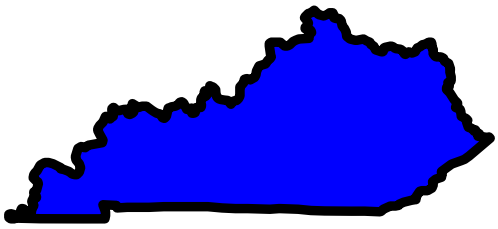

STATE MATCH SUPPLEMENT

Kentucky Core Content for Assessment

Version 4.1
Reading, Writing, Mathematics, and Science
Grades 8–12

and

ACT®

EXPLORE®, PLAN®, the ACT®, and WorkKeys®

November 2006

List of Supplement Tables

ACT

Preface

This document is a supplement to the *State Match Kentucky Core Content for Assessment Version 4.1 Reading, Writing, Mathematics, and Science Grades 8–12 and ACT EXPLORE, PLAN, the ACT, and WorkKeys (September 2006)*. This supplement identifies specific ACT College Readiness Standards and WorkKeys Level Skills that correspond to each Kentucky Core Content for Assessment in a side-by-side format. The left side of each page presents the Kentucky Core Content for Assessment (highlighted if measured by ACT's corresponding testing program). The right side of each page presents the specific ACT College Readiness Standard(s) and WorkKeys Level Skill(s) that corresponds to each Kentucky Core Content Standard.

Kentucky standards listed here are from the *Kentucky Core Content for Assessment Version 4.1* (August 2006) as presented on the Kentucky Department of Education's website in September 2006.

SUPPLEMENT
TABLES 1A–1E:

READING

TABLE 1A

KENTUCKY Grade 8 Reading Core Content for Assessment, Version 4.1	EXPLORE Reading College Readiness Standards
FORMING A FOUNDATION FOR READING	
Requires readers to develop and apply basic reading skills and strategies across genres to read and understand texts at the appropriate grade level. This involves reading at the word, sentence and connected text levels across content areas that include multicultural texts.	
RD-08-1.0.1. Students will apply knowledge of synonyms or antonyms to comprehend a passage.	**Meanings of Words:** Understand the implication of a familiar word or phrase and of simple descriptive language Use context to understand basic figurative language Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in uncomplicated passages Use context to determine the appropriate meaning of virtually any word, phrase, or statement in uncomplicated passages Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in more challenging passages
RD-08-1.0.2. Students will select, based on context, the appropriate meaning for a word that has multiple meanings.	**Meanings of Words:** Understand the implication of a familiar word or phrase and of simple descriptive language Use context to understand basic figurative language Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in uncomplicated passages Use context to determine the appropriate meaning of virtually any word, phrase, or statement in uncomplicated passages Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in more challenging passages
RD-08-1.0.3. Students will apply the meanings of word parts (prefixes, suffixes, roots) to comprehend unfamiliar words in a passage.	
RD-08-1.0.4. Students will formulate questions to guide reading.	
RD-08-1.0.5. Students will scan to find key information.	**Main Ideas and Author's Approach:** Recognize a clear intent of an author or narrator in uncomplicated literary narratives Identify a clear main idea or purpose of straightforward paragraphs in uncomplicated literary narratives Infer the main idea or purpose of straightforward paragraphs in uncomplicated literary narratives Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in uncomplicated passages Identify a clear main idea or purpose of any paragraph or paragraphs in uncomplicated passages

TABLE 1A

KENTUCKY Grade 8 Reading Core Content for Assessment, Version 4.1	**EXPLORE Reading** **College Readiness Standards**
FORMING A FOUNDATION FOR READING	
	Infer the main idea or purpose of straightforward paragraphs in more challenging passages
	Summarize basic events and ideas in more challenging passages
	Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in more challenging passages
	Supporting Details:
	Locate basic facts (e.g., names, dates, events) clearly stated in a passage
	Locate simple details at the sentence and paragraph level in uncomplicated passages
	Recognize a clear function of a part of an uncomplicated passage
	Locate important details in uncomplicated passages
	Make simple inferences about how details are used in passages
	Locate important details in more challenging passages
	Locate and interpret minor or subtly stated details in uncomplicated passages
	Discern which details, though they may appear in different sections throughout a passage, support important points in more challenging passages
	Sequential, Comparative, and Cause-Effect Relationships:
	Determine when (e.g., first, last, before, after) or if an event occurred in uncomplicated passages
	Recognize clear cause-effect relationships described within a single sentence in a passage
	Identify relationships between main characters in uncomplicated literary narratives
	Recognize clear cause-effect relationships within a single paragraph in uncomplicated literary narratives
	Order simple sequences of events in uncomplicated literary narratives
	Identify clear relationships between people, ideas, and so on in uncomplicated passages
	Identify clear cause-effect relationships in uncomplicated passages
	Order sequences of events in uncomplicated passages
	Understand relationships between people, ideas, and so on in uncomplicated passages
	Identify clear relationships between characters, ideas, and so on in more challenging literary narratives
	Understand implied or subtly stated cause-effect relationships in uncomplicated passages
	Identify clear cause-effect relationships in more challenging passages

TABLE 1A

KENTUCKY Grade 8 Reading Core Content for Assessment, Version 4.1	**EXPLORE Reading** **College Readiness Standards**
FORMING A FOUNDATION FOR READING	
	Meanings of Words: Understand the implication of a familiar word or phrase and of simple descriptive language Use context to understand basic figurative language Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in uncomplicated passages Use context to determine the appropriate meaning of virtually any word, phrase, or statement in uncomplicated passages Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in more challenging passages **Generalizations and Conclusions:** Draw simple generalizations and conclusions about the main characters in uncomplicated literary narratives Draw simple generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw simple generalizations and conclusions using details that support the main points of more challenging passages Draw subtle generalizations and conclusions about characters, ideas, and so on in uncomplicated literary narratives Draw generalizations and conclusions about people, ideas, and so on in more challenging passages
RD-08-1.0.6. Students will skim to get the general meaning of a passage.	**Main Ideas and Author's Approach:** Identify a clear main idea or purpose of straightforward paragraphs in uncomplicated literary narratives Infer the main idea or purpose of straightforward paragraphs in uncomplicated literary narratives Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in uncomplicated passages Identify a clear main idea or purpose of any paragraph or paragraphs in uncomplicated passages Infer the main idea or purpose of straightforward paragraphs in more challenging passages Summarize basic events and ideas in more challenging passages Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in more challenging passages **Generalizations and Conclusions:** Draw simple generalizations and conclusions about the main characters in uncomplicated literary narratives Draw simple generalizations and conclusions about people, ideas, and so on in uncomplicated passages

TABLE 1A

KENTUCKY Grade 8 Reading Core Content for Assessment, Version 4.1	**EXPLORE Reading** **College Readiness Standards**
FORMING A FOUNDATION FOR READING	
	Draw generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw simple generalizations and conclusions using details that support the main points of more challenging passages Draw subtle generalizations and conclusions about characters, ideas, and so on in uncomplicated literary narratives Draw generalizations and conclusions about people, ideas, and so on in more challenging passages
RD-08-1.0.7. Students will interpret literal and non-literal meanings of words or phrases based on context.	**Meanings of Words:** Understand the implication of a familiar word or phrase and of simple descriptive language Use context to understand basic figurative language Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in uncomplicated passages Use context to determine the appropriate meaning of virtually any word, phrase, or statement in uncomplicated passages Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in more challenging passages
RD-08-1.0.8. Students will interpret the meaning of jargon, dialect, or specialized vocabulary used in a passage.	**Meanings of Words:** Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in uncomplicated passages Use context to determine the appropriate meaning of virtually any word, phrase, or statement in uncomplicated passages Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in more challenging passages

TABLE 1A

KENTUCKY Grade 8 Reading Core Content for Assessment, Version 4.1	EXPLORE Reading College Readiness Standards
DEVELOPING AN INITIAL UNDERSTANDING	
Requires readers to consider the text as a whole or in a broader perspective to develop an initial understanding.	
RD-08-2.0.1. Students will explain the main idea of a passage.	**Main Ideas and Author's Approach:** Summarize basic events and ideas in more challenging passages
RD-08-2.0.2. Students will identify and explain the characteristics of short stories, novels, poetry, or plays.	
RD-08-2.0.4. Students will locate key ideas or information in a passage.	**Main Ideas and Author's Approach:** Recognize a clear intent of an author or narrator in uncomplicated literary narratives Identify a clear main idea or purpose of straightforward paragraphs in uncomplicated literary narratives Infer the main idea or purpose of straightforward paragraphs in uncomplicated literary narratives Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in uncomplicated passages Identify a clear main idea or purpose of any paragraph or paragraphs in uncomplicated passages Infer the main idea or purpose of straightforward paragraphs in more challenging passages Summarize basic events and ideas in more challenging passages Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in more challenging passages **Supporting Details:** Locate basic facts (e.g., names, dates, events) clearly stated in a passage Locate simple details at the sentence and paragraph level in uncomplicated passages Recognize a clear function of a part of an uncomplicated passage Locate important details in uncomplicated passages Make simple inferences about how details are used in passages Locate important details in more challenging passages Locate and interpret minor or subtly stated details in uncomplicated passages Discern which details, though they may appear in different sections throughout a passage, support important points in more challenging passages **Sequential, Comparative, and Cause-Effect Relationships:** Determine when (e.g., first, last, before, after) or if an event occurred in uncomplicated passages Recognize clear cause-effect relationships described within a single sentence in a passage

TABLE 1A

KENTUCKY Grade 8 Reading Core Content for Assessment, Version 4.1	**EXPLORE Reading** **College Readiness Standards**
DEVELOPING AN INITIAL UNDERSTANDING	
	Identify relationships between main characters in uncomplicated literary narratives
	Recognize clear cause-effect relationships within a single paragraph in uncomplicated literary narratives
	Order simple sequences of events in uncomplicated literary narratives
	Identify clear relationships between people, ideas, and so on in uncomplicated passages
	Identify clear cause-effect relationships in uncomplicated passages
	Order sequences of events in uncomplicated passages
	Understand relationships between people, ideas, and so on in uncomplicated passages
	Identify clear relationships between characters, ideas, and so on in more challenging literary narratives
	Understand implied or subtly stated cause-effect relationships in uncomplicated passages
	Identify clear cause-effect relationships in more challenging passages
	Meanings of Words:
	Understand the implication of a familiar word or phrase and of simple descriptive language
	Use context to understand basic figurative language
	Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in uncomplicated passages
	Use context to determine the appropriate meaning of virtually any word, phrase, or statement in uncomplicated passages
	Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in more challenging passages
	Generalizations and Conclusions:
	Draw simple generalizations and conclusions about the main characters in uncomplicated literary narratives
	Draw simple generalizations and conclusions about people, ideas, and so on in uncomplicated passages
	Draw generalizations and conclusions about people, ideas, and so on in uncomplicated passages
	Draw simple generalizations and conclusions using details that support the main points of more challenging passages
	Draw subtle generalizations and conclusions about characters, ideas, and so on in uncomplicated literary narratives
	Draw generalizations and conclusions about people, ideas, and so on in more challenging passages

TABLE 1A

KENTUCKY Grade 8 Reading Core Content for Assessment, Version 4.1	EXPLORE Reading College Readiness Standards
DEVELOPING AN INITIAL UNDERSTANDING	
RD-08-2.0.5. Students will paraphrase information from a paragraph, a section of a passage, or an entire passage.	**Main Ideas and Author's Approach:** Recognize a clear intent of an author or narrator in uncomplicated literary narratives Identify a clear main idea or purpose of straightforward paragraphs in uncomplicated literary narratives Infer the main idea or purpose of straightforward paragraphs in uncomplicated literary narratives Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in uncomplicated passages Identify a clear main idea or purpose of any paragraph or paragraphs in uncomplicated passages Infer the main idea or purpose of straightforward paragraphs in more challenging passages Summarize basic events and ideas in more challenging passages Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in more challenging passages **Supporting Details:** Locate basic facts (e.g., names, dates, events) clearly stated in a passage Locate simple details at the sentence and paragraph level in uncomplicated passages Recognize a clear function of a part of an uncomplicated passage Locate important details in uncomplicated passages Make simple inferences about how details are used in passages Locate important details in more challenging passages Locate and interpret minor or subtly stated details in uncomplicated passages Discern which details, though they may appear in different sections throughout a passage, support important points in more challenging passages **Sequential, Comparative, and Cause-Effect Relationships:** Determine when (e.g., first, last, before, after) or if an event occurred in uncomplicated passages Recognize clear cause-effect relationships described within a single sentence in a passage Identify relationships between main characters in uncomplicated literary narratives Recognize clear cause-effect relationships within a single paragraph in uncomplicated literary narratives Order simple sequences of events in uncomplicated literary narratives

TABLE 1A

KENTUCKY Grade 8 Reading Core Content for Assessment, Version 4.1	EXPLORE Reading College Readiness Standards
DEVELOPING AN INITIAL UNDERSTANDING	
	Identify clear relationships between people, ideas, and so on in uncomplicated passages Identify clear cause-effect relationships in uncomplicated passages Order sequences of events in uncomplicated passages Understand relationships between people, ideas, and so on in uncomplicated passages Identify clear relationships between characters, ideas, and so on in more challenging literary narratives Understand implied or subtly stated cause-effect relationships in uncomplicated passages Identify clear cause-effect relationships in more challenging passages **Meanings of Words:** Understand the implication of a familiar word or phrase and of simple descriptive language Use context to understand basic figurative language Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in uncomplicated passages Use context to determine the appropriate meaning of virtually any word, phrase, or statement in uncomplicated passages Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in more challenging passages **Generalizations and Conclusions:** Draw simple generalizations and conclusions about the main characters in uncomplicated literary narratives Draw simple generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw simple generalizations and conclusions using details that support the main points of more challenging passages Draw subtle generalizations and conclusions about characters, ideas, and so on in uncomplicated literary narratives Draw generalizations and conclusions about people, ideas, and so on in more challenging passages
RD-08-2.0.6. Students will apply the information contained in a passage to accomplish a task/procedure or answer questions about a passage.	**Main Ideas and Author's Approach:** Recognize a clear intent of an author or narrator in uncomplicated literary narratives Identify a clear main idea or purpose of straightforward paragraphs in uncomplicated literary narratives Infer the main idea or purpose of straightforward paragraphs in uncomplicated literary narratives

TABLE 1A

KENTUCKY Grade 8 Reading Core Content for Assessment, Version 4.1	**EXPLORE Reading** **College Readiness Standards**
DEVELOPING AN INITIAL UNDERSTANDING	
	Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in uncomplicated passages Identify a clear main idea or purpose of any paragraph or paragraphs in uncomplicated passages Infer the main idea or purpose of straightforward paragraphs in more challenging passages Summarize basic events and ideas in more challenging passages Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in more challenging passages **Supporting Details:** Locate basic facts (e.g., names, dates, events) clearly stated in a passage Locate simple details at the sentence and paragraph level in uncomplicated passages Recognize a clear function of a part of an uncomplicated passage Locate important details in uncomplicated passages Make simple inferences about how details are used in passages Locate important details in more challenging passages Locate and interpret minor or subtly stated details in uncomplicated passages Discern which details, though they may appear in different sections throughout a passage, support important points in more challenging passages **Sequential, Comparative, and Cause-Effect Relationships:** Determine when (e.g., first, last, before, after) or if an event occurred in uncomplicated passages Recognize clear cause-effect relationships described within a single sentence in a passage Identify relationships between main characters in uncomplicated literary narratives Recognize clear cause-effect relationships within a single paragraph in uncomplicated literary narratives Order simple sequences of events in uncomplicated literary narratives Identify clear relationships between people, ideas, and so on in uncomplicated passages Identify clear cause-effect relationships in uncomplicated passages Order sequences of events in uncomplicated passages Understand relationships between people, ideas, and so on in uncomplicated passages

TABLE 1A

KENTUCKY Grade 8 Reading Core Content for Assessment, Version 4.1	EXPLORE Reading College Readiness Standards
DEVELOPING AN INITIAL UNDERSTANDING	
	Identify clear relationships between characters, ideas, and so on in more challenging literary narratives Understand implied or subtly stated cause-effect relationships in uncomplicated passages Identify clear cause-effect relationships in more challenging passages **Meanings of Words:** Understand the implication of a familiar word or phrase and of simple descriptive language Use context to understand basic figurative language Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in uncomplicated passages Use context to determine the appropriate meaning of virtually any word, phrase, or statement in uncomplicated passages Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in more challenging passages **Generalizations and Conclusions:** Draw simple generalizations and conclusions about the main characters in uncomplicated literary narratives Draw simple generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw simple generalizations and conclusions using details that support the main points of more challenging passages Draw subtle generalizations and conclusions about characters, ideas, and so on in uncomplicated literary narratives Draw generalizations and conclusions about people, ideas, and so on in more challenging passages
RD-08-2.0.7. Students will make predictions, draw conclusions, make generalizations, or make inferences based on what is read.	**Main Ideas and Author's Approach:** Infer the main idea or purpose of straightforward paragraphs in uncomplicated literary narratives Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in uncomplicated passages Infer the main idea or purpose of straightforward paragraphs in more challenging passages Summarize basic events and ideas in more challenging passages Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in more challenging passages **Supporting Details:** Make simple inferences about how details are used in passages

TABLE 1A

KENTUCKY Grade 8 Reading Core Content for Assessment, Version 4.1	EXPLORE Reading College Readiness Standards
DEVELOPING AN INITIAL UNDERSTANDING	
	Locate and interpret minor or subtly stated details in uncomplicated passages
	Discern which details, though they may appear in different sections throughout a passage, support important points in more challenging passages
	Sequential, Comparative, and Cause-Effect Relationships:
	Determine when (e.g., first, last, before, after) or if an event occurred in uncomplicated passages
	Order simple sequences of events in uncomplicated literary narratives
	Order sequences of events in uncomplicated passages
	Understand relationships between people, ideas, and so on in uncomplicated passages
	Understand implied or subtly stated cause-effect relationships in uncomplicated passages
	Meanings of Words:
	Understand the implication of a familiar word or phrase and of simple descriptive language
	Use context to understand basic figurative language
	Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in uncomplicated passages
	Use context to determine the appropriate meaning of virtually any word, phrase, or statement in uncomplicated passages
	Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in more challenging passages
	Generalizations and Conclusions:
	Draw simple generalizations and conclusions about the main characters in uncomplicated literary narratives
	Draw simple generalizations and conclusions about people, ideas, and so on in uncomplicated passages
	Draw generalizations and conclusions about people, ideas, and so on in uncomplicated passages
	Draw simple generalizations and conclusions using details that support the main points of more challenging passages
	Draw subtle generalizations and conclusions about characters, ideas, and so on in uncomplicated literary narratives
	Draw generalizations and conclusions about people, ideas, and so on in more challenging passages

TABLE 1A

KENTUCKY Grade 8 Reading Core Content for Assessment, Version 4.1	EXPLORE Reading College Readiness Standards
DEVELOPING AN INITIAL UNDERSTANDING	
RD-08-2.0.8. Students will interpret the meaning of concrete and abstract terms, based on the context from a passage (e.g., "loaded" words, connotation and denotation).	**Meanings of Words:** Understand the implication of a familiar word or phrase and of simple descriptive language Use context to understand basic figurative language Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in uncomplicated passages Use context to determine the appropriate meaning of virtually any word, phrase, or statement in uncomplicated passages Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in more challenging passages

TABLE 1A

KENTUCKY Grade 8 Reading Core Content for Assessment, Version 4.1	EXPLORE Reading College Readiness Standards
INTERPRETING TEXT	
Requires readers to extend their initial impressions to develop a more complete understanding of what is read. This involves linking information across parts of a text as well as focusing on specific information.	
RD-08-3.0.1. Students will analyze the relationship between a speaker's or character's motivation and behavior in a passage, as revealed by the dilemmas.	**Sequential, Comparative, and Cause-Effect Relationships:** Recognize clear cause-effect relationships described within a single sentence in a passage Identify relationships between main characters in uncomplicated literary narratives Recognize clear cause-effect relationships within a single paragraph in uncomplicated literary narratives Identify clear relationships between people, ideas, and so on in uncomplicated passages Identify clear cause-effect relationships in uncomplicated passages Understand relationships between people, ideas, and so on in uncomplicated passages Identify clear relationships between characters, ideas, and so on in more challenging literary narratives Understand implied or subtly stated cause-effect relationships in uncomplicated passages Identify clear cause-effect relationships in more challenging passages
RD-08-3.0.2. Students will identify or explain an author's purpose in a passage.	**Main Ideas and Author's Approach:** Recognize a clear intent of an author or narrator in uncomplicated literary narratives Identify a clear main idea or purpose of straightforward paragraphs in uncomplicated literary narratives Infer the main idea or purpose of straightforward paragraphs in uncomplicated literary narratives Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in uncomplicated passages Identify a clear main idea or purpose of any paragraph or paragraphs in uncomplicated passages Infer the main idea or purpose of straightforward paragraphs in more challenging passages Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in more challenging passages

TABLE 1A

KENTUCKY Grade 8 Reading Core Content for Assessment, Version 4.1	EXPLORE Reading College Readiness Standards
INTERPRETING TEXT	
RD-08-3.0.3. Students will explain or analyze how a conflict in a passage is resolved.	**Sequential, Comparative, and Cause-Effect Relationships:** Determine when (e.g., first, last, before, after) or if an event occurred in uncomplicated passages Recognize clear cause-effect relationships described within a single sentence in a passage Identify relationships between main characters in uncomplicated literary narratives Recognize clear cause-effect relationships within a single paragraph in uncomplicated literary narratives Order simple sequences of events in uncomplicated literary narratives Identify clear relationships between people, ideas, and so on in uncomplicated passages Identify clear cause-effect relationships in uncomplicated passages Order sequences of events in uncomplicated passages Understand relationships between people, ideas, and so on in uncomplicated passages Identify clear relationships between characters, ideas, and so on in more challenging literary narratives Understand implied or subtly stated cause-effect relationships in uncomplicated passages Identify clear cause-effect relationships in more challenging passages **Generalizations and Conclusions:** Draw simple generalizations and conclusions about the main characters in uncomplicated literary narratives Draw simple generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw simple generalizations and conclusions using details that support the main points of more challenging passages Draw subtle generalizations and conclusions about characters, ideas, and so on in uncomplicated literary narratives Draw generalizations and conclusions about people, ideas, and so on in more challenging passages
RD-08-3.0.4. Students will analyze the use of details that support the main idea or explain their importance in a passage.	**Supporting Details:** Recognize a clear function of a part of an uncomplicated passage Make simple inferences about how details are used in passages Discern which details, though they may appear in different sections throughout a passage, support important points in more challenging passages

TABLE 1A

KENTUCKY Grade 8 Reading Core Content for Assessment, Version 4.1	EXPLORE Reading College Readiness Standards
INTERPRETING TEXT	
RD-08-3.0.7. Students will identify or explain an author's position based on evidence in a passage.	**Main Ideas and Author's Approach:** Recognize a clear intent of an author or narrator in uncomplicated literary narratives Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in uncomplicated passages Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in more challenging passages
RD-08-3.0.8. Students will explain an author's argument or identify evidence from the passage to support the author's argument.	**Main Ideas and Author's Approach:** Recognize a clear intent of an author or narrator in uncomplicated literary narratives Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in uncomplicated passages Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in more challenging passages **Supporting Details:** Recognize a clear function of a part of an uncomplicated passage Make simple inferences about how details are used in passages Discern which details, though they may appear in different sections throughout a passage, support important points in more challenging passages
RD-08-3.0.9. Students will identify persuasive techniques (e.g., expert opinion, logical/emotional/ethical appeal, repetition, rhetorical question, allusion) or propaganda techniques (e.g., testimonial, bandwagon, personal attack) or explain how each is used.	**Supporting Details:** Recognize a clear function of a part of an uncomplicated passage Make simple inferences about how details are used in passages Discern which details, though they may appear in different sections throughout a passage, support important points in more challenging passages **Meanings of Words:** Understand the implication of a familiar word or phrase and of simple descriptive language Use context to understand basic figurative language Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in uncomplicated passages Use context to determine the appropriate meaning of virtually any word, phrase, or statement in uncomplicated passages Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in more challenging passages

TABLE 1A

KENTUCKY Grade 8 Reading Core Content for Assessment, Version 4.1	**EXPLORE Reading** **College Readiness Standards**
INTERPRETING TEXT	
	Generalizations and Conclusions: Draw simple generalizations and conclusions about the main characters in uncomplicated literary narratives Draw simple generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw simple generalizations and conclusions using details that support the main points of more challenging passages Draw subtle generalizations and conclusions about characters, ideas, and so on in uncomplicated literary narratives Draw generalizations and conclusions about people, ideas, and so on in more challenging passages

TABLE 1A

KENTUCKY Grade 8 Reading Core Content for Assessment, Version 4.1	**EXPLORE Reading** **College Readiness Standards**
REFLECTING AND RESPONDING TO TEXT	
Requires readers to connect knowledge from the text with their own background knowledge. The focus is on how the text relates to personal knowledge.	
RD-08-4.0.1. Students will connect information from a passage to students' lives (text-to-self), real world issues (text-to-world) and other texts (text-to-text—e.g., novel, short story, song, film, website, etc.).	
RD-08-4.0.2. Students will use evidence from a passage to formulate opinions in response to a reading passage.	

TABLE 1A

KENTUCKY Grade 8 Reading Core Content for Assessment, Version 4.1	EXPLORE Reading College Readiness Standards
DEMONSTRATING A CRITICAL STANCE	
Requires readers to consider the text objectively. It involves a range of tasks, including critical evaluation, comparing and contrasting and understanding the impact of features such as irony, humor and organization.	
RD-08-5.0.1. Students will explain the interrelationships (themes, ideas, concepts) that are developed in more than one literary work.	
RD-08-5.0.2. Students will interpret the use of literary elements (e.g., characterization, setting, plot, theme, point of view) in a passage.	**Supporting Details:** Recognize a clear function of a part of an uncomplicated passage Make simple inferences about how details are used in passages Discern which details, though they may appear in different sections throughout a passage, support important points in more challenging passages **Generalizations and Conclusions:** Draw simple generalizations and conclusions about the main characters in uncomplicated literary narratives Draw simple generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw simple generalizations and conclusions using details that support the main points of more challenging passages Draw subtle generalizations and conclusions about characters, ideas, and so on in uncomplicated literary narratives Draw generalizations and conclusions about people, ideas, and so on in more challenging passages
RD-08-5.0.3. Students will identify and explain the use of literary devices (e.g., symbolism, irony, analogies, imagery, foreshadowing, figurative language).	**Supporting Details:** Recognize a clear function of a part of an uncomplicated passage Make simple inferences about how details are used in passages Discern which details, though they may appear in different sections throughout a passage, support important points in more challenging passages **Sequential, Comparative, and Cause-Effect Relationships:** Determine when (e.g., first, last, before, after) or if an event occurred in uncomplicated passages Order simple sequences of events in uncomplicated literary narratives Identify clear relationships between people, ideas, and so on in uncomplicated passages Order sequences of events in uncomplicated passages Understand relationships between people, ideas, and so on in uncomplicated passages

TABLE 1A

KENTUCKY Grade 8 Reading Core Content for Assessment, Version 4.1	EXPLORE Reading College Readiness Standards
DEMONSTRATING A CRITICAL STANCE	
	Identify clear relationships between characters, ideas, and so on in more challenging literary narratives **Meanings of Words:** Understand the implication of a familiar word or phrase and of simple descriptive language Use context to understand basic figurative language Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in uncomplicated passages Use context to determine the appropriate meaning of virtually any word, phrase, or statement in uncomplicated passages Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in more challenging passages **Generalizations and Conclusions:** Draw simple generalizations and conclusions about the main characters in uncomplicated literary narratives Draw simple generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw simple generalizations and conclusions using details that support the main points of more challenging passages Draw subtle generalizations and conclusions about characters, ideas, and so on in uncomplicated literary narratives Draw generalizations and conclusions about people, ideas, and so on in more challenging passages
RD-08-5.0.4. Students will analyze the author's use of literary devices in a passage (e.g., symbolism, irony, analogies, imagery, figurative language).	**Supporting Details:** Recognize a clear function of a part of an uncomplicated passage Make simple inferences about how details are used in passages Discern which details, though they may appear in different sections throughout a passage, support important points in more challenging passages **Generalizations and Conclusions:** Draw simple generalizations and conclusions about the main characters in uncomplicated literary narratives Draw simple generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw simple generalizations and conclusions using details that support the main points of more challenging passages Draw subtle generalizations and conclusions about characters, ideas, and so on in uncomplicated literary narratives

TABLE 1A

KENTUCKY Grade 8 Reading Core Content for Assessment, Version 4.1	EXPLORE Reading College Readiness Standards
DEMONSTRATING A CRITICAL STANCE	
	Draw generalizations and conclusions about people, ideas, and so on in more challenging passages
RD-08-5.0.5. Students will evaluate the author's word choice, style, content, or use of literary elements.	**Main Ideas and Author's Approach:** Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in uncomplicated passages Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in more challenging passages **Supporting Details:** Recognize a clear function of a part of an uncomplicated passage Make simple inferences about how details are used in passages Discern which details, though they may appear in different sections throughout a passage, support important points in more challenging passages
RD-08-5.0.6. Students will compare and contrast elements, views, ideas, or events presented in one or more passages.	**Sequential, Comparative, and Cause-Effect Relationships:** Identify clear relationships between people, ideas, and so on in uncomplicated passages Understand relationships between people, ideas, and so on in uncomplicated passages Identify clear relationships between characters, ideas, and so on in more challenging literary narratives
RD-08-5.0.7. Students will evaluate the effectiveness of organization or format in fulfilling the purpose of a passage.	
RD-08-5.0.8. Students will explain or analyze how the use of text features (e.g., subheadings, bullets, fonts, white space, layout, charts, diagrams, labels, pictures and captions) enhances the reader's understanding of a passage.	
RD-08-5.0.9. Students will analyze the organizational patterns (cause and effect, comparison or contrast, sequence, generalizations) in a passage.	**Main Ideas and Author's Approach:** Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in uncomplicated passages Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in more challenging passages

TABLE 1B

KENTUCKY Grade 9 Reading Core Content for Assessment, Version 4.1	EXPLORE Reading College Readiness Standards
FORMING A FOUNDATION FOR READING	
Requires readers to develop and apply basic reading skills and strategies across genres to read and understand texts at the appropriate grade level. This involves reading at the word, sentence and connected text levels across content areas that include multicultural texts.	
RD-09-1.0.1. Students will interpret literal or non-literal meanings of words in a passage.	**Meanings of Words:** Understand the implication of a familiar word or phrase and of simple descriptive language Use context to understand basic figurative language Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in uncomplicated passages Use context to determine the appropriate meaning of virtually any word, phrase, or statement in uncomplicated passages Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in more challenging passages
RD-09-1.0.2. Students will make predictions based on what is read.	**Generalizations and Conclusions:** Draw simple generalizations and conclusions about the main characters in uncomplicated literary narratives Draw simple generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw simple generalizations and conclusions using details that support the main points of more challenging passages Draw subtle generalizations and conclusions about characters, ideas, and so on in uncomplicated literary narratives Draw generalizations and conclusions about people, ideas, and so on in more challenging passages
RD-09-1.0.3. Students will formulate questions to guide reading.	
RD-09-1.0.4. Students will interpret the meaning of jargon, dialect, or specialized vocabulary found in a passage.	**Meanings of Words:** Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in uncomplicated passages Use context to determine the appropriate meaning of virtually any word, phrase, or statement in uncomplicated passages Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in more challenging passages

TABLE 1B

KENTUCKY Grade 9 Reading Core Content for Assessment, Version 4.1	EXPLORE Reading College Readiness Standards
DEVELOPING AN INITIAL UNDERSTANDING	
Requires readers to consider the text as a whole or in a broader perspective to develop an initial understanding.	
RD-09-2.0.1. Students will paraphrase information in a passage.	**Main Ideas and Author's Approach:** Recognize a clear intent of an author or narrator in uncomplicated literary narratives Identify a clear main idea or purpose of straightforward paragraphs in uncomplicated literary narratives Infer the main idea or purpose of straightforward paragraphs in uncomplicated literary narratives Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in uncomplicated passages Identify a clear main idea or purpose of any paragraph or paragraphs in uncomplicated passages Infer the main idea or purpose of straightforward paragraphs in more challenging passages Summarize basic events and ideas in more challenging passages Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in more challenging passages **Supporting Details:** Locate basic facts (e.g., names, dates, events) clearly stated in a passage Locate simple details at the sentence and paragraph level in uncomplicated passages Recognize a clear function of a part of an uncomplicated passage Locate important details in uncomplicated passages Make simple inferences about how details are used in passages Locate important details in more challenging passages Locate and interpret minor or subtly stated details in uncomplicated passages Discern which details, though they may appear in different sections throughout a passage, support important points in more challenging passages **Sequential, Comparative, and Cause-Effect Relationships:** Determine when (e.g., first, last, before, after) or if an event occurred in uncomplicated passages Recognize clear cause-effect relationships described within a single sentence in a passage Identify relationships between main characters in uncomplicated literary narratives Recognize clear cause-effect relationships within a single paragraph in uncomplicated literary narratives

TABLE 1B

KENTUCKY Grade 9 Reading Core Content for Assessment, Version 4.1	EXPLORE Reading College Readiness Standards
DEVELOPING AN INITIAL UNDERSTANDING	
	Order simple sequences of events in uncomplicated literary narratives Identify clear relationships between people, ideas, and so on in uncomplicated passages Identify clear cause-effect relationships in uncomplicated passages Order sequences of events in uncomplicated passages Understand relationships between people, ideas, and so on in uncomplicated passages Identify clear relationships between characters, ideas, and so on in more challenging literary narratives Understand implied or subtly stated cause-effect relationships in uncomplicated passages Identify clear cause-effect relationships in more challenging passages **Meanings of Words:** Understand the implication of a familiar word or phrase and of simple descriptive language Use context to understand basic figurative language Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in uncomplicated passages Use context to determine the appropriate meaning of virtually any word, phrase, or statement in uncomplicated passages Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in more challenging passages **Generalizations and Conclusions:** Draw simple generalizations and conclusions about the main characters in uncomplicated literary narratives Draw simple generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw simple generalizations and conclusions using details that support the main points of more challenging passages Draw subtle generalizations and conclusions about characters, ideas, and so on in uncomplicated literary narratives Draw generalizations and conclusions about people, ideas, and so on in more challenging passages
RD-09-2.0.2. Students will identify essential information from a passage needed to accomplish a task.	
RD-09-2.0.3. Students will apply the information contained in a passage to accomplish a task/procedure or to answer questions about a passage.	**Main Ideas and Author's Approach:** Recognize a clear intent of an author or narrator in uncomplicated literary narratives Identify a clear main idea or purpose of straightforward paragraphs in uncomplicated literary narratives

TABLE 1B

KENTUCKY Grade 9 Reading Core Content for Assessment, Version 4.1	**EXPLORE Reading** **College Readiness Standards**
DEVELOPING AN INITIAL UNDERSTANDING	
	Infer the main idea or purpose of straightforward paragraphs in uncomplicated literary narratives Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in uncomplicated passages Identify a clear main idea or purpose of any paragraph or paragraphs in uncomplicated passages Infer the main idea or purpose of straightforward paragraphs in more challenging passages Summarize basic events and ideas in more challenging passages Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in more challenging passages **Supporting Details:** Locate basic facts (e.g., names, dates, events) clearly stated in a passage Locate simple details at the sentence and paragraph level in uncomplicated passages Recognize a clear function of a part of an uncomplicated passage Locate important details in uncomplicated passages Make simple inferences about how details are used in passages Locate important details in more challenging passages Locate and interpret minor or subtly stated details in uncomplicated passages Discern which details, though they may appear in different sections throughout a passage, support important points in more challenging passages **Sequential, Comparative, and Cause-Effect Relationships:** Determine when (e.g., first, last, before, after) or if an event occurred in uncomplicated passages Recognize clear cause-effect relationships described within a single sentence in a passage Identify relationships between main characters in uncomplicated literary narratives Recognize clear cause-effect relationships within a single paragraph in uncomplicated literary narratives Order simple sequences of events in uncomplicated literary narratives Identify clear relationships between people, ideas, and so on in uncomplicated passages Identify clear cause-effect relationships in uncomplicated passages Order sequences of events in uncomplicated passages

TABLE 1B

KENTUCKY Grade 9 Reading Core Content for Assessment, Version 4.1	EXPLORE Reading College Readiness Standards
DEVELOPING AN INITIAL UNDERSTANDING	
	Understand relationships between people, ideas, and so on in uncomplicated passages Identify clear relationships between characters, ideas, and so on in more challenging literary narratives Understand implied or subtly stated cause-effect relationships in uncomplicated passages Identify clear cause-effect relationships in more challenging passages **Meanings of Words:** Understand the implication of a familiar word or phrase and of simple descriptive language Use context to understand basic figurative language Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in uncomplicated passages Use context to determine the appropriate meaning of virtually any word, phrase, or statement in uncomplicated passages Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in more challenging passages **Generalizations and Conclusions:** Draw simple generalizations and conclusions about the main characters in uncomplicated literary narratives Draw simple generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw simple generalizations and conclusions using details that support the main points of more challenging passages Draw subtle generalizations and conclusions about characters, ideas, and so on in uncomplicated literary narratives Draw generalizations and conclusions about people, ideas, and so on in more challenging passages
RD-09-2.0.4. Students will follow the sequence of information from a passage.	**Sequential, Comparative, and Cause-Effect Relationships:** Determine when (e.g., first, last, before, after) or if an event occurred in uncomplicated passages Order simple sequences of events in uncomplicated literary narratives Order sequences of events in uncomplicated passages

TABLE 1B

KENTUCKY Grade 9 Reading Core Content for Assessment, Version 4.1	EXPLORE Reading College Readiness Standards
DEVELOPING AN INITIAL UNDERSTANDING	
RD-09-2.0.5. Students will interpret concrete or abstract terms using context from the passage.	**Meanings of Words:** Understand the implication of a familiar word or phrase and of simple descriptive language Use context to understand basic figurative language Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in uncomplicated passages Use context to determine the appropriate meaning of virtually any word, phrase, or statement in uncomplicated passages Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in more challenging passages
RD-09-2.0.6. Students will explain the main ideas of a passage and identify the key ideas or information that support them.	**Main Ideas and Author's Approach:** Identify a clear main idea or purpose of straightforward paragraphs in uncomplicated literary narratives Infer the main idea or purpose of straightforward paragraphs in uncomplicated literary narratives Identify a clear main idea or purpose of any paragraph or paragraphs in uncomplicated passages Infer the main idea or purpose of straightforward paragraphs in more challenging passages Summarize basic events and ideas in more challenging passages **Supporting Details:** Recognize a clear function of a part of an uncomplicated passage Make simple inferences about how details are used in passages Discern which details, though they may appear in different sections throughout a passage, support important points in more challenging passages
RD-09-2.0.7. Students will make inferences, draw conclusions or make generalizations based on evidence from a passage.	**Main Ideas and Author's Approach:** Infer the main idea or purpose of straightforward paragraphs in uncomplicated literary narratives Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in uncomplicated passages Infer the main idea or purpose of straightforward paragraphs in more challenging passages Summarize basic events and ideas in more challenging passages Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in more challenging passages **Supporting Details:** Make simple inferences about how details are used in passages

TABLE 1B

KENTUCKY Grade 9 Reading Core Content for Assessment, Version 4.1	**EXPLORE Reading** **College Readiness Standards**
DEVELOPING AN INITIAL UNDERSTANDING	
	Locate and interpret minor or subtly stated details in uncomplicated passages
	Discern which details, though they may appear in different sections throughout a passage, support important points in more challenging passages
	Sequential, Comparative, and Cause-Effect Relationships:
	Determine when (e.g., first, last, before, after) or if an event occurred in uncomplicated passages
	Order simple sequences of events in uncomplicated literary narratives
	Order sequences of events in uncomplicated passages
	Understand relationships between people, ideas, and so on in uncomplicated passages
	Understand implied or subtly stated cause-effect relationships in uncomplicated passages
	Meanings of Words:
	Understand the implication of a familiar word or phrase and of simple descriptive language
	Use context to understand basic figurative language
	Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in uncomplicated passages
	Use context to determine the appropriate meaning of virtually any word, phrase, or statement in uncomplicated passages
	Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in more challenging passages
	Generalizations and Conclusions:
	Draw simple generalizations and conclusions about the main characters in uncomplicated literary narratives
	Draw simple generalizations and conclusions about people, ideas, and so on in uncomplicated passages
	Draw generalizations and conclusions about people, ideas, and so on in uncomplicated passages
	Draw simple generalizations and conclusions using details that support the main points of more challenging passages
	Draw subtle generalizations and conclusions about characters, ideas, and so on in uncomplicated literary narratives
	Draw generalizations and conclusions about people, ideas, and so on in more challenging passages

TABLE 1B

KENTUCKY Grade 9 Reading Core Content for Assessment, Version 4.1	EXPLORE Reading College Readiness Standards
INTERPRETING TEXT	
Requires readers to extend their initial impressions to develop a more complete understanding of what is read. This involves linking information across parts of a text as well as focusing on specific information.	
RD-09-3.0.1. Students will explain or analyze how a conflict in a passage is resolved.	**Sequential, Comparative, and Cause-Effect Relationships:** Determine when (e.g., first, last, before, after) or if an event occurred in uncomplicated passages Recognize clear cause-effect relationships described within a single sentence in a passage Identify relationships between main characters in uncomplicated literary narratives Recognize clear cause-effect relationships within a single paragraph in uncomplicated literary narratives Order simple sequences of events in uncomplicated literary narratives Identify clear relationships between people, ideas, and so on in uncomplicated passages Identify clear cause-effect relationships in uncomplicated passages Order sequences of events in uncomplicated passages Understand relationships between people, ideas, and so on in uncomplicated passages Identify clear relationships between characters, ideas, and so on in more challenging literary narratives Understand implied or subtly stated cause-effect relationships in uncomplicated passages Identify clear cause-effect relationships in more challenging passages **Generalizations and Conclusions:** Draw simple generalizations and conclusions about the main characters in uncomplicated literary narratives Draw simple generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw simple generalizations and conclusions using details that support the main points of more challenging passages Draw subtle generalizations and conclusions about characters, ideas, and so on in uncomplicated literary narratives Draw generalizations and conclusions about people, ideas, and so on in more challenging passages

TABLE 1B

KENTUCKY Grade 9 Reading Core Content for Assessment, Version 4.1	EXPLORE Reading College Readiness Standards
INTERPRETING TEXT	
RD-09-3.0.2. Students will identify or explain an author's purpose in a passage.	**Main Ideas and Author's Approach:** Recognize a clear intent of an author or narrator in uncomplicated literary narratives Identify a clear main idea or purpose of straightforward paragraphs in uncomplicated literary narratives Infer the main idea or purpose of straightforward paragraphs in uncomplicated literary narratives Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in uncomplicated passages Identify a clear main idea or purpose of any paragraph or paragraphs in uncomplicated passages Infer the main idea or purpose of straightforward paragraphs in more challenging passages Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in more challenging passages
RD-09-3.0.3. Students will explain an author's position based on evidence in a passage.	**Main Ideas and Author's Approach:** Recognize a clear intent of an author or narrator in uncomplicated literary narratives Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in uncomplicated passages Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in more challenging passages
RD-09-3.0.4. Students will accept or reject an argument, giving supporting evidence from the passage.	
RD-09-3.0.5. Students will analyze an argument, giving supporting evidence from the passage.	**Main Ideas and Author's Approach:** Recognize a clear intent of an author or narrator in uncomplicated literary narratives Identify a clear main idea or purpose of straightforward paragraphs in uncomplicated literary narratives Infer the main idea or purpose of straightforward paragraphs in uncomplicated literary narratives Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in uncomplicated passages Identify a clear main idea or purpose of any paragraph or paragraphs in uncomplicated passages Infer the main idea or purpose of straightforward paragraphs in more challenging passages Summarize basic events and ideas in more challenging passages Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in more challenging passages

TABLE 1B

KENTUCKY Grade 9 Reading Core Content for Assessment, Version 4.1	**EXPLORE Reading** **College Readiness Standards**
INTERPRETING TEXT	
	Supporting Details: Locate basic facts (e.g., names, dates, events) clearly stated in a passage Locate simple details at the sentence and paragraph level in uncomplicated passages Recognize a clear function of a part of an uncomplicated passage Locate important details in uncomplicated passages Make simple inferences about how details are used in passages Locate important details in more challenging passages Locate and interpret minor or subtly stated details in uncomplicated passages Discern which details, though they may appear in different sections throughout a passage, support important points in more challenging passages **Sequential, Comparative, and Cause-Effect Relationships:** Determine when (e.g., first, last, before, after) or if an event occurred in uncomplicated passages Recognize clear cause-effect relationships described within a single sentence in a passage Identify relationships between main characters in uncomplicated literary narratives Recognize clear cause-effect relationships within a single paragraph in uncomplicated literary narratives Order simple sequences of events in uncomplicated literary narratives Identify clear relationships between people, ideas, and so on in uncomplicated passages Identify clear cause-effect relationships in uncomplicated passages Order sequences of events in uncomplicated passages Understand relationships between people, ideas, and so on in uncomplicated passages Identify clear relationships between characters, ideas, and so on in more challenging literary narratives Understand implied or subtly stated cause-effect relationships in uncomplicated passages Identify clear cause-effect relationships in more challenging passages **Meanings of Words:** Understand the implication of a familiar word or phrase and of simple descriptive language Use context to understand basic figurative language Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in uncomplicated passages

TABLE 1B

KENTUCKY Grade 9 Reading Core Content for Assessment, Version 4.1	EXPLORE Reading College Readiness Standards
INTERPRETING TEXT	
	Use context to determine the appropriate meaning of virtually any word, phrase, or statement in uncomplicated passages Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in more challenging passages **Generalizations and Conclusions:** Draw simple generalizations and conclusions about the main characters in uncomplicated literary narratives Draw simple generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw simple generalizations and conclusions using details that support the main points of more challenging passages Draw subtle generalizations and conclusions about characters, ideas, and so on in uncomplicated literary narratives Draw generalizations and conclusions about people, ideas, and so on in more challenging passages
RD-09-3.0.6. Students will analyze the relationship between a speaker's or character's motivation and behavior in a passage, as revealed by the dilemmas.	**Sequential, Comparative, and Cause-Effect Relationships:** Recognize clear cause-effect relationships described within a single sentence in a passage Identify relationships between main characters in uncomplicated literary narratives Recognize clear cause-effect relationships within a single paragraph in uncomplicated literary narratives Identify clear relationships between people, ideas, and so on in uncomplicated passages Identify clear cause-effect relationships in uncomplicated passages Understand relationships between people, ideas, and so on in uncomplicated passages Identify clear relationships between characters, ideas, and so on in more challenging literary narratives Understand implied or subtly stated cause-effect relationships in uncomplicated passages Identify clear cause-effect relationships in more challenging passages
RD-09-3.0.7. Students will analyze or evaluate the use of supporting details as they relate to the author's message.	**Supporting Details:** Recognize a clear function of a part of an uncomplicated passage Make simple inferences about how details are used in passages Discern which details, though they may appear in different sections throughout a passage, support important points in more challenging passages

TABLE 1B

KENTUCKY Grade 9 Reading Core Content for Assessment, Version 4.1	EXPLORE Reading College Readiness Standards
INTERPRETING TEXT	
RD-09-3.0.8. Students will analyze or evaluate the use of persuasive or propaganda techniques within a passage.`	**Supporting Details:** Recognize a clear function of a part of an uncomplicated passage Make simple inferences about how details are used in passages Discern which details, though they may appear in different sections throughout a passage, support important points in more challenging passages **Meanings of Words:** Understand the implication of a familiar word or phrase and of simple descriptive language Use context to understand basic figurative language Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in uncomplicated passages Use context to determine the appropriate meaning of virtually any word, phrase, or statement in uncomplicated passages Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in more challenging passages **Generalizations and Conclusions:** Draw simple generalizations and conclusions about the main characters in uncomplicated literary narratives Draw simple generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw simple generalizations and conclusions using details that support the main points of more challenging passages Draw subtle generalizations and conclusions about characters, ideas, and so on in uncomplicated literary narratives Draw generalizations and conclusions about people, ideas, and so on in more challenging passages
RD-09-3.0.9. Students will explain the appropriateness of the author's content for an intended audience.	

TABLE 1B

KENTUCKY Grade 9 Reading Core Content for Assessment, Version 4.1	**EXPLORE Reading** **College Readiness Standards**
REFLECTING AND RESPONDING TO TEXT	
Requires readers to connect knowledge from the text with their own background knowledge. The focus is on how the text relates to personal knowledge.	
RD-09-4.0.1. Students will analyze the content or make connections as it applies to students' lives (text-to-self), real-world issues (text-to-world) or other texts (text-to-text).	
RD-09-4.0.2. Students will use evidence from a passage to formulate opinions in response to a reading passage.	

TABLE 1B

KENTUCKY Grade 9 Reading Core Content for Assessment, Version 4.1	EXPLORE Reading College Readiness Standards
DEMONSTRATING A CRITICAL STANCE	
Requires readers to consider the text objectively. It involves a range of tasks, including critical evaluation, comparing and contrasting and understanding the impact of features such as irony, humor and organization.	
RD-09-5.0.1. Students will compare and contrast the characteristics of a variety of literary genres.	
RD-09-5.0.2. Students will analyze or evaluate the effectiveness of literary elements (e.g., theme, characterization, setting, point of view, conflict and resolution, plot, structure) within a passage.	**Main Ideas and Author's Approach:** Recognize a clear intent of an author or narrator in uncomplicated literary narratives Identify a clear main idea or purpose of straightforward paragraphs in uncomplicated literary narratives Infer the main idea or purpose of straightforward paragraphs in uncomplicated literary narratives Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in uncomplicated passages Identify a clear main idea or purpose of any paragraph or paragraphs in uncomplicated passages Infer the main idea or purpose of straightforward paragraphs in more challenging passages Summarize basic events and ideas in more challenging passages Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in more challenging passages **Supporting Details:** Locate basic facts (e.g., names, dates, events) clearly stated in a passage Locate simple details at the sentence and paragraph level in uncomplicated passages Recognize a clear function of a part of an uncomplicated passage Locate important details in uncomplicated passages Make simple inferences about how details are used in passages Locate important details in more challenging passages Locate and interpret minor or subtly stated details in uncomplicated passages Discern which details, though they may appear in different sections throughout a passage, support important points in more challenging passages **Sequential, Comparative, and Cause-Effect Relationships:** Determine when (e.g., first, last, before, after) or if an event occurred in uncomplicated passages Recognize clear cause-effect relationships described within a single sentence in a passage

TABLE 1B

KENTUCKY Grade 9 Reading Core Content for Assessment, Version 4.1	**EXPLORE Reading** **College Readiness Standards**
DEMONSTRATING A CRITICAL STANCE	
	Identify relationships between main characters in uncomplicated literary narratives
	Recognize clear cause-effect relationships within a single paragraph in uncomplicated literary narratives
	Order simple sequences of events in uncomplicated literary narratives
	Identify clear relationships between people, ideas, and so on in uncomplicated passages
	Identify clear cause-effect relationships in uncomplicated passages
	Order sequences of events in uncomplicated passages
	Understand relationships between people, ideas, and so on in uncomplicated passages
	Identify clear relationships between characters, ideas, and so on in more challenging literary narratives
	Understand implied or subtly stated cause-effect relationships in uncomplicated passages
	Identify clear cause-effect relationships in more challenging passages
	Meanings of Words:
	Understand the implication of a familiar word or phrase and of simple descriptive language
	Use context to understand basic figurative language
	Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in uncomplicated passages
	Use context to determine the appropriate meaning of virtually any word, phrase, or statement in uncomplicated passages
	Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in more challenging passages
	Generalizations and Conclusions:
	Draw simple generalizations and conclusions about the main characters in uncomplicated literary narratives
	Draw simple generalizations and conclusions about people, ideas, and so on in uncomplicated passages
	Draw generalizations and conclusions about people, ideas, and so on in uncomplicated passages
	Draw simple generalizations and conclusions using details that support the main points of more challenging passages
	Draw subtle generalizations and conclusions about characters, ideas, and so on in uncomplicated literary narratives
	Draw generalizations and conclusions about people, ideas, and so on in more challenging passages

TABLE 1B

KENTUCKY Grade 9 Reading Core Content for Assessment, Version 4.1	EXPLORE Reading College Readiness Standards
DEMONSTRATING A CRITICAL STANCE	
RD-09-5.0.3. Students will analyze the author's use of literary devices in a passage (e.g., symbolism, irony, analogies, imagery, figurative language).	**Supporting Details:** Recognize a clear function of a part of an uncomplicated passage Make simple inferences about how details are used in passages Discern which details, though they may appear in different sections throughout a passage, support important points in more challenging passages **Generalizations and Conclusions:** Draw simple generalizations and conclusions about the main characters in uncomplicated literary narratives Draw simple generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw simple generalizations and conclusions using details that support the main points of more challenging passages Draw subtle generalizations and conclusions about characters, ideas, and so on in uncomplicated literary narratives Draw generalizations and conclusions about people, ideas, and so on in more challenging passages
RD-09-5.0.4. Students will critique the author's word choice, style, tone, or content.	
RD-09-5.0.5. Students will compare or contrast elements, views, ideas, or events presented in one or more passages.	**Sequential, Comparative, and Cause-Effect Relationships:** Identify clear relationships between people, ideas, and so on in uncomplicated passages Understand relationships between people, ideas, and so on in uncomplicated passages Identify clear relationships between characters, ideas, and so on in more challenging literary narratives
RD-09-5.0.6. Students will analyze the ways in which similar themes or ideas are developed in more than one text.	
RD-09-5.0.7. Students will evaluate the effectiveness of organization or format in fulfilling the purpose of a passage.	
RD-09-5.0.8. Students will explain how the use of text features (e.g., illustrations, charts, lists, tables, graphs, tables of contents, indexes, glossaries, headings, captions), format, or layout enhances the reader's understanding of a passage.	
RD-09-5.0.9. Students will analyze the effectiveness of the organizational patterns in a passage (e.g., cause and effect, repetition, comparison and contrast, sequence, generalizations) for fulfilling the purpose of the passage.	

TABLE 1C

KENTUCKY Grade 10 Reading Core Content for Assessment, Version 4.1	**PLAN Reading** **College Readiness Standards**
FORMING A FOUNDATION FOR READING	
Requires readers to develop and apply basic reading skills and strategies across genres to read and understand texts at the appropriate grade level. This involves reading at the word, sentence and connected text levels across content areas that include multicultural texts.	
RD-10-1.0.1. Students will interpret literal or nonliteral meanings of words in a passage.	**Meanings of Words:** Understand the implication of a familiar word or phrase and of simple descriptive language Use context to understand basic figurative language Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in uncomplicated passages Use context to determine the appropriate meaning of virtually any word, phrase, or statement in uncomplicated passages Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in more challenging passages Determine the appropriate meaning of words, phrases, or statements from figurative or somewhat technical contexts
RD-10-1.0.2. Students will make predictions based on what is read.	**Generalizations and Conclusions:** Draw simple generalizations and conclusions about the main characters in uncomplicated literary narratives Draw simple generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw simple generalizations and conclusions using details that support the main points of more challenging passages Draw subtle generalizations and conclusions about characters, ideas, and so on in uncomplicated literary narratives Draw generalizations and conclusions about people, ideas, and so on in more challenging passages Use information from one or more sections of a more challenging passage to draw generalizations and conclusions about people, ideas, and so on
RD-10-1.0.3. Students will formulate questions to guide reading.	

TABLE 1C

KENTUCKY Grade 10 Reading Core Content for Assessment, Version 4.1	**PLAN Reading** **College Readiness Standards**
FORMING A FOUNDATION FOR READING	
RD-10-1.0.4. Students will interpret the meaning of jargon, dialect, or specialized vocabulary found in a passage.	**Meanings of Words:** Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in uncomplicated passages Use context to determine the appropriate meaning of virtually any word, phrase, or statement in uncomplicated passages Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in more challenging passages Determine the appropriate meaning of words, phrases, or statements from figurative or somewhat technical contexts

TABLE 1C

KENTUCKY Grade 10 Reading Core Content for Assessment, Version 4.1	**PLAN Reading** **College Readiness Standards**
DEVELOPING AN INITIAL UNDERSTANDING	
Requires readers to consider the text as a whole or in a broader perspective to develop an initial understanding.	
RD-10-2.0.1. Students will paraphrase information in a passage.	**Main Ideas and Author's Approach:** Recognize a clear intent of an author or narrator in uncomplicated literary narratives Identify a clear main idea or purpose of straightforward paragraphs in uncomplicated literary narratives Infer the main idea or purpose of straightforward paragraphs in uncomplicated literary narratives Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in uncomplicated passages Identify a clear main idea or purpose of any paragraph or paragraphs in uncomplicated passages Infer the main idea or purpose of straightforward paragraphs in more challenging passages Summarize basic events and ideas in more challenging passages Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in more challenging passages Infer the main idea or purpose of more challenging passages or their paragraphs **Supporting Details:** Locate basic facts (e.g., names, dates, events) clearly stated in a passage Locate simple details at the sentence and paragraph level in uncomplicated passages Recognize a clear function of a part of an uncomplicated passage Locate important details in uncomplicated passages Make simple inferences about how details are used in passages Locate important details in more challenging passages Locate and interpret minor or subtly stated details in uncomplicated passages Discern which details, though they may appear in different sections throughout a passage, support important points in more challenging passages Locate and interpret minor or subtly stated details in more challenging passages **Sequential, Comparative, and Cause-Effect Relationships:** Determine when (e.g., first, last, before, after) or if an event occurred in uncomplicated passages Recognize clear cause-effect relationships described within a single sentence in a passage

TABLE 1C

KENTUCKY Grade 10 Reading Core Content for Assessment, Version 4.1	**PLAN Reading** **College Readiness Standards**
DEVELOPING AN INITIAL UNDERSTANDING	
	Identify relationships between main characters in uncomplicated literary narratives
	Recognize clear cause-effect relationships within a single paragraph in uncomplicated literary narratives
	Order simple sequences of events in uncomplicated literary narratives
	Identify clear relationships between people, ideas, and so on in uncomplicated passages
	Identify clear cause-effect relationships in uncomplicated passages
	Order sequences of events in uncomplicated passages
	Understand relationships between people, ideas, and so on in uncomplicated passages
	Identify clear relationships between characters, ideas, and so on in more challenging literary narratives
	Understand implied or subtly stated cause-effect relationships in uncomplicated passages
	Identify clear cause-effect relationships in more challenging passages
	Order sequences of events in more challenging passages
	Understand the dynamics between people, ideas, and so on in more challenging passages
	Understand implied or subtly stated cause-effect relationships in more challenging passages
	Meanings of Words:
	Understand the implication of a familiar word or phrase and of simple descriptive language
	Use context to understand basic figurative language
	Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in uncomplicated passages
	Use context to determine the appropriate meaning of virtually any word, phrase, or statement in uncomplicated passages
	Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in more challenging passages
	Determine the appropriate meaning of words, phrases, or statements from figurative or somewhat technical contexts
	Generalizations and Conclusions:
	Draw simple generalizations and conclusions about the main characters in uncomplicated literary narratives
	Draw simple generalizations and conclusions about people, ideas, and so on in uncomplicated passages
	Draw generalizations and conclusions about people, ideas, and so on in uncomplicated passages
	Draw simple generalizations and conclusions using details that support the main points of more challenging passages

TABLE 1C

KENTUCKY Grade 10 Reading Core Content for Assessment, Version 4.1	**PLAN Reading** **College Readiness Standards**
DEVELOPING AN INITIAL UNDERSTANDING	
	Draw subtle generalizations and conclusions about characters, ideas, and so on in uncomplicated literary narratives Draw generalizations and conclusions about people, ideas, and so on in more challenging passages Use information from one or more sections of a more challenging passage to draw generalizations and conclusions about people, ideas, and so on
RD-10-2.0.2. Students will identify essential information from a passage needed to accomplish a task.	
RD-10-2.0.3. Students will apply the information contained in a passage to accomplish a task/procedure or to answer questions about a passage.	
RD-10-2.0.4. Students will follow the sequence of information from a passage.	**Sequential, Comparative, and Cause-Effect Relationships:** Determine when (e.g., first, last, before, after) or if an event occurred in uncomplicated passages Order simple sequences of events in uncomplicated literary narratives Order sequences of events in uncomplicated passages Order sequences of events in more challenging passages
RD-10-2.0.5. Students will interpret concrete or abstract terms using context from the passage.	**Meanings of Words:** Understand the implication of a familiar word or phrase and of simple descriptive language Use context to understand basic figurative language Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in uncomplicated passages Use context to determine the appropriate meaning of virtually any word, phrase, or statement in uncomplicated passages Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in more challenging passages Determine the appropriate meaning of words, phrases, or statements from figurative or somewhat technical contexts
RD-10-2.0.6. Students will explain the main ideas of a passage and identify the key ideas or information that support them.	**Main Ideas and Author's Approach:** Identify a clear main idea or purpose of straightforward paragraphs in uncomplicated literary narratives Infer the main idea or purpose of straightforward paragraphs in uncomplicated literary narratives Identify a clear main idea or purpose of any paragraph or paragraphs in uncomplicated passages Infer the main idea or purpose of straightforward paragraphs in more challenging passages Summarize basic events and ideas in more challenging passages Infer the main idea or purpose of more challenging passages or their paragraphs

TABLE 1C

KENTUCKY Grade 10 Reading Core Content for Assessment, Version 4.1	**PLAN Reading** **College Readiness Standards**
DEVELOPING AN INITIAL UNDERSTANDING	
	Supporting Details: Recognize a clear function of a part of an uncomplicated passage Make simple inferences about how details are used in passages Discern which details, though they may appear in different sections throughout a passage, support important points in more challenging passages
RD-10-2.0.7. Students will make inferences, draw conclusions or make generalizations based on evidence from a passage.	**Main Ideas and Author's Approach:** Infer the main idea or purpose of straightforward paragraphs in uncomplicated literary narratives Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in uncomplicated passages Infer the main idea or purpose of straightforward paragraphs in more challenging passages Summarize basic events and ideas in more challenging passages Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in more challenging passages Infer the main idea or purpose of more challenging passages or their paragraphs **Supporting Details:** Make simple inferences about how details are used in passages Locate and interpret minor or subtly stated details in uncomplicated passages Discern which details, though they may appear in different sections throughout a passage, support important points in more challenging passages Locate and interpret minor or subtly stated details in more challenging passages **Sequential, Comparative, and Cause-Effect Relationships:** Determine when (e.g., first, last, before, after) or if an event occurred in uncomplicated passages Order simple sequences of events in uncomplicated literary narratives Order sequences of events in uncomplicated passages Understand relationships between people, ideas, and so on in uncomplicated passages Understand implied or subtly stated cause-effect relationships in uncomplicated passages Order sequences of events in more challenging passages Understand the dynamics between people, ideas, and so on in more challenging passages

TABLE 1C

KENTUCKY Grade 10 Reading Core Content for Assessment, Version 4.1	**PLAN Reading** **College Readiness Standards**
DEVELOPING AN INITIAL UNDERSTANDING	
	Understand implied or subtly stated cause-effect relationships in more challenging passages **Meanings of Words:** Understand the implication of a familiar word or phrase and of simple descriptive language Use context to understand basic figurative language Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in uncomplicated passages Use context to determine the appropriate meaning of virtually any word, phrase, or statement in uncomplicated passages Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in more challenging passages Determine the appropriate meaning of words, phrases, or statements from figurative or somewhat technical contexts **Generalizations and Conclusions:** Draw simple generalizations and conclusions about the main characters in uncomplicated literary narratives Draw simple generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw simple generalizations and conclusions using details that support the main points of more challenging passages Draw subtle generalizations and conclusions about characters, ideas, and so on in uncomplicated literary narratives Draw generalizations and conclusions about people, ideas, and so on in more challenging passagesUse information from one or more sections of a more challenging passage to draw generalizations and conclusions about people, ideas, and so on

TABLE 1C

KENTUCKY Grade 10 Reading Core Content for Assessment, Version 4.1	**PLAN Reading** **College Readiness Standards**
INTERPRETING TEXT	
Requires readers to extend their initial impressions to develop a more complete understanding of what is read. This involves linking information across parts of a text as well as focusing on specific information.	
RD-10-3.0.1. Students will explain or analyze how a conflict in a passage is resolved.	**Sequential, Comparative, and Cause-Effect Relationships:** Determine when (e.g., first, last, before, after) or if an event occurred in uncomplicated passages Recognize clear cause-effect relationships described within a single sentence in a passage Identify relationships between main characters in uncomplicated literary narratives Recognize clear cause-effect relationships within a single paragraph in uncomplicated literary narratives Order simple sequences of events in uncomplicated literary narratives Identify clear relationships between people, ideas, and so on in uncomplicated passages Identify clear cause-effect relationships in uncomplicated passages Order sequences of events in uncomplicated passages Understand relationships between people, ideas, and so on in uncomplicated passages Identify clear relationships between characters, ideas, and so on in more challenging literary narratives Understand implied or subtly stated cause-effect relationships in uncomplicated passages Identify clear cause-effect relationships in more challenging passages Order sequences of events in more challenging passages Understand the dynamics between people, ideas, and so on in more challenging passages Understand implied or subtly stated cause-effect relationships in more challenging passages **Generalizations and Conclusions:** Draw simple generalizations and conclusions about the main characters in uncomplicated literary narratives Draw simple generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw simple generalizations and conclusions using details that support the main points of more challenging passages Draw subtle generalizations and conclusions about characters, ideas, and so on in uncomplicated literary narratives Draw generalizations and conclusions about people, ideas, and so on in more challenging passages

TABLE 1C

KENTUCKY Grade 10 Reading Core Content for Assessment, Version 4.1	**PLAN Reading** **College Readiness Standards**
INTERPRETING TEXT	
	Use information from one or more sections of a more challenging passage to draw generalizations and conclusions about people, ideas, and so on
RD-10-3.0.2. Students will identify or explain an author's purpose in a passage.	**Main Ideas and Author's Approach:** Recognize a clear intent of an author or narrator in uncomplicated literary narratives Identify a clear main idea or purpose of straightforward paragraphs in uncomplicated literary narratives Infer the main idea or purpose of straightforward paragraphs in uncomplicated literary narratives Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in uncomplicated passages Identify a clear main idea or purpose of any paragraph or paragraphs in uncomplicated passages Infer the main idea or purpose of straightforward paragraphs in more challenging passages Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in more challenging passages Infer the main idea or purpose of more challenging passages or their paragraphs
RD-10-3.0.3. Students will explain an author's position based on evidence in a passage.	**Main Ideas and Author's Approach:** Recognize a clear intent of an author or narrator in uncomplicated literary narratives Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in uncomplicated passages Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in more challenging passages
RD-10-3.0.4. Students will accept or reject an argument, giving supporting evidence from the passage.	
RD-10-3.0.5. Students will analyze an argument, giving supporting evidence from the passage.	**Main Ideas and Author's Approach:** Recognize a clear intent of an author or narrator in uncomplicated literary narratives Identify a clear main idea or purpose of straightforward paragraphs in uncomplicated literary narratives Infer the main idea or purpose of straightforward paragraphs in uncomplicated literary narratives Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in uncomplicated passages Identify a clear main idea or purpose of any paragraph or paragraphs in uncomplicated passages Infer the main idea or purpose of straightforward paragraphs in more challenging passages

TABLE 1C

KENTUCKY Grade 10 Reading Core Content for Assessment, Version 4.1	**PLAN Reading** **College Readiness Standards**
INTERPRETING TEXT	
	Summarize basic events and ideas in more challenging passages
	Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in more challenging passages
	Infer the main idea or purpose of more challenging passages or their paragraphs
	Supporting Details:
	Locate basic facts (e.g., names, dates, events) clearly stated in a passage
	Locate simple details at the sentence and paragraph level in uncomplicated passages
	Recognize a clear function of a part of an uncomplicated passage
	Locate important details in uncomplicated passages
	Make simple inferences about how details are used in passages
	Locate important details in more challenging passages
	Locate and interpret minor or subtly stated details in uncomplicated passages
	Discern which details, though they may appear in different sections throughout a passage, support important points in more challenging passages
	Locate and interpret minor or subtly stated details in more challenging passages
	Sequential, Comparative, and Cause-Effect Relationships:
	Determine when (e.g., first, last, before, after) or if an event occurred in uncomplicated passages
	Recognize clear cause-effect relationships described within a single sentence in a passage
	Identify relationships between main characters in uncomplicated literary narratives
	Recognize clear cause-effect relationships within a single paragraph in uncomplicated literary narratives
	Order simple sequences of events in uncomplicated literary narratives
	Identify clear relationships between people, ideas, and so on in uncomplicated passages
	Identify clear cause-effect relationships in uncomplicated passages
	Order sequences of events in uncomplicated passages
	Understand relationships between people, ideas, and so on in uncomplicated passages
	Identify clear relationships between characters, ideas, and so on in more challenging literary narratives
	Understand implied or subtly stated cause-effect relationships in uncomplicated passages

TABLE 1C

KENTUCKY Grade 10 Reading Core Content for Assessment, Version 4.1	**PLAN Reading** **College Readiness Standards**
INTERPRETING TEXT	
	Identify clear cause-effect relationships in more challenging passages Order sequences of events in more challenging passages Understand the dynamics between people, ideas, and so on in more challenging passages Understand implied or subtly stated cause-effect relationships in more challenging passages **Meanings of Words:** Understand the implication of a familiar word or phrase and of simple descriptive language Use context to understand basic figurative language Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in uncomplicated passages Use context to determine the appropriate meaning of virtually any word, phrase, or statement in uncomplicated passages Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in more challenging passages Determine the appropriate meaning of words, phrases, or statements from figurative or somewhat technical contexts **Generalizations and Conclusions:** Draw simple generalizations and conclusions about the main characters in uncomplicated literary narratives Draw simple generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw simple generalizations and conclusions using details that support the main points of more challenging passages Draw subtle generalizations and conclusions about characters, ideas, and so on in uncomplicated literary narratives Draw generalizations and conclusions about people, ideas, and so on in more challenging passages Use information from one or more sections of a more challenging passage to draw generalizations and conclusions about people, ideas, and so on
RD-10-3.0.6. Students will analyze the relationship between a speaker's or character's motivation and behavior in a passage, as revealed by the dilemmas.	**Sequential, Comparative, and Cause-Effect Relationships:** Recognize clear cause-effect relationships described within a single sentence in a passage Identify relationships between main characters in uncomplicated literary narratives Recognize clear cause-effect relationships within a single paragraph in uncomplicated literary narratives

TABLE 1C

KENTUCKY Grade 10 Reading Core Content for Assessment, Version 4.1	**PLAN Reading** **College Readiness Standards**
INTERPRETING TEXT	
	Identify clear relationships between people, ideas, and so on in uncomplicated passages Identify clear cause-effect relationships in uncomplicated passages Understand relationships between people, ideas, and so on in uncomplicated passages Identify clear relationships between characters, ideas, and so on in more challenging literary narratives Understand implied or subtly stated cause-effect relationships in uncomplicated passages Identify clear cause-effect relationships in more challenging passages Understand the dynamics between people, ideas, and so on in more challenging passages Understand implied or subtly stated cause-effect relationships in more challenging passages
RD-10-3.0.7. Students will analyze or evaluate the use of supporting details as they relate to the author's message.	**Supporting Details:** Recognize a clear function of a part of an uncomplicated passage Make simple inferences about how details are used in passages Discern which details, though they may appear in different sections throughout a passage, support important points in more challenging passages
RD-10-3.0.8. Students will analyze or evaluate the use of persuasive or propaganda techniques within a passage.	**Supporting Details:** Recognize a clear function of a part of an uncomplicated passage Make simple inferences about how details are used in passages Discern which details, though they may appear in different sections throughout a passage, support important points in more challenging passages **Meanings of Words:** Understand the implication of a familiar word or phrase and of simple descriptive language Use context to understand basic figurative language Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in uncomplicated passages Use context to determine the appropriate meaning of virtually any word, phrase, or statement in uncomplicated passages Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in more challenging passages Determine the appropriate meaning of words, phrases, or statements from figurative or somewhat technical contexts

TABLE 1C

KENTUCKY Grade 10 Reading Core Content for Assessment, Version 4.1	**PLAN Reading** **College Readiness Standards**
INTERPRETING TEXT	
	Generalizations and Conclusions: Draw simple generalizations and conclusions about the main characters in uncomplicated literary narratives Draw simple generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw simple generalizations and conclusions using details that support the main points of more challenging passages Draw subtle generalizations and conclusions about characters, ideas, and so on in uncomplicated literary narratives Draw generalizations and conclusions about people, ideas, and so on in more challenging passages Use information from one or more sections of a more challenging passage to draw generalizations and conclusions about people, ideas, and so on
RD-10-3.0.9. Students will explain the appropriateness of the author's content for an intended audience.	

TABLE 1C

KENTUCKY Grade 10 Reading Core Content for Assessment, Version 4.1	**PLAN Reading** **College Readiness Standards**
REFLECTING AND RESPONDING TO TEXT	
Requires readers to connect knowledge from the text with their own background knowledge. The focus is on how the text relates to personal knowledge.	
RD-10-4.0.1. Students will analyze the content or make connections as it applies to students' lives (text-to-self), real-world issues (text-to-world) or other texts (text-to-text).	
RD-10-4.0.2. Students will use evidence from a passage to formulate opinions in response to a reading passage.	

TABLE 1C

KENTUCKY Grade 10 Reading Core Content for Assessment, Version 4.1	**PLAN Reading** **College Readiness Standards**
DEMONSTRATING A CRITICAL STANCE	
Requires readers to consider the text objectively. It involves a range of tasks, including critical evaluation, comparing and contrasting and understanding the impact of features such as irony, humor and organization.	
RD-10-5.0.1. Students will compare and contrast the characteristics of a variety of literary genres.	
RD-10-5.0.2. Students will analyze or evaluate the effectiveness of literary elements (e.g., theme, characterization, setting, point of view, conflict and resolution, plot, structure) within a passage.	**Main Ideas and Author's Approach:** Recognize a clear intent of an author or narrator in uncomplicated literary narratives Identify a clear main idea or purpose of straightforward paragraphs in uncomplicated literary narratives Infer the main idea or purpose of straightforward paragraphs in uncomplicated literary narratives Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in uncomplicated passages Identify a clear main idea or purpose of any paragraph or paragraphs in uncomplicated passages Infer the main idea or purpose of straightforward paragraphs in more challenging passages Summarize basic events and ideas in more challenging passages Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in more challenging passages Infer the main idea or purpose of more challenging passages or their paragraphs **Supporting Details:** Locate basic facts (e.g., names, dates, events) clearly stated in a passage Locate simple details at the sentence and paragraph level in uncomplicated passages Recognize a clear function of a part of an uncomplicated passage Locate important details in uncomplicated passages Make simple inferences about how details are used in passages Locate important details in more challenging passages Locate and interpret minor or subtly stated details in uncomplicated passages Discern which details, though they may appear in different sections throughout a passage, support important points in more challenging passages Locate and interpret minor or subtly stated details in more challenging passages

TABLE 1C

KENTUCKY Grade 10 Reading Core Content for Assessment, Version 4.1	**PLAN Reading** **College Readiness Standards**
DEMONSTRATING A CRITICAL STANCE	
	Sequential, Comparative, and Cause-Effect Relationships:
	Determine when (e.g., first, last, before, after) or if an event occurred in uncomplicated passages
	Recognize clear cause-effect relationships described within a single sentence in a passage
	Identify relationships between main characters in uncomplicated literary narratives
	Recognize clear cause-effect relationships within a single paragraph in uncomplicated literary narratives
	Order simple sequences of events in uncomplicated literary narratives
	Identify clear relationships between people, ideas, and so on in uncomplicated passages
	Identify clear cause-effect relationships in uncomplicated passages
	Order sequences of events in uncomplicated passages
	Understand relationships between people, ideas, and so on in uncomplicated passages
	Identify clear relationships between characters, ideas, and so on in more challenging literary narratives
	Understand implied or subtly stated cause-effect relationships in uncomplicated passages
	Identify clear cause-effect relationships in more challenging passages
	Order sequences of events in more challenging passages
	Understand the dynamics between people, ideas, and so on in more challenging passages
	Understand implied or subtly stated cause-effect relationships in more challenging passages
	Meanings of Words:
	Understand the implication of a familiar word or phrase and of simple descriptive language
	Use context to understand basic figurative language
	Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in uncomplicated passages
	Use context to determine the appropriate meaning of virtually any word, phrase, or statement in uncomplicated passages
	Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in more challenging passages
	Determine the appropriate meaning of words, phrases, or statements from figurative or somewhat technical contexts
	Generalizations and Conclusions:
	Draw simple generalizations and conclusions about the main characters in uncomplicated literary narratives

TABLE 1C

KENTUCKY Grade 10 Reading Core Content for Assessment, Version 4.1	**PLAN Reading** **College Readiness Standards**
DEMONSTRATING A CRITICAL STANCE	
	Draw simple generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw simple generalizations and conclusions using details that support the main points of more challenging passages Draw subtle generalizations and conclusions about characters, ideas, and so on in uncomplicated literary narratives Draw generalizations and conclusions about people, ideas, and so on in more challenging passages Use information from one or more sections of a more challenging passage to draw generalizations and conclusions about people, ideas, and so on
RD-10-5.0.3. Students will analyze the author's use of literary devices in a passage (e.g., symbolism, irony, analogies, imagery, figurative language).	**Supporting Details:** Recognize a clear function of a part of an uncomplicated passage Make simple inferences about how details are used in passages Discern which details, though they may appear in different sections throughout a passage, support important points in more challenging passages **Generalizations and Conclusions:** Draw simple generalizations and conclusions about the main characters in uncomplicated literary narratives Draw simple generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw simple generalizations and conclusions using details that support the main points of more challenging passages Draw subtle generalizations and conclusions about characters, ideas, and so on in uncomplicated literary narratives Draw generalizations and conclusions about people, ideas, and so on in more challenging passages Use information from one or more sections of a more challenging passage to draw generalizations and conclusions about people, ideas, and so on
RD-10-5.0.4. Students will critique the author's word choice, style, tone, or content.	

TABLE 1C

KENTUCKY Grade 10 Reading Core Content for Assessment, Version 4.1	**PLAN Reading** **College Readiness Standards**
DEMONSTRATING A CRITICAL STANCE	
RD-10-5.0.5. Students will compare or contrast elements, views, ideas, or events presented in one or more passages.	**Sequential, Comparative, and Cause-Effect Relationships:** Identify clear relationships between people, ideas, and so on in uncomplicated passages Understand relationships between people, ideas, and so on in uncomplicated passages Identify clear relationships between characters, ideas, and so on in more challenging literary narratives Understand the dynamics between people, ideas, and so on in more challenging passages
RD-10-5.0.6. Students will analyze the ways in which similar themes or ideas are developed in more than one text.	
RD-10-5.0.7. Students will evaluate the effectiveness of organization or format in fulfilling the purpose of a passage.	
RD-10-5.0.8. Students will explain how the use of text features (e.g., illustrations, charts, lists, tables, graphs, tables of contents, indexes, glossaries, headings, captions), format, or layout enhances the reader's understanding of a passage.	
RD-10-5.0.9. Students will analyze the effectiveness of the organizational patterns in a passage (e.g., cause and effect, repetition, comparison and contrast, sequence, generalizations) for fulfilling the purpose of the passage.	

TABLE 1D

KENTUCKY Grade 11 Reading Core Content for Assessment, Version 4.1	**ACT Reading College Readiness Standards and WorkKeys Reading for Information Skills**
FORMING A FOUNDATION FOR READING	
Requires readers to develop and apply basic reading skills and strategies across genres to read and understand texts at the appropriate grade level. This involves reading at the word, sentence and connected text levels across content areas that include multicultural texts.	
RD-11-1.0.1. Students will interpret literal or non-literal meanings of words in a passage.	**ACT Reading** College Readiness Standards **Meanings of Words:** Understand the implication of a familiar word or phrase and of simple descriptive language Use context to understand basic figurative language Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in uncomplicated passages Use context to determine the appropriate meaning of virtually any word, phrase, or statement in uncomplicated passages Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in more challenging passages Determine the appropriate meaning of words, phrases, or statements from figurative or somewhat technical contexts **WorkKeys Reading for Information** Skills Choose the correct meaning of a word that is clearly defined in the reading Choose the correct meaning of common, everyday and workplace words Use the reading material to figure out the meaning of words that are not defined Figure out the correct meaning of a word based on how the word is used Figure out the less common meaning of a word based on the context Figure out the definitions of difficult, uncommon words based on how they are used
RD-11-1.0.2. Students will make predictions based on what is read.	**ACT Reading** College Readiness Standards **Generalizations and Conclusions:** Draw simple generalizations and conclusions about the main characters in uncomplicated literary narratives Draw simple generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw simple generalizations and conclusions using details that support the main points of more challenging passages Draw subtle generalizations and conclusions about characters, ideas, and so on in uncomplicated literary narratives Draw generalizations and conclusions about people, ideas, and so on in more challenging passages

TABLE 1D

KENTUCKY Grade 11 Reading Core Content for Assessment, Version 4.1	**ACT Reading College Readiness Standards and WorkKeys Reading for Information Skills**
FORMING A FOUNDATION FOR READING	
	Use information from one or more sections of a more challenging passage to draw generalizations and conclusions about people, ideas, and so on **WorkKeys Reading for Information** Skills Identify implied details Figure out the principles behind policies, rules, and procedures Apply general principles from the materials to similar and new situations
RD-11-1.0.3. Students will formulate questions to guide reading.	
RD-11-1.0.4. Students will interpret the meaning of jargon, dialect, or specialized vocabulary found in a passage.	**ACT Reading** College Readiness Standards **Meanings of Words:** Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in uncomplicated passages Use context to determine the appropriate meaning of virtually any word, phrase, or statement in uncomplicated passages Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in more challenging passages Determine the appropriate meaning of words, phrases, or statements from figurative or somewhat technical contexts **WorkKeys Reading for Information** Skills Identify the paraphrased definition of a technical term or jargon that is defined in the document Apply technical terms and jargon and relate them to stated situations Figure out the definitions of difficult, uncommon words based on how they are used Figure out the meaning of jargon or technical terms based on how they are used

TABLE 1D

KENTUCKY Grade 11 Reading Core Content for Assessment, Version 4.1	**ACT Reading College Readiness Standards and WorkKeys Reading for Information Skills**
DEVELOPING AN INITIAL UNDERSTANDING	
Requires readers to consider the text as a whole or in a broader perspective to develop an initial understanding.	
RD-11-2.0.1. Students will paraphrase information in a passage.	**ACT Reading** College Readiness Standards **Main Ideas and Author's Approach:** Recognize a clear intent of an author or narrator in uncomplicated literary narratives Identify a clear main idea or purpose of straightforward paragraphs in uncomplicated literary narratives Infer the main idea or purpose of straightforward paragraphs in uncomplicated literary narratives Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in uncomplicated passages Identify a clear main idea or purpose of any paragraph or paragraphs in uncomplicated passages Infer the main idea or purpose of straightforward paragraphs in more challenging passages Summarize basic events and ideas in more challenging passages Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in more challenging passages Infer the main idea or purpose of more challenging passages or their paragraphs **Supporting Details:** Locate basic facts (e.g., names, dates, events) clearly stated in a passage Locate simple details at the sentence and paragraph level in uncomplicated passages Recognize a clear function of a part of an uncomplicated passage Locate important details in uncomplicated passages Make simple inferences about how details are used in passages Locate important details in more challenging passages Locate and interpret minor or subtly stated details in uncomplicated passages Discern which details, though they may appear in different sections throughout a passage, support important points in more challenging passages Locate and interpret minor or subtly stated details in more challenging passages **Sequential, Comparative, and Cause-Effect Relationships:** Determine when (e.g., first, last, before, after) or if an event occurred in uncomplicated passages Recognize clear cause-effect relationships described within a single sentence in a passage

TABLE 1D

KENTUCKY Grade 11 Reading Core Content for Assessment, Version 4.1	**ACT Reading College Readiness Standards and WorkKeys Reading for Information Skills**
DEVELOPING AN INITIAL UNDERSTANDING	
	Identify relationships between main characters in uncomplicated literary narratives
	Recognize clear cause-effect relationships within a single paragraph in uncomplicated literary narratives
	Order simple sequences of events in uncomplicated literary narratives
	Identify clear relationships between people, ideas, and so on in uncomplicated passages
	Identify clear cause-effect relationships in uncomplicated passages
	Order sequences of events in uncomplicated passages
	Understand relationships between people, ideas, and so on in uncomplicated passages
	Identify clear relationships between characters, ideas, and so on in more challenging literary narratives
	Understand implied or subtly stated cause-effect relationships in uncomplicated passages
	Identify clear cause-effect relationships in more challenging passages
	Order sequences of events in more challenging passages
	Understand the dynamics between people, ideas, and so on in more challenging passages
	Understand implied or subtly stated cause-effect relationships in more challenging passages
	Meanings of Words:
	Understand the implication of a familiar word or phrase and of simple descriptive language
	Use context to understand basic figurative language
	Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in uncomplicated passages
	Use context to determine the appropriate meaning of virtually any word, phrase, or statement in uncomplicated passages
	Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in more challenging passages
	Determine the appropriate meaning of words, phrases, or statements from figurative or somewhat technical contexts
	Generalizations and Conclusions:
	Draw simple generalizations and conclusions about the main characters in uncomplicated literary narratives
	Draw simple generalizations and conclusions about people, ideas, and so on in uncomplicated passages
	Draw generalizations and conclusions about people, ideas, and so on in uncomplicated passages
	Draw simple generalizations and conclusions using details that support the main points of more challenging passages

TABLE 1D

KENTUCKY Grade 11 Reading Core Content for Assessment, Version 4.1	**ACT Reading College Readiness Standards and WorkKeys Reading for Information Skills**
DEVELOPING AN INITIAL UNDERSTANDING	
	Draw subtle generalizations and conclusions about characters, ideas, and so on in uncomplicated literary narratives Draw generalizations and conclusions about people, ideas, and so on in more challenging passages Use information from one or more sections of a more challenging passage to draw generalizations and conclusions about people, ideas, and so on
RD-11-2.0.2. Students will identify essential information from a passage needed to accomplish a task.	**WorkKeys Reading for Information** Skills Identify main ideas and clearly stated details Identify important details that may not be clearly stated
RD-11-2.0.3. Students will apply the information contained in a passage to accomplish a task/procedure or to answer questions about a passage.	**WorkKeys Reading for Information** Skills Apply instructions to a situation that is the same as the one in the reading materials Apply instructions with several steps to a situation that is the same as the situation in the reading materials Choose what to do when changing conditions call for a different action (follow directions that include "if-then" statements) Apply straightforward instructions to a new situation that is similar to the one described in the material
RD-11-2.0.4. Students will follow the sequence of information from a passage.	**ACT Reading** College Readiness Standards **Sequential, Comparative, and Cause-Effect Relationships:** Determine when (e.g., first, last, before, after) or if an event occurred in uncomplicated passages Order simple sequences of events in uncomplicated literary narratives Order sequences of events in uncomplicated passages Order sequences of events in more challenging passages **WorkKeys Reading for Information** Skills Choose when to perform each step in a short series of steps Apply instructions with several steps to a situation that is the same as the situation in the reading materials
RD-11-2.0.5. Students will interpret concrete or abstract terms using context from the passage.	**ACT Reading** College Readiness Standards **Meanings of Words:** Understand the implication of a familiar word or phrase and of simple descriptive language Use context to understand basic figurative language Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in uncomplicated passages Use context to determine the appropriate meaning of virtually any word, phrase, or statement in uncomplicated passages

TABLE 1D

KENTUCKY Grade 11 Reading Core Content for Assessment, Version 4.1	**ACT Reading College Readiness Standards and WorkKeys Reading for Information Skills**
DEVELOPING AN INITIAL UNDERSTANDING	
	Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in more challenging passages Determine the appropriate meaning of words, phrases, or statements from figurative or somewhat technical contexts **WorkKeys Reading for Information** Skills Choose the correct meaning of a word that is clearly defined in the reading Choose the correct meaning of common, everyday and workplace words Use the reading material to figure out the meaning of words that are not defined Figure out the correct meaning of a word based on how the word is used Figure out the less common meaning of a word based on the context
RD-11-2.0.6. Students will explain the main ideas of a passage and identify the key ideas or information that support them.	**ACT Reading** College Readiness Standards **Main Ideas and Author's Approach:** Recognize a clear intent of an author or narrator in uncomplicated literary narratives Identify a clear main idea or purpose of straightforward paragraphs in uncomplicated literary narratives Infer the main idea or purpose of straightforward paragraphs in uncomplicated literary narratives Identify a clear main idea or purpose of any paragraph or paragraphs in uncomplicated passages Infer the main idea or purpose of straightforward paragraphs in more challenging passages Summarize basic events and ideas in more challenging passages Infer the main idea or purpose of more challenging passages or their paragraphs **Supporting Details:** Recognize a clear function of a part of an uncomplicated passage Make simple inferences about how details are used in passages Discern which details, though they may appear in different sections throughout a passage, support important points in more challenging passages **WorkKeys Reading for Information** Skills Identify main ideas and clearly stated details Identify important details that may not be clearly stated Identify implied details

TABLE 1D

KENTUCKY Grade 11 Reading Core Content for Assessment, Version 4.1	**ACT Reading College Readiness Standards and WorkKeys Reading for Information Skills**
DEVELOPING AN INITIAL UNDERSTANDING	
RD-11-2.0.7. Students will make inferences, draw conclusions or make generalizations based on evidence from a passage.	**ACT Reading** College Readiness Standards **Main Ideas and Author's Approach:** Infer the main idea or purpose of straightforward paragraphs in uncomplicated literary narratives Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in uncomplicated passages Infer the main idea or purpose of straightforward paragraphs in more challenging passages Summarize basic events and ideas in more challenging passages Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in more challenging passages Infer the main idea or purpose of more challenging passages or their paragraphs **Supporting Details:** Make simple inferences about how details are used in passages Locate and interpret minor or subtly stated details in uncomplicated passages Discern which details, though they may appear in different sections throughout a passage, support important points in more challenging passages Locate and interpret minor or subtly stated details in more challenging passages **Sequential, Comparative, and Cause-Effect Relationships:** Determine when (e.g., first, last, before, after) or if an event occurred in uncomplicated passages Order simple sequences of events in uncomplicated literary narratives Order sequences of events in uncomplicated passages Understand relationships between people, ideas, and so on in uncomplicated passages Understand implied or subtly stated cause-effect relationships in uncomplicated passages Order sequences of events in more challenging passages Understand the dynamics between people, ideas, and so on in more challenging passages Understand implied or subtly stated cause-effect relationships in more challenging passages **Meanings of Words:** Understand the implication of a familiar word or phrase and of simple descriptive language Use context to understand basic figurative language

TABLE 1D

KENTUCKY Grade 11 Reading Core Content for Assessment, Version 4.1	**ACT Reading College Readiness Standards and WorkKeys Reading for Information Skills**
DEVELOPING AN INITIAL UNDERSTANDING	
	Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in uncomplicated passages Use context to determine the appropriate meaning of virtually any word, phrase, or statement in uncomplicated passages Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in more challenging passages Determine the appropriate meaning of words, phrases, or statements from figurative or somewhat technical contexts **Generalizations and Conclusions:** Draw simple generalizations and conclusions about the main characters in uncomplicated literary narratives Draw simple generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw simple generalizations and conclusions using details that support the main points of more challenging passages Draw subtle generalizations and conclusions about characters, ideas, and so on in uncomplicated literary narratives Draw generalizations and conclusions about people, ideas, and so on in more challenging passages Use information from one or more sections of a more challenging passage to draw generalizations and conclusions about people, ideas, and so on **WorkKeys Reading for Information** Skills Figure out the principles behind policies, rules, and procedures Apply general principles from the materials to similar and new situations Explain the rationale behind a procedure, policy, or communication

TABLE 1D

KENTUCKY Grade 11 Reading Core Content for Assessment, Version 4.1	**ACT Reading** **College Readiness Standards**
INTERPRETING TEXT	
Requires readers to extend their initial impressions to develop a more complete understanding of what is read. This involves linking information across parts of a text as well as focusing on specific information.	
RD-11-3.0.1. Students will analyze how a conflict in a passage is resolved.	**Sequential, Comparative, and Cause-Effect Relationships:** Determine when (e.g., first, last, before, after) or if an event occurred in uncomplicated passages Recognize clear cause-effect relationships described within a single sentence in a passage Identify relationships between main characters in uncomplicated literary narratives Recognize clear cause-effect relationships within a single paragraph in uncomplicated literary narratives Order simple sequences of events in uncomplicated literary narratives Identify clear relationships between people, ideas, and so on in uncomplicated passages Identify clear cause-effect relationships in uncomplicated passages Order sequences of events in uncomplicated passages Understand relationships between people, ideas, and so on in uncomplicated passages Identify clear relationships between characters, ideas, and so on in more challenging literary narratives Understand implied or subtly stated cause-effect relationships in uncomplicated passages Identify clear cause-effect relationships in more challenging passages Order sequences of events in more challenging passages Understand the dynamics between people, ideas, and so on in more challenging passages Understand implied or subtly stated cause-effect relationships in more challenging passages **Generalizations and Conclusions:** Draw simple generalizations and conclusions about the main characters in uncomplicated literary narratives Draw simple generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw simple generalizations and conclusions using details that support the main points of more challenging passages Draw subtle generalizations and conclusions about characters, ideas, and so on in uncomplicated literary narratives Draw generalizations and conclusions about people, ideas, and so on in more challenging passages

TABLE 1D

KENTUCKY Grade 11 Reading Core Content for Assessment, Version 4.1	**ACT Reading** **College Readiness Standards**
INTERPRETING TEXT	
	Use information from one or more sections of a more challenging passage to draw generalizations and conclusions about people, ideas, and so on
RD-11-3.0.2. Students will analyze an author's purpose in a passage.	**Main Ideas and Author's Approach:** Recognize a clear intent of an author or narrator in uncomplicated literary narratives Identify a clear main idea or purpose of straightforward paragraphs in uncomplicated literary narratives Infer the main idea or purpose of straightforward paragraphs in uncomplicated literary narratives Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in uncomplicated passages Identify a clear main idea or purpose of any paragraph or paragraphs in uncomplicated passages Infer the main idea or purpose of straightforward paragraphs in more challenging passages Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in more challenging passages Infer the main idea or purpose of more challenging passages or their paragraphs
RD-11-3.0.3. Students will explain an author's position based on evidence in a passage.	**Main Ideas and Author's Approach:** Recognize a clear intent of an author or narrator in uncomplicated literary narratives Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in uncomplicated passages Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in more challenging passages
RD-11-3.0.4. Students will accept or reject an argument, giving supporting evidence from the passage.	
RD-11-3.0.5. Students will evaluate an argument, giving supporting evidence from the passage.	
RD-11-3.0.6. Students will analyze the relationship between a speaker's or character's motivation and behavior in a passage, as revealed by the dilemmas.	**Sequential, Comparative, and Cause-Effect Relationships:** Recognize clear cause-effect relationships described within a single sentence in a passage Identify relationships between main characters in uncomplicated literary narratives Recognize clear cause-effect relationships within a single paragraph in uncomplicated literary narratives Identify clear relationships between people, ideas, and so on in uncomplicated passages Identify clear cause-effect relationships in uncomplicated passages

TABLE 1D

KENTUCKY Grade 11 Reading Core Content for Assessment, Version 4.1	**ACT Reading** **College Readiness Standards**
INTERPRETING TEXT	
	Understand relationships between people, ideas, and so on in uncomplicated passages Identify clear relationships between characters, ideas, and so on in more challenging literary narratives Understand implied or subtly stated cause-effect relationships in uncomplicated passages Identify clear cause-effect relationships in more challenging passages Understand the dynamics between people, ideas, and so on in more challenging passages Understand implied or subtly stated cause-effect relationships in more challenging passages
RD-11-3.0.7. Students will analyze or evaluate the use of supporting details as they relate to the author's message.	**Supporting Details:** Recognize a clear function of a part of an uncomplicated passage Make simple inferences about how details are used in passages Discern which details, though they may appear in different sections throughout a passage, support important points in more challenging passages
RD-11-3.0.8. Students will analyze or evaluate the use of persuasive or propaganda techniques within a passage.	**Supporting Details:** Recognize a clear function of a part of an uncomplicated passage Make simple inferences about how details are used in passages Discern which details, though they may appear in different sections throughout a passage, support important points in more challenging passages **Meanings of Words:** Understand the implication of a familiar word or phrase and of simple descriptive language Use context to understand basic figurative language Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in uncomplicated passages Use context to determine the appropriate meaning of virtually any word, phrase, or statement in uncomplicated passages Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in more challenging passages Determine the appropriate meaning of words, phrases, or statements from figurative or somewhat technical contexts **Generalizations and Conclusions:** Draw simple generalizations and conclusions about the main characters in uncomplicated literary narratives Draw simple generalizations and conclusions about people, ideas, and so on in uncomplicated passages

TABLE 1D

KENTUCKY Grade 11 Reading Core Content for Assessment, Version 4.1	**ACT Reading** **College Readiness Standards**
INTERPRETING TEXT	
	Draw generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw simple generalizations and conclusions using details that support the main points of more challenging passages Draw subtle generalizations and conclusions about characters, ideas, and so on in uncomplicated literary narratives Draw generalizations and conclusions about people, ideas, and so on in more challenging passages Use information from one or more sections of a more challenging passage to draw generalizations and conclusions about people, ideas, and so on
RD-11-3.0.9. Students will explain the appropriateness of the author's content for an intended audience.	

TABLE 1D

KENTUCKY Grade 11 Reading Core Content for Assessment, Version 4.1	**WorkKeys** **Reading for Information Skills**
REFLECTING AND RESPONDING TO TEXT	
Requires readers to connect knowledge from the text with their own background knowledge. The focus is on how the text relates to personal knowledge.	
RD-11-4.0.1. Students will evaluate the content or make connections as it applies to students' lives (text-to-self), real-world issues (text-to-world) or other texts (text-to-text).	Apply straightforward instructions to a new situation that is similar to the one described in the material Apply general principles from the materials to similar and new situations
RD-11-4.0.2. Students will use evidence from a passage to formulate opinions in response to a reading passage.	Figure out the principles behind policies, rules, and procedures Explain the rationale behind a procedure, policy, or communication

TABLE 1D

KENTUCKY Grade 11 Reading Core Content for Assessment, Version 4.1	**ACT Reading** **College Readiness Standards**
DEMONSTRATING A CRITICAL STANCE	
Requires readers to consider the text objectively. It involves a range of tasks, including critical evaluation, comparing and contrasting and understanding the impact of features such as irony, humor and organization.	
RD-11-5.0.1. Students will compare and contrast the characteristics of a variety of literary genres.	
RD-11-5.0.2. Students will analyze or evaluate the effectiveness of literary elements (e.g., theme, characterization, setting, point of view, conflict and resolution, plot, structure) within a passage.	**Main Ideas and Author's Approach:** Recognize a clear intent of an author or narrator in uncomplicated literary narratives Identify a clear main idea or purpose of straightforward paragraphs in uncomplicated literary narratives Infer the main idea or purpose of straightforward paragraphs in uncomplicated literary narratives Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in uncomplicated passages Identify a clear main idea or purpose of any paragraph or paragraphs in uncomplicated passages Infer the main idea or purpose of straightforward paragraphs in more challenging passages Summarize basic events and ideas in more challenging passages Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in more challenging passages Infer the main idea or purpose of more challenging passages or their paragraphs **Supporting Details:** Locate basic facts (e.g., names, dates, events) clearly stated in a passage Locate simple details at the sentence and paragraph level in uncomplicated passages Recognize a clear function of a part of an uncomplicated passage Locate important details in uncomplicated passages Make simple inferences about how details are used in passages Locate important details in more challenging passages Locate and interpret minor or subtly stated details in uncomplicated passages Discern which details, though they may appear in different sections throughout a passage, support important points in more challenging passages Locate and interpret minor or subtly stated details in more challenging passages

TABLE 1D

KENTUCKY Grade 11 Reading Core Content for Assessment, Version 4.1	**ACT Reading** **College Readiness Standards**
DEMONSTRATING A CRITICAL STANCE	
	Sequential, Comparative, and Cause-Effect Relationships:
	Determine when (e.g., first, last, before, after) or if an event occurred in uncomplicated passages
	Recognize clear cause-effect relationships described within a single sentence in a passage
	Identify relationships between main characters in uncomplicated literary narratives
	Recognize clear cause-effect relationships within a single paragraph in uncomplicated literary narratives
	Order simple sequences of events in uncomplicated literary narratives
	Identify clear relationships between people, ideas, and so on in uncomplicated passages
	Identify clear cause-effect relationships in uncomplicated passages
	Order sequences of events in uncomplicated passages
	Understand relationships between people, ideas, and so on in uncomplicated passages
	Identify clear relationships between characters, ideas, and so on in more challenging literary narratives
	Understand implied or subtly stated cause-effect relationships in uncomplicated passages
	Identify clear cause-effect relationships in more challenging passages
	Order sequences of events in more challenging passages
	Understand the dynamics between people, ideas, and so on in more challenging passages
	Understand implied or subtly stated cause-effect relationships in more challenging passages
	Meanings of Words:
	Understand the implication of a familiar word or phrase and of simple descriptive language
	Use context to understand basic figurative language
	Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in uncomplicated passages
	Use context to determine the appropriate meaning of virtually any word, phrase, or statement in uncomplicated passages
	Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in more challenging passages
	Determine the appropriate meaning of words, phrases, or statements from figurative or somewhat technical contexts
	Generalizations and Conclusions:
	Draw simple generalizations and conclusions about the main characters in uncomplicated literary narratives

TABLE 1D

KENTUCKY Grade 11 Reading Core Content for Assessment, Version 4.1	**ACT Reading** **College Readiness Standards**
DEMONSTRATING A CRITICAL STANCE	
	Draw simple generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw simple generalizations and conclusions using details that support the main points of more challenging passages Draw subtle generalizations and conclusions about characters, ideas, and so on in uncomplicated literary narratives Draw generalizations and conclusions about people, ideas, and so on in more challenging passages Use information from one or more sections of a more challenging passage to draw generalizations and conclusions about people, ideas, and so on
RD-11-5.0.3. Students will analyze the author's use of literary devices in a passage (e.g., symbolism, irony, analogies, imagery, figurative language).	**Supporting Details:** Recognize a clear function of a part of an uncomplicated passage Make simple inferences about how details are used in passages Discern which details, though they may appear in different sections throughout a passage, support important points in more challenging passages **Generalizations and Conclusions:** Draw simple generalizations and conclusions about the main characters in uncomplicated literary narratives Draw simple generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw simple generalizations and conclusions using details that support the main points of more challenging passages Draw subtle generalizations and conclusions about characters, ideas, and so on in uncomplicated literary narratives Draw generalizations and conclusions about people, ideas, and so on in more challenging passages Use information from one or more sections of a more challenging passage to draw generalizations and conclusions about people, ideas, and so on
RD-11-5.0.4. Students will critique the author's word choice, style, tone, or content.	

TABLE 1D

KENTUCKY Grade 11 Reading Core Content for Assessment, Version 4.1	**ACT Reading** **College Readiness Standards**
DEMONSTRATING A CRITICAL STANCE	
RD-11-5.0.5. Students will compare or contrast elements, views, ideas, or events presented in one or more passages.	**Sequential, Comparative, and Cause-Effect Relationships:** Identify clear relationships between people, ideas, and so on in uncomplicated passages Understand relationships between people, ideas, and so on in uncomplicated passages Identify clear relationships between characters, ideas, and so on in more challenging literary narratives Understand the dynamics between people, ideas, and so on in more challenging passages
RD-11-5.0.6. Students will analyze the ways in which similar themes or ideas are developed in more than one text.	
RD-11-5.0.7. Students will evaluate the effectiveness of organization or format in fulfilling the purpose of a passage.	
RD-11-5.0.8. Students will explain how the use of text features (e.g., illustrations, charts, lists, tables, graphs, tables of contents, indexes, glossaries, headings, captions), format, or layout enhances the reader's understanding of a passage.	
RD-11-5.0.9. Students will analyze the effectiveness of the organizational patterns in a passage (e.g., cause and effect, repetition, comparison and contrast, sequence, generalizations) for fulfilling the purpose of the passage.	

TABLE 1E

KENTUCKY Grade 12 Reading Core Content for Assessment, Version 4.1	**ACT Reading College Readiness Standards and WorkKeys Reading for Information Skills**
FORMING A FOUNDATION FOR READING	
Requires readers to develop and apply basic reading skills and strategies across genres to read and understand texts at the appropriate grade level. This involves reading at the word, sentence and connected text levels across content areas that include multicultural texts.	
RD-12-1.0.1. Students will interpret literal or non-literal meanings of words in a passage.	**ACT Reading** College Readiness Standards **Meanings of Words:** Understand the implication of a familiar word or phrase and of simple descriptive language Use context to understand basic figurative language Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in uncomplicated passages Use context to determine the appropriate meaning of virtually any word, phrase, or statement in uncomplicated passages Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in more challenging passages Determine the appropriate meaning of words, phrases, or statements from figurative or somewhat technical contexts **WorkKeys Reading for Information** Skills Choose the correct meaning of a word that is clearly defined in the reading Choose the correct meaning of common, everyday and workplace words Use the reading material to figure out the meaning of words that are not defined Figure out the correct meaning of a word based on how the word is used Figure out the less common meaning of a word based on the context Figure out the definitions of difficult, uncommon words based on how they are used
RD-12-1.0.2. Students will make predictions based on what is read.	**ACT Reading** College Readiness Standards **Generalizations and Conclusions:** Draw simple generalizations and conclusions about the main characters in uncomplicated literary narratives Draw simple generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw simple generalizations and conclusions using details that support the main points of more challenging passages Draw subtle generalizations and conclusions about characters, ideas, and so on in uncomplicated literary narratives Draw generalizations and conclusions about people, ideas, and so on in more challenging passages

TABLE 1E

KENTUCKY Grade 12 Reading Core Content for Assessment, Version 4.1	**ACT Reading College Readiness Standards and WorkKeys Reading for Information Skills**
FORMING A FOUNDATION FOR READING	
	Use information from one or more sections of a more challenging passage to draw generalizations and conclusions about people, ideas, and so on **WorkKeys Reading for Information** Skills Identify implied details Figure out the principles behind policies, rules, and procedures Apply general principles from the materials to similar and new situations
RD-12-1.0.3. Students will formulate questions to guide reading.	
RD-12-1.0.4. Students will interpret the meaning of jargon, dialect, or specialized vocabulary found in a passage.	**ACT Reading** College Readiness Standards **Meanings of Words:** Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in uncomplicated passages Use context to determine the appropriate meaning of virtually any word, phrase, or statement in uncomplicated passages Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in more challenging passages Determine the appropriate meaning of words, phrases, or statements from figurative or somewhat technical contexts **WorkKeys Reading for Information** Skills Identify the paraphrased definition of a technical term or jargon that is defined in the document Apply technical terms and jargon and relate them to stated situations Figure out the definitions of difficult, uncommon words based on how they are used Figure out the meaning of jargon or technical terms based on how they are used

TABLE 1E

KENTUCKY Grade 12 Reading Core Content for Assessment, Version 4.1	**ACT Reading College Readiness Standards and WorkKeys Reading for Information Skills**
DEVELOPING AN INITIAL UNDERSTANDING	
Requires readers to consider the text as a whole or in a broader perspective to develop an initial understanding.	
RD-12-2.0.1. Students will paraphrase information in a passage.	**ACT Reading** College Readiness Standards **Main Ideas and Author's Approach:** Recognize a clear intent of an author or narrator in uncomplicated literary narratives Identify a clear main idea or purpose of straightforward paragraphs in uncomplicated literary narratives Infer the main idea or purpose of straightforward paragraphs in uncomplicated literary narratives Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in uncomplicated passages Identify a clear main idea or purpose of any paragraph or paragraphs in uncomplicated passages Infer the main idea or purpose of straightforward paragraphs in more challenging passages Summarize basic events and ideas in more challenging passages Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in more challenging passages Infer the main idea or purpose of more challenging passages or their paragraphs **Supporting Details:** Locate basic facts (e.g., names, dates, events) clearly stated in a passage Locate simple details at the sentence and paragraph level in uncomplicated passages Recognize a clear function of a part of an uncomplicated passage Locate important details in uncomplicated passages Make simple inferences about how details are used in passages Locate important details in more challenging passages Locate and interpret minor or subtly stated details in uncomplicated passages Discern which details, though they may appear in different sections throughout a passage, support important points in more challenging passages Locate and interpret minor or subtly stated details in more challenging passages **Sequential, Comparative, and Cause-Effect Relationships:** Determine when (e.g., first, last, before, after) or if an event occurred in uncomplicated passages Recognize clear cause-effect relationships described within a single sentence in a passage

TABLE 1E

KENTUCKY Grade 12 Reading Core Content for Assessment, Version 4.1	**ACT Reading College Readiness Standards and WorkKeys Reading for Information Skills**
DEVELOPING AN INITIAL UNDERSTANDING	
	Identify relationships between main characters in uncomplicated literary narratives
	Recognize clear cause-effect relationships within a single paragraph in uncomplicated literary narratives
	Order simple sequences of events in uncomplicated literary narratives
	Identify clear relationships between people, ideas, and so on in uncomplicated passages
	Identify clear cause-effect relationships in uncomplicated passages
	Order sequences of events in uncomplicated passages
	Understand relationships between people, ideas, and so on in uncomplicated passages
	Identify clear relationships between characters, ideas, and so on in more challenging literary narratives
	Understand implied or subtly stated cause-effect relationships in uncomplicated passages
	Identify clear cause-effect relationships in more challenging passages
	Order sequences of events in more challenging passages
	Understand the dynamics between people, ideas, and so on in more challenging passages
	Understand implied or subtly stated cause-effect relationships in more challenging passages
	Meanings of Words:
	Understand the implication of a familiar word or phrase and of simple descriptive language
	Use context to understand basic figurative language
	Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in uncomplicated passages
	Use context to determine the appropriate meaning of virtually any word, phrase, or statement in uncomplicated passages
	Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in more challenging passages
	Determine the appropriate meaning of words, phrases, or statements from figurative or somewhat technical contexts
	Generalizations and Conclusions:
	Draw simple generalizations and conclusions about the main characters in uncomplicated literary narratives
	Draw simple generalizations and conclusions about people, ideas, and so on in uncomplicated passages
	Draw generalizations and conclusions about people, ideas, and so on in uncomplicated passages
	Draw simple generalizations and conclusions using details that support the main points of more challenging passages

TABLE 1E

KENTUCKY Grade 12 Reading Core Content for Assessment, Version 4.1	**ACT Reading College Readiness Standards and WorkKeys Reading for Information Skills**
DEVELOPING AN INITIAL UNDERSTANDING	
	Draw subtle generalizations and conclusions about characters, ideas, and so on in uncomplicated literary narratives Draw generalizations and conclusions about people, ideas, and so on in more challenging passages Use information from one or more sections of a more challenging passage to draw generalizations and conclusions about people, ideas, and so on
RD-12-2.0.2. Students will identify essential information from a passage needed to accomplish a task.	**WorkKeys Reading for Information** Skills Identify main ideas and clearly stated details Identify important details that may not be clearly stated
RD-12-2.0.3. Students will apply the information contained in a passage to accomplish a task/procedure or to answer questions about a passage.	**WorkKeys Reading for Information** Skills Apply instructions to a situation that is the same as the one in the reading materials Apply instructions with several steps to a situation that is the same as the situation in the reading materials Choose what to do when changing conditions call for a different action (follow directions that include "if-then" statements) Apply straightforward instructions to a new situation that is similar to the one described in the material
RD-12-2.0.4. Students will follow the sequence of information from a passage.	**ACT Reading** College Readiness Standards **Sequential, Comparative, and Cause-Effect Relationships:** Determine when (e.g., first, last, before, after) or if an event occurred in uncomplicated passages Order simple sequences of events in uncomplicated literary narratives Order sequences of events in uncomplicated passages Order sequences of events in more challenging passages **WorkKeys Reading for Information** Skills Choose when to perform each step in a short series of steps Apply instructions with several steps to a situation that is the same as the situation in the reading materials
RD-12-2.0.5. Students will interpret concrete or abstract terms using context from the passage.	**ACT Reading** College Readiness Standards **Meanings of Words:** Understand the implication of a familiar word or phrase and of simple descriptive language Use context to understand basic figurative language Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in uncomplicated passages Use context to determine the appropriate meaning of virtually any word, phrase, or statement in uncomplicated passages

TABLE 1E

KENTUCKY Grade 12 Reading Core Content for Assessment, Version 4.1	**ACT Reading College Readiness Standards and WorkKeys Reading for Information Skills**
DEVELOPING AN INITIAL UNDERSTANDING	
	Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in more challenging passages Determine the appropriate meaning of words, phrases, or statements from figurative or somewhat technical contexts **WorkKeys Reading for Information** Skills Choose the correct meaning of a word that is clearly defined in the reading Choose the correct meaning of common, everyday and workplace words Use the reading material to figure out the meaning of words that are not defined Figure out the correct meaning of a word based on how the word is used Figure out the less common meaning of a word based on the context
RD-12-2.0.6. Students will explain the main ideas of a passage and identify the key ideas or information that support them.	**ACT Reading** College Readiness Standards **Main Ideas and Author's Approach:** Recognize a clear intent of an author or narrator in uncomplicated literary narratives Identify a clear main idea or purpose of straightforward paragraphs in uncomplicated literary narratives Infer the main idea or purpose of straightforward paragraphs in uncomplicated literary narratives Identify a clear main idea or purpose of any paragraph or paragraphs in uncomplicated passages Infer the main idea or purpose of straightforward paragraphs in more challenging passages Summarize basic events and ideas in more challenging passages Infer the main idea or purpose of more challenging passages or their paragraphs **Supporting Details:** Recognize a clear function of a part of an uncomplicated passage Make simple inferences about how details are used in passages Discern which details, though they may appear in different sections throughout a passage, support important points in more challenging passages **WorkKeys Reading for Information** Skills Identify main ideas and clearly stated details Identify important details that may not be clearly stated Identify implied details

TABLE 1E

KENTUCKY Grade 12 Reading Core Content for Assessment, Version 4.1	**ACT Reading College Readiness Standards and WorkKeys Reading for Information Skills**
DEVELOPING AN INITIAL UNDERSTANDING	
RD-12-2.0.7. Students will make inferences, draw conclusions or make generalizations based on evidence from a passage.	**ACT Reading** College Readiness Standards **Main Ideas and Author's Approach:** Infer the main idea or purpose of straightforward paragraphs in uncomplicated literary narratives Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in uncomplicated passages Infer the main idea or purpose of straightforward paragraphs in more challenging passages Summarize basic events and ideas in more challenging passages Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in more challenging passages Infer the main idea or purpose of more challenging passages or their paragraphs **Supporting Details:** Make simple inferences about how details are used in passages Locate and interpret minor or subtly stated details in uncomplicated passages Discern which details, though they may appear in different sections throughout a passage, support important points in more challenging passages Locate and interpret minor or subtly stated details in more challenging passages **Sequential, Comparative, and Cause-Effect Relationships:** Determine when (e.g., first, last, before, after) or if an event occurred in uncomplicated passages Order simple sequences of events in uncomplicated literary narratives Order sequences of events in uncomplicated passages Understand relationships between people, ideas, and so on in uncomplicated passages Understand implied or subtly stated cause-effect relationships in uncomplicated passages Order sequences of events in more challenging passages Understand the dynamics between people, ideas, and so on in more challenging passages Understand implied or subtly stated cause-effect relationships in more challenging passages **Meanings of Words:** Understand the implication of a familiar word or phrase and of simple descriptive language Use context to understand basic figurative language

TABLE 1E

KENTUCKY Grade 12 Reading Core Content for Assessment, Version 4.1	**ACT Reading College Readiness Standards and WorkKeys Reading for Information Skills**
DEVELOPING AN INITIAL UNDERSTANDING	
	Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in uncomplicated passages Use context to determine the appropriate meaning of virtually any word, phrase, or statement in uncomplicated passages Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in more challenging passages Determine the appropriate meaning of words, phrases, or statements from figurative or somewhat technical contexts **Generalizations and Conclusions:** Draw simple generalizations and conclusions about the main characters in uncomplicated literary narratives Draw simple generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw simple generalizations and conclusions using details that support the main points of more challenging passages Draw subtle generalizations and conclusions about characters, ideas, and so on in uncomplicated literary narratives Draw generalizations and conclusions about people, ideas, and so on in more challenging passages Use information from one or more sections of a more challenging passage to draw generalizations and conclusions about people, ideas, and so on **WorkKeys Reading for Information** Skills Figure out the principles behind policies, rules, and procedures Apply general principles from the materials to similar and new situations Explain the rationale behind a procedure, policy, or communication

TABLE 1E

KENTUCKY Grade 12 Reading Core Content for Assessment, Version 4.1	**ACT Reading** **College Readiness Standards**
INTERPRETING TEXT	
Requires readers to extend their initial impressions to develop a more complete understanding of what is read. This involves linking information across parts of a text as well as focusing on specific information.	
RD-12-3.0.1. Students will analyze how a conflict in a passage is resolved.	**Sequential, Comparative, and Cause-Effect Relationships:** Determine when (e.g., first, last, before, after) or if an event occurred in uncomplicated passages Recognize clear cause-effect relationships described within a single sentence in a passage Identify relationships between main characters in uncomplicated literary narratives Recognize clear cause-effect relationships within a single paragraph in uncomplicated literary narratives Order simple sequences of events in uncomplicated literary narratives Identify clear relationships between people, ideas, and so on in uncomplicated passages Identify clear cause-effect relationships in uncomplicated passages Order sequences of events in uncomplicated passages Understand relationships between people, ideas, and so on in uncomplicated passages Identify clear relationships between characters, ideas, and so on in more challenging literary narratives Understand implied or subtly stated cause-effect relationships in uncomplicated passages Identify clear cause-effect relationships in more challenging passages Order sequences of events in more challenging passages Understand the dynamics between people, ideas, and so on in more challenging passages Understand implied or subtly stated cause-effect relationships in more challenging passages **Generalizations and Conclusions:** Draw simple generalizations and conclusions about the main characters in uncomplicated literary narratives Draw simple generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw simple generalizations and conclusions using details that support the main points of more challenging passages Draw subtle generalizations and conclusions about characters, ideas, and so on in uncomplicated literary narratives Draw generalizations and conclusions about people, ideas, and so on in more challenging passages

TABLE 1E

KENTUCKY Grade 12 Reading Core Content for Assessment, Version 4.1	**ACT Reading** **College Readiness Standards**
INTERPRETING TEXT	
	Use information from one or more sections of a more challenging passage to draw generalizations and conclusions about people, ideas, and so on
RD-12-3.0.2. Students will analyze an author's purpose in a passage.	**Main Ideas and Author's Approach:** Recognize a clear intent of an author or narrator in uncomplicated literary narratives Identify a clear main idea or purpose of straightforward paragraphs in uncomplicated literary narratives Infer the main idea or purpose of straightforward paragraphs in uncomplicated literary narratives Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in uncomplicated passages Identify a clear main idea or purpose of any paragraph or paragraphs in uncomplicated passages Infer the main idea or purpose of straightforward paragraphs in more challenging passages Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in more challenging passages Infer the main idea or purpose of more challenging passages or their paragraphs
RD-12-3.0.3. Students will explain an author's position based on evidence in a passage.	**Main Ideas and Author's Approach:** Recognize a clear intent of an author or narrator in uncomplicated literary narratives Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in uncomplicated passages Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in more challenging passages
RD-12-3.0.4. Students will accept or reject an argument, giving supporting evidence from the passage.	
RD-12-3.0.5. Students will evaluate an argument, giving supporting evidence from the passage.	
RD-12-3.0.6. Students will analyze the relationship between a speaker's or character's motivation and behavior in a passage, as revealed by the dilemmas.	**Sequential, Comparative, and Cause-Effect Relationships:** Recognize clear cause-effect relationships described within a single sentence in a passage Identify relationships between main characters in uncomplicated literary narratives Recognize clear cause-effect relationships within a single paragraph in uncomplicated literary narratives Identify clear relationships between people, ideas, and so on in uncomplicated passages Identify clear cause-effect relationships in uncomplicated passages

TABLE 1E

KENTUCKY Grade 12 Reading Core Content for Assessment, Version 4.1	**ACT Reading** **College Readiness Standards**
INTERPRETING TEXT	
	Understand relationships between people, ideas, and so on in uncomplicated passages Identify clear relationships between characters, ideas, and so on in more challenging literary narratives Understand implied or subtly stated cause-effect relationships in uncomplicated passages Identify clear cause-effect relationships in more challenging passages Understand the dynamics between people, ideas, and so on in more challenging passages Understand implied or subtly stated cause-effect relationships in more challenging passages
RD-12-3.0.7. Students will analyze or evaluate the use of supporting details as they relate to the author's message.	**Supporting Details:** Recognize a clear function of a part of an uncomplicated passage Make simple inferences about how details are used in passages Discern which details, though they may appear in different sections throughout a passage, support important points in more challenging passages
RD-12-3.0.8. Students will analyze or evaluate the use of persuasive or propaganda techniques within a passage.	**Supporting Details:** Recognize a clear function of a part of an uncomplicated passage Make simple inferences about how details are used in passages Discern which details, though they may appear in different sections throughout a passage, support important points in more challenging passages **Meanings of Words:** Understand the implication of a familiar word or phrase and of simple descriptive language Use context to understand basic figurative language Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in uncomplicated passages Use context to determine the appropriate meaning of virtually any word, phrase, or statement in uncomplicated passages Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in more challenging passages Determine the appropriate meaning of words, phrases, or statements from figurative or somewhat technical contexts **Generalizations and Conclusions:** Draw simple generalizations and conclusions about the main characters in uncomplicated literary narratives Draw simple generalizations and conclusions about people, ideas, and so on in uncomplicated passages

TABLE 1E

KENTUCKY Grade 12 Reading Core Content for Assessment, Version 4.1	**ACT Reading** **College Readiness Standards**
INTERPRETING TEXT	
	Draw generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw simple generalizations and conclusions using details that support the main points of more challenging passages Draw subtle generalizations and conclusions about characters, ideas, and so on in uncomplicated literary narratives Draw generalizations and conclusions about people, ideas, and so on in more challenging passages Use information from one or more sections of a more challenging passage to draw generalizations and conclusions about people, ideas, and so on
RD-12-3.0.9. Students will explain the appropriateness of the author's content for an intended audience.	

TABLE 1E

KENTUCKY Grade 12 Reading Core Content for Assessment, Version 4.1	**WorkKeys** **Reading for Information Skills**
REFLECTING AND RESPONDING TO TEXT	
Requires readers to connect knowledge from the text with their own background knowledge. The focus is on how the text relates to personal knowledge.	
RD-12-4.0.1. Students will evaluate the content or make connections as it applies to students' lives (text-to-self), real-world issues (text-to-world) or other texts (text-to-text).	Apply straightforward instructions to a new situation that is similar to the one described in the material Apply general principles from the materials to similar and new situations
RD-12-4.0.2. Students will use evidence from a passage to formulate opinions in response to a reading passage.	Figure out the principles behind policies, rules, and procedures Explain the rationale behind a procedure, policy, or communication

TABLE 1E

KENTUCKY Grade 12 Reading Core Content for Assessment, Version 4.1	**ACT Reading** **College Readiness Standards**
DEMONSTRATING A CRITICAL STANCE	
Requires readers to consider the text objectively. It involves a range of tasks, including critical evaluation, comparing and contrasting and understanding the impact of features such as irony, humor and organization.	
RD-12-5.0.1. Students will compare and contrast the characteristics of a variety of literary genres.	
RD-12-5.0.2. Students will analyze or evaluate the effectiveness of literary elements (e.g., theme, characterization, setting, point of view, conflict and resolution, plot, structure) within a passage.	**Main Ideas and Author's Approach:** Recognize a clear intent of an author or narrator in uncomplicated literary narratives Identify a clear main idea or purpose of straightforward paragraphs in uncomplicated literary narratives Infer the main idea or purpose of straightforward paragraphs in uncomplicated literary narratives Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in uncomplicated passages Identify a clear main idea or purpose of any paragraph or paragraphs in uncomplicated passages Infer the main idea or purpose of straightforward paragraphs in more challenging passages Summarize basic events and ideas in more challenging passages Understand the overall approach taken by an author or narrator (e.g., point of view, kinds of evidence used) in more challenging passages Infer the main idea or purpose of more challenging passages or their paragraphs **Supporting Details:** Locate basic facts (e.g., names, dates, events) clearly stated in a passage Locate simple details at the sentence and paragraph level in uncomplicated passages Recognize a clear function of a part of an uncomplicated passage Locate important details in uncomplicated passages Make simple inferences about how details are used in passages Locate important details in more challenging passages Locate and interpret minor or subtly stated details in uncomplicated passages Discern which details, though they may appear in different sections throughout a passage, support important points in more challenging passages Locate and interpret minor or subtly stated details in more challenging passages

TABLE 1E

KENTUCKY Grade 12 Reading Core Content for Assessment, Version 4.1	**ACT Reading** **College Readiness Standards**
DEMONSTRATING A CRITICAL STANCE	
	Sequential, Comparative, and Cause-Effect Relationships:
	Determine when (e.g., first, last, before, after) or if an event occurred in uncomplicated passages
	Recognize clear cause-effect relationships described within a single sentence in a passage
	Identify relationships between main characters in uncomplicated literary narratives
	Recognize clear cause-effect relationships within a single paragraph in uncomplicated literary narratives
	Order simple sequences of events in uncomplicated literary narratives
	Identify clear relationships between people, ideas, and so on in uncomplicated passages
	Identify clear cause-effect relationships in uncomplicated passages
	Order sequences of events in uncomplicated passages
	Understand relationships between people, ideas, and so on in uncomplicated passages
	Identify clear relationships between characters, ideas, and so on in more challenging literary narratives
	Understand implied or subtly stated cause-effect relationships in uncomplicated passages
	Identify clear cause-effect relationships in more challenging passages
	Order sequences of events in more challenging passages
	Understand the dynamics between people, ideas, and so on in more challenging passages
	Understand implied or subtly stated cause-effect relationships in more challenging passages
	Meanings of Words:
	Understand the implication of a familiar word or phrase and of simple descriptive language
	Use context to understand basic figurative language
	Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in uncomplicated passages
	Use context to determine the appropriate meaning of virtually any word, phrase, or statement in uncomplicated passages
	Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in more challenging passages
	Determine the appropriate meaning of words, phrases, or statements from figurative or somewhat technical contexts
	Generalizations and Conclusions:
	Draw simple generalizations and conclusions about the main characters in uncomplicated literary narratives

TABLE 1E

KENTUCKY Grade 12 Reading Core Content for Assessment, Version 4.1	**ACT Reading** **College Readiness Standards**
DEMONSTRATING A CRITICAL STANCE	
	Draw simple generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw simple generalizations and conclusions using details that support the main points of more challenging passages Draw subtle generalizations and conclusions about characters, ideas, and so on in uncomplicated literary narratives Draw generalizations and conclusions about people, ideas, and so on in more challenging passages Use information from one or more sections of a more challenging passage to draw generalizations and conclusions about people, ideas, and so on
RD-12-5.0.3. Students will analyze the author's use of literary devices in a passage (e.g., symbolism, irony, analogies, imagery, figurative language).	**Supporting Details:** Recognize a clear function of a part of an uncomplicated passage Make simple inferences about how details are used in passages Discern which details, though they may appear in different sections throughout a passage, support important points in more challenging passages **Generalizations and Conclusions:** Draw simple generalizations and conclusions about the main characters in uncomplicated literary narratives Draw simple generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw generalizations and conclusions about people, ideas, and so on in uncomplicated passages Draw simple generalizations and conclusions using details that support the main points of more challenging passages Draw subtle generalizations and conclusions about characters, ideas, and so on in uncomplicated literary narratives Draw generalizations and conclusions about people, ideas, and so on in more challenging passages Use information from one or more sections of a more challenging passage to draw generalizations and conclusions about people, ideas, and so on
RD-12-5.0.4. Students will critique the author's word choice, style, tone, or content.	

TABLE 1E

KENTUCKY Grade 12 Reading Core Content for Assessment, Version 4.1	**ACT Reading** **College Readiness Standards**
DEMONSTRATING A CRITICAL STANCE	
RD-12-5.0.5. Students will compare or contrast elements, views, ideas, or events presented in one or more passages.	**Sequential, Comparative, and Cause-Effect Relationships:** Identify clear relationships between people, ideas, and so on in uncomplicated passages Understand relationships between people, ideas, and so on in uncomplicated passages Identify clear relationships between characters, ideas, and so on in more challenging literary narratives Understand the dynamics between people, ideas, and so on in more challenging passages
RD-12-5.0.6. Students will analyze the ways in which similar themes or ideas are developed in more than one text.	
RD-12-5.0.7. Students will evaluate the effectiveness of organization or format in fulfilling the purpose of a passage.	
RD-12-5.0.8. Students will explain how the use of text features (e.g., illustrations, charts, lists, tables, graphs, tables of contents, indexes, glossaries, headings, captions), format, or layout enhances the reader's understanding of a passage.	
RD-12-5.0.9. Students will analyze the effectiveness of the organizational patterns in a passage (e.g., cause and effect, repetition, comparison and contrast, sequence, generalizations) for fulfilling the purpose of the passage.	

SUPPLEMENT
TABLES 2A–2C:

WRITING

TABLE 2A

KENTUCKY Grade 8 Writing Core Content for Assessment, Version 4.1	EXPLORE English College Readiness Standards
WRITING CONTENT	
WR-M-1.1.0. Purpose/Audience	
Students will establish and maintain a focused purpose to communicate with an authentic audience by • Narrowing the topic to present an idea or theme • Choosing a perspective authentic to the writer • Analyzing and addressing the needs of the intended audience • Adhering to the characteristics of the form • Applying a suitable tone • Allowing voice to emerge when appropriate	**Topic Development in Terms of Purpose and Focus:** Delete a clause or sentence because it is obviously irrelevant to the essay Identify the central idea or main topic of a straightforward piece of writing Determine relevancy when presented with a variety of sentence-level details Identify the focus of a simple essay, applying that knowledge to add a sentence that sharpens that focus or to determine if an essay has met a specified goal Delete material primarily because it disturbs the flow and development of the paragraph **Word Choice in Terms of Style, Tone, Clarity, and Economy:** Revise expressions that deviate from the style of an essay Use the word or phrase most consistent with the style and tone of a fairly straightforward essay Use the word or phrase most appropriate in terms of the content of the sentence and tone of the essay
WR-M-1.2.0. Idea Development/Support	
Students will support main ideas and deepen the audience's understanding of purpose by • Developing logical, justified and suitable explanations • Providing relevant elaboration • Explaining related connections or reflections • Applying idea development strategies appropriate to the form	**Topic Development in Terms of Purpose and Focus:** Identify the basic purpose or role of a specified phrase or sentence Delete a clause or sentence because it is obviously irrelevant to the essay Determine relevancy when presented with a variety of sentence-level details Delete material primarily because it disturbs the flow and development of the paragraph Add a sentence to accomplish a fairly straightforward purpose such as illustrating a given statement

TABLE 2A

KENTUCKY Grade 8 Writing Core Content for Assessment, Version 4.1	EXPLORE English College Readiness Standards
WRITING STRUCTURE	
WR-M-2.3.0. Organization	
Students will create unity and coherence to accomplish the focused purpose by • Engaging the audience • Establishing a context for reading when appropriate • Communicating ideas and support in a meaningful order • Applying transitions and transitional elements to guide the reader through the piece • Developing effective closure	**Organization, Unity, and Coherence:** Use conjunctive adverbs or phrases to show time relationships in simple narrative essays (e.g., *then*, *this time*) Select the most logical place to add a sentence in a paragraph Use conjunctive adverbs or phrases to express straightforward logical relationships (e.g., *first*, *afterward*, *in response*) Decide the most logical place to add a sentence in an essay Add a sentence that introduces a simple paragraph Determine the need for conjunctive adverbs or phrases to create subtle logical connections between sentences (e.g., *therefore*, *however*, *in addition*) Rearrange the sentences in a fairly uncomplicated paragraph for the sake of logic Add a sentence to introduce or conclude the essay or to provide a transition between paragraphs when the essay is fairly straightforward
WR-M-2.4.0. Sentence Structure	
Students will create effective sentences by • Applying a variety of structures and lengths • Developing complete and correct sentences unless using unconventional structures for effect when appropriate	**Sentence Structure and Formation:** Use conjunctions or punctuation to join simple clauses Revise shifts in verb tense between simple clauses in a sentence or between simple adjoining sentences Determine the need for punctuation and conjunctions to avoid awkward-sounding sentence fragments and fused sentences Decide the appropriate verb tense and voice by considering the meaning of the entire sentence Recognize and correct marked disturbances of sentence flow and structure (e.g., participial phrase fragments, missing or incorrect relative pronouns, dangling or misplaced modifiers) Revise to avoid faulty placement of phrases and faulty coordination and subordination of clauses in sentences with subtle structural problems Maintain consistent verb tense and pronoun person on the basis of the preceding clause or sentence

TABLE 2A

KENTUCKY Grade 8 Writing Core Content for Assessment, Version 4.1	EXPLORE English College Readiness Standards
WRITING CONVENTIONS	
WR-M-3.5.0. Language	
Students will exemplify effective language choices by • Applying correct grammar and usage • Applying concise use of language • Incorporating strong verbs, precise nouns, concrete details and sensory details • Applying language appropriate to the content, purpose and audience	**Topic Development in Terms of Purpose and Focus:** Identify the basic purpose or role of a specified phrase or sentence Add a sentence to accomplish a fairly straightforward purpose such as illustrating a given statement **Word Choice in Terms of Style, Tone, Clarity, and Economy:** Revise sentences to correct awkward and confusing arrangements of sentence elements Revise vague nouns and pronouns that create obvious logic problems Delete obviously synonymous and wordy material in a sentence Revise expressions that deviate from the style of an essay Delete redundant material when information is repeated in different parts of speech (e.g., “alarmingly startled”) Use the word or phrase most consistent with the style and tone of a fairly straightforward essay Determine the clearest and most logical conjunction to link clauses Revise a phrase that is redundant in terms of the meaning and logic of the entire sentence Identify and correct ambiguous pronoun references Use the word or phrase most appropriate in terms of the content of the sentence and tone of the essay **Sentence Structure and Formation:** Use conjunctions or punctuation to join simple clauses Revise shifts in verb tense between simple clauses in a sentence or between simple adjoining sentences Determine the need for punctuation and conjunctions to avoid awkward-sounding sentence fragments and fused sentences Decide the appropriate verb tense and voice by considering the meaning of the entire sentence Recognize and correct marked disturbances of sentence flow and structure (e.g., participial phrase fragments, missing or incorrect relative pronouns, dangling or misplaced modifiers) Revise to avoid faulty placement of phrases and faulty coordination and subordination of clauses in sentences with subtle structural problems Maintain consistent verb tense and pronoun person on the basis of the preceding clause or sentence **Conventions of Usage:** Solve such basic grammatical problems as how to form the past and past participle of irregular but commonly used verbs and how to form comparative and superlative adjectives

TABLE 2A

KENTUCKY Grade 8 Writing Core Content for Assessment, Version 4.1	EXPLORE English College Readiness Standards
WRITING CONVENTIONS	
	Solve such grammatical problems as whether to use an adverb or adjective form, how to ensure straightforward subject-verb and pronoun-antecedent agreement, and which preposition to use in simple contexts Recognize and use the appropriate word in frequently confused pairs such as *there* and *their*, *past* and *passed*, and *led* and *lead* Use idiomatically appropriate prepositions, especially in combination with verbs (e.g., *long for*, *appeal to*) Ensure that a verb agrees with its subject when there is some text between the two Ensure that a pronoun agrees with its antecedent when the two occur in separate clauses or sentences Identify the correct past and past participle forms of irregular and infrequently used verbs and form present-perfect verbs by using *have* rather than *of*
WR-M-3.6.0. Correctness	
Students will communicate clearly by • Applying correct spelling • Applying correct punctuation • Applying correct capitalization • Incorporating acceptable departure from standard correctness to enhance meaning when appropriate • Incorporating appropriate documentation of ideas and information from outside sources (e.g., citing authors or titles within the text, listing sources)	**Conventions of Punctuation:** Delete commas that create basic sense problems (e.g., between verb and direct object) Provide appropriate punctuation in straightforward situations (e.g., items in a series) Delete commas that disturb the sentence flow (e.g., between modifier and modified element) Use commas to set off simple parenthetical phrases Delete unnecessary commas when an incorrect reading of the sentence suggests a pause that should be punctuated (e.g., between verb and direct object clause) Use punctuation to set off complex parenthetical phrases Recognize and delete unnecessary commas based on a careful reading of a complicated sentence (e.g., between the elements of a compound subject or compound verb joined by *and*) Use apostrophes to indicate simple possessive nouns Recognize inappropriate uses of colons and semicolons

TABLE 2A

KENTUCKY Grade 8 Writing Core Content for Assessment, Version 4.1	EXPLORE English College Readiness Standards
WRITING PROCESS	
WR-M-4.10.0. Revising (Content/Ideas)	
Revising Skills	
Idea Development	
WR-08-4.10.05. Students will identify a topic sentence of a paragraph	
WR-08-4.10.06. Students will select appropriate supporting details.	**Topic Development in Terms of Purpose and Focus:** Identify the basic purpose or role of a specified phrase or sentence Add a sentence to accomplish a fairly straightforward purpose such as illustrating a given statement
WR-08-4.10.07. Students will identify extraneous/irrelevant materials.	**Topic Development in Terms of Purpose and Focus:** Delete a clause or sentence because it is obviously irrelevant to the essay Determine relevancy when presented with a variety of sentence-level details Delete material primarily because it disturbs the flow and development of the paragraph
Organization	
WR-08-4.10.08. Students will correct sentences that are out of chronological/sequential order or insert new sentences in the correct chronological/sequential position.	**Organization, Unity, and Coherence:** Select the most logical place to add a sentence in a paragraph Decide the most logical place to add a sentence in an essay Rearrange the sentences in a fairly uncomplicated paragraph for the sake of logic
WR-08-4.10.09. Students will apply the most effective transitions.	**Organization, Unity, and Coherence:** Use conjunctive adverbs or phrases to show time relationships in simple narrative essays (e.g., *then*, *this time*) Use conjunctive adverbs or phrases to express straightforward logical relationships (e.g., *first*, *afterward*, *in response*) Add a sentence that introduces a simple paragraph Determine the need for conjunctive adverbs or phrases to create subtle logical connections between sentences (e.g., *therefore*, *however*, *in addition*) Add a sentence to introduce or conclude the essay or to provide a transition between paragraphs when the essay is fairly straightforward
WR-08-4.10.10. Students will develop effective introductions and closures for writing.	**Organization, Unity, and Coherence:** Add a sentence to introduce or conclude the essay or to provide a transition between paragraphs when the essay is fairly straightforward

TABLE 2A

KENTUCKY Grade 8 Writing Core Content for Assessment, Version 4.1	EXPLORE English College Readiness Standards
WRITING PROCESS	
Word Choice	
WR-08-4.10.11. Students will eliminate redundant words and phrases.	**Word Choice in Terms of Style, Tone, Clarity, and Economy:** Delete obviously synonymous and wordy material in a sentence Delete redundant material when information is repeated in different parts of speech (e.g., "alarmingly startled") Revise a phrase that is redundant in terms of the meaning and logic of the entire sentence
WR-08-4.10.12. Students will choose the most specific word for use in a sentence.	**Word Choice in Terms of Style, Tone, Clarity, and Economy:** Revise vague nouns and pronouns that create obvious logic problems Identify and correct ambiguous pronoun references
WR-M-4.11.0. Editing (Conventions and Mechanics)	
Editing Skills	
Language Usage	
WR-08-4.11.13. Students will apply knowledge of subject/verb agreement with both singular and plural subjects.	**Conventions of Usage:** Solve such grammatical problems as whether to use an adverb or adjective form, how to ensure straightforward subject-verb and pronoun-antecedent agreement, and which preposition to use in simple contexts Ensure that a verb agrees with its subject when there is some text between the two
WR-08-4.11.14. Students will apply knowledge of present, past and future verb tenses.	**Sentence Structure and Formation:** Revise shifts in verb tense between simple clauses in a sentence or between simple adjoining sentences Decide the appropriate verb tense and voice by considering the meaning of the entire sentence Maintain consistent verb tense and pronoun person on the basis of the preceding clause or sentence **Conventions of Usage:** Solve such basic grammatical problems as how to form the past and past participle of irregular but commonly used verbs and how to form comparative and superlative adjectives Recognize and use the appropriate word in frequently confused pairs such as *there* and *their*, *past* and *passed*, and *led* and *lead* Identify the correct past and past participle forms of irregular and infrequently used verbs and form present-perfect verbs by using *have* rather than *of*

TABLE 2A

KENTUCKY Grade 8 Writing Core Content for Assessment, Version 4.1	EXPLORE English College Readiness Standards
WRITING PROCESS	
WR-08-4.11.15. Students will apply knowledge of comparative and superlative forms of adjectives and adverbs.	**Conventions of Usage:** Solve such basic grammatical problems as how to form the past and past participle of irregular but commonly used verbs and how to form comparative and superlative adjectives Solve such grammatical problems as whether to use an adverb or adjective form, how to ensure straightforward subject-verb and pronoun-antecedent agreement, and which preposition to use in simple contexts
WR-08-4.11.16. Students will apply knowledge of special problems in usage (a/an, to/two/too, their/there/they're), pronoun references and double negatives	**Conventions of Usage:** Solve such grammatical problems as whether to use an adverb or adjective form, how to ensure straightforward subject-verb and pronoun-antecedent agreement, and which preposition to use in simple contexts Recognize and use the appropriate word in frequently confused pairs such as *there* and *their*, *past* and *passed*, and *led* and *lead* Ensure that a pronoun agrees with its antecedent when the two occur in separate clauses or sentences
WR-08-4.11.17. Students will apply knowledge of idiomatic expressions	
Sentence Structure	
WR-08-4.11.18. Students will correct sentences that are run-ons or awkward.	**Word Choice in Terms of Style, Tone, Clarity, and Economy:** Revise sentences to correct awkward and confusing arrangements of sentence elements Determine the clearest and most logical conjunction to link clauses **Sentence Structure and Formation:** Use conjunctions or punctuation to join simple clauses Determine the need for punctuation and conjunctions to avoid awkward-sounding sentence fragments and fused sentences Recognize and correct marked disturbances of sentence flow and structure (e.g., participial phrase fragments, missing or incorrect relative pronouns, dangling or misplaced modifiers) Revise to avoid faulty placement of phrases and faulty coordination and subordination of clauses in sentences with subtle structural problems
WR-08-4.11.19. Students will correct sentence fragments.	**Sentence Structure and Formation:** Use conjunctions or punctuation to join simple clauses Determine the need for punctuation and conjunctions to avoid awkward-sounding sentence fragments and fused sentences Recognize and correct marked disturbances of sentence flow and structure (e.g., participial phrase fragments, missing or incorrect relative pronouns, dangling or misplaced modifiers)

TABLE 2A

KENTUCKY Grade 8 Writing Core Content for Assessment, Version 4.1	EXPLORE English College Readiness Standards
WRITING PROCESS	
WR-08-4.11.20. Students will combine short choppy sentences effectively.	**Sentence Structure and Formation:** Use conjunctions or punctuation to join simple clauses Determine the need for punctuation and conjunctions to avoid awkward-sounding sentence fragments and fused sentences Recognize and correct marked disturbances of sentence flow and structure (e.g., participial phrase fragments, missing or incorrect relative pronouns, dangling or misplaced modifiers) Revise to avoid faulty placement of phrases and faulty coordination and subordination of clauses in sentences with subtle structural problems
WR-08-4.11.21. Students will combine simple sentences by using subordination and coordination.	**Sentence Structure and Formation:** Use conjunctions or punctuation to join simple clauses Determine the need for punctuation and conjunctions to avoid awkward-sounding sentence fragments and fused sentences Recognize and correct marked disturbances of sentence flow and structure (e.g., participial phrase fragments, missing or incorrect relative pronouns, dangling or misplaced modifiers) Revise to avoid faulty placement of phrases and faulty coordination and subordination of clauses in sentences with subtle structural problems
WR-08-4.11.22 Students will correct sentences with misplaced/and or dangling modifiers.	**Sentence Structure and Formation:** Recognize and correct marked disturbances of sentence flow and structure (e.g., participial phrase fragments, missing or incorrect relative pronouns, dangling or misplaced modifiers) Revise to avoid faulty placement of phrases and faulty coordination and subordination of clauses in sentences with subtle structural problems
Spelling	
WR-08-4.11.23. Students will apply knowledge of spelling patterns, generalizations and rules to commonly used words.	
WR-08-4.11.24. Students will apply knowledge of spelling patterns, generalizations and rules to plural forms of words.	
WR-08-4.11.25. Students will apply knowledge of spelling patterns, generalizations and rules to contractions.	
WR-08-4.11.26. Students will apply knowledge of spelling patterns, generalizations and rules to change verb endings.	
Capitalization	
WR-08-4.11.27. Students will capitalize proper nouns (e.g., names, days, months).	
WR-08-4.11.28. Students will capitalize the beginning of sentences.	
WR-08-4.11.29. Students will capitalize the pronoun “I”.	

TABLE 2A

KENTUCKY Grade 8 Writing Core Content for Assessment, Version 4.1	EXPLORE English College Readiness Standards
WRITING PROCESS	
WR-08-4.11.30. Students will capitalize proper adjectives.	
WR-08-4.11.31. Students will capitalize first word in a quote when appropriate.	
WR-08-4.11.32. Students will capitalize the first word and every succeeding main word in a title.	
Punctuation	
WR-08-4.11.33. Students will correctly punctuate declarative, exclamatory, interrogative and imperative sentences.	**Conventions of Punctuation:** Delete commas that create basic sense problems (e.g., between verb and direct object) Provide appropriate punctuation in straightforward situations (e.g., items in a series) Delete commas that disturb the sentence flow (e.g., between modifier and modified element) Use commas to set off simple parenthetical phrases Delete unnecessary commas when an incorrect reading of the sentence suggests a pause that should be punctuated (e.g., between verb and direct object clause) Use punctuation to set off complex parenthetical phrases Recognize and delete unnecessary commas based on a careful reading of a complicated sentence (e.g., between the elements of a compound subject or compound verb joined by *and*) Use apostrophes to indicate simple possessive nouns Recognize inappropriate uses of colons and semicolons
WR-08-4.11.34. Students will use commas in a series, a date, a compound sentence and the greeting and closing of a letter.	**Sentence Structure and Formation:** Use conjunctions or punctuation to join simple clauses Determine the need for punctuation and conjunctions to avoid awkward-sounding sentence fragments and fused sentences **Conventions of Punctuation:** Provide appropriate punctuation in straightforward situations (e.g., items in a series)
WR-08-4.11.35. Students will correctly apply the rules of punctuation for commas in appositives, direct address, and introductory phrases and clauses.	**Conventions of Punctuation:** Use commas to set off simple parenthetical phrases Use punctuation to set off complex parenthetical phrases
WR-08-4.11.36. Students will correctly apply the rules of punctuation for apostrophes in possessives and contractions.	**Conventions of Usage:** Recognize and use the appropriate word in frequently confused pairs such as *there* and *their*, *past* and *passed*, and *led* and *lead* **Conventions of Punctuation:** Use apostrophes to indicate simple possessive nouns
WR-08-4.11.37. Students will correctly apply the rules of punctuation for periods in abbreviations and acronyms	

TABLE 2A

KENTUCKY Grade 8 Writing Core Content for Assessment, Version 4.1	**EXPLORE English** **College Readiness Standards**
WRITING PROCESS	
WR-08-4.11.38. Students will correctly apply the rules of punctuation for semicolons in items in a series and combined sentences.	**Sentence Structure and Formation:** Use conjunctions or punctuation to join simple clauses Determine the need for punctuation and conjunctions to avoid awkward-sounding sentence fragments and fused sentences Recognize and correct marked disturbances of sentence flow and structure (e.g., participial phrase fragments, missing or incorrect relative pronouns, dangling or misplaced modifiers) **Conventions of Punctuation:** Recognize inappropriate uses of colons and semicolons
WR-08-4.11.39. Students will correctly apply the rules of punctuation for colons in introducing a list and the business letter greeting.	**Conventions of Punctuation:** Provide appropriate punctuation in straightforward situations (e.g., items in a series) Recognize inappropriate uses of colons and semicolons
WR-08-4.11.40. Students will correctly apply the rules of punctuation for quotation marks in dialogue, titles and direct/indirect quotes.	

TABLE 2B

KENTUCKY High School Writing Core Content for Assessment, Version 4.1	**PLAN English** **College Readiness Standards**
WRITING CONTENT	
WR-HS-1.1.0. Purpose/Audience	
Students will establish and maintain a focused purpose to communicate with an authentic audience by • Narrowing the topic to present an idea or theme • Choosing a perspective authentic to the writer • Analyzing and addressing the needs of the intended audience • Adhering to the characteristics of the form • Applying a suitable tone • Allowing voice to emerge when appropriate	**Topic Development in Terms of Purpose and Focus:** Identify the basic purpose or role of a specified phrase or sentence Delete a clause or sentence because it is obviously irrelevant to the essay Identify the central idea or main topic of a straightforward piece of writing Determine relevancy when presented with a variety of sentence-level details Identify the focus of a simple essay, applying that knowledge to add a sentence that sharpens that focus or to determine if an essay has met a specified goal Delete material primarily because it disturbs the flow and development of the paragraph Add a sentence to accomplish a fairly straightforward purpose such as illustrating a given statement Apply an awareness of the focus and purpose of a fairly involved essay to determine the rhetorical effect and suitability of an existing phrase or sentence, or to determine the need to delete plausible but irrelevant material **Word Choice in Terms of Style, Tone, Clarity, and Economy:** Revise expressions that deviate from the style of an essay Use the word or phrase most consistent with the style and tone of a fairly straightforward essay Use the word or phrase most appropriate in terms of the content of the sentence and tone of the essay
WR-HS-1.2.0. Idea Development/Support	
Students will support main ideas and deepen the audience's understanding of purpose by • Developing logical, justified and suitable explanations • Providing relevant elaboration • Explaining related connections or reflections • Applying idea development strategies appropriate to the form	**Topic Development in Terms of Purpose and Focus:** Identify the basic purpose or role of a specified phrase or sentence Delete a clause or sentence because it is obviously irrelevant to the essay Determine relevancy when presented with a variety of sentence-level details Delete material primarily because it disturbs the flow and development of the paragraph Add a sentence to accomplish a fairly straightforward purpose such as illustrating a given statement Apply an awareness of the focus and purpose of a fairly involved essay to determine the rhetorical effect and suitability of an existing phrase or sentence, or to determine the need to delete plausible but irrelevant material Add a sentence to accomplish a subtle rhetorical purpose such as to emphasize, to add supporting detail, or to express meaning through connotation

TABLE 2B

KENTUCKY High School Writing Core Content for Assessment, Version 4.1	**PLAN English** **College Readiness Standards**
WRITING STRUCTURE	
WR-HS-2.3.0. Organization	
Students will create unity and coherence to accomplish the focused purpose by • Engaging the audience • Establishing a context for reading when appropriate • Communicating ideas and support in a meaningful order • Applying transitions and transitional elements to guide the reader through the piece • Developing effective closure	**Organization, Unity, and Coherence:** Use conjunctive adverbs or phrases to show time relationships in simple narrative essays (e.g., *then*, *this time*) Select the most logical place to add a sentence in a paragraph Use conjunctive adverbs or phrases to express straightforward logical relationships (e.g., *first*, *afterward*, *in response*) Decide the most logical place to add a sentence in an essay Add a sentence that introduces a simple paragraph Determine the need for conjunctive adverbs or phrases to create subtle logical connections between sentences (e.g., *therefore*, *however*, *in addition*) Rearrange the sentences in a fairly uncomplicated paragraph for the sake of logic Add a sentence to introduce or conclude the essay or to provide a transition between paragraphs when the essay is fairly straightforward
WR-HS-2.4.0. Sentence Structure	
Students will create effective sentences by • Applying a variety of structures and lengths • Maintaining parallel structure • Developing complete and correct sentences unless using unconventional structures for an intentional effect when appropriate	**Sentence Structure and Formation:** Use conjunctions or punctuation to join simple clauses Revise shifts in verb tense between simple clauses in a sentence or between simple adjoining sentences Determine the need for punctuation and conjunctions to avoid awkward-sounding sentence fragments and fused sentences Decide the appropriate verb tense and voice by considering the meaning of the entire sentence Recognize and correct marked disturbances of sentence flow and structure (e.g., participial phrase fragments, missing or incorrect relative pronouns, dangling or misplaced modifiers) Revise to avoid faulty placement of phrases and faulty coordination and subordination of clauses in sentences with subtle structural problems Maintain consistent verb tense and pronoun person on the basis of the preceding clause or sentence Use sentence-combining techniques, effectively avoiding problematic comma splices, run-on sentences, and sentence fragments, especially in sentences containing compound subjects or verbs Maintain a consistent and logical use of verb tense and pronoun person on the basis of information in the paragraph or essay as a whole

TABLE 2B

KENTUCKY High School Writing Core Content for Assessment, Version 4.1	**PLAN English** **College Readiness Standards**
WRITING CONVENTIONS	
WR-HS-3.5.0. Language	
Students will exemplify effective language choices by • Applying correct grammar and usage • Applying concise use of language • Incorporating strong verbs, precise nouns, concrete details and sensory details • Applying language appropriate to the content, purpose and audience	**Topic Development in Terms of Purpose and Focus:** Identify the basic purpose or role of a specified phrase or sentence Add a sentence to accomplish a fairly straightforward purpose such as illustrating a given statement Apply an awareness of the focus and purpose of a fairly involved essay to determine the rhetorical effect and suitability of an existing phrase or sentence, or to determine the need to delete plausible but irrelevant material Add a sentence to accomplish a subtle rhetorical purpose such as to emphasize, to add supporting detail, or to express meaning through connotation **Word Choice in Terms of Style, Tone, Clarity, and Economy:** Revise sentences to correct awkward and confusing arrangements of sentence elements Revise vague nouns and pronouns that create obvious logic problems Delete obviously synonymous and wordy material in a sentence Revise expressions that deviate from the style of an essay Delete redundant material when information is repeated in different parts of speech (e.g., “alarmingly startled”) Use the word or phrase most consistent with the style and tone of a fairly straightforward essay Determine the clearest and most logical conjunction to link clauses Revise a phrase that is redundant in terms of the meaning and logic of the entire sentence Identify and correct ambiguous pronoun references Use the word or phrase most appropriate in terms of the content of the sentence and tone of the essay **Sentence Structure and Formation:** Use conjunctions or punctuation to join simple clauses Revise shifts in verb tense between simple clauses in a sentence or between simple adjoining sentences Determine the need for punctuation and conjunctions to avoid awkward-sounding sentence fragments and fused sentences Decide the appropriate verb tense and voice by considering the meaning of the entire sentence Recognize and correct marked disturbances of sentence flow and structure (e.g., participial phrase fragments, missing or incorrect relative pronouns, dangling or misplaced modifiers) Revise to avoid faulty placement of phrases and faulty coordination and subordination of clauses in sentences with subtle structural problems

TABLE 2B

KENTUCKY High School Writing Core Content for Assessment, Version 4.1	**PLAN English** **College Readiness Standards**
WRITING CONVENTIONS	
	Maintain consistent verb tense and pronoun person on the basis of the preceding clause or sentence Use sentence-combining techniques, effectively avoiding problematic comma splices, run-on sentences, and sentence fragments, especially in sentences containing compound subjects or verbs Maintain a consistent and logical use of verb tense and pronoun person on the basis of information in the paragraph or essay as a whole **Conventions of Usage:** Solve such basic grammatical problems as how to form the past and past participle of irregular but commonly used verbs and how to form comparative and superlative adjectives Solve such grammatical problems as whether to use an adverb or adjective form, how to ensure straightforward subject-verb and pronoun-antecedent agreement, and which preposition to use in simple contexts Recognize and use the appropriate word in frequently confused pairs such as *there* and *their*, *past* and *passed*, and *led* and *lead* Use idiomatically appropriate prepositions, especially in combination with verbs (e.g., *long for*, *appeal to*) Ensure that a verb agrees with its subject when there is some text between the two Ensure that a pronoun agrees with its antecedent when the two occur in separate clauses or sentences Identify the correct past and past participle forms of irregular and infrequently used verbs and form present-perfect verbs by using *have* rather than *of* Correctly use reflexive pronouns, the possessive pronouns *its* and *your*, and the relative pronouns *who* and *whom* Ensure that a verb agrees with its subject in unusual situations (e.g., when the subject-verb order is inverted or when the subject is an indefinite pronoun)
WR-HS-3.6.0. Correctness	
Students will communicate clearly by • Applying correct spelling • Applying correct punctuation • Applying correct capitalization • Incorporating acceptable departure from standard correctness to enhance meaning when appropriate • Incorporating appropriate documentation of ideas and information from outside sources (e.g., citing authors or titles within the text, listing sources, documenting sources in text and/or on a Works Cited page)	**Conventions of Punctuation:** Delete commas that create basic sense problems (e.g., between verb and direct object) Provide appropriate punctuation in straightforward situations (e.g., items in a series) Delete commas that disturb the sentence flow (e.g., between modifier and modified element) Use commas to set off simple parenthetical phrases Delete unnecessary commas when an incorrect reading of the sentence suggests a pause that should be punctuated (e.g., between verb and direct object clause) Use punctuation to set off complex parenthetical phrases

TABLE 2B

KENTUCKY High School Writing Core Content for Assessment, Version 4.1	**PLAN English** **College Readiness Standards**
WRITING CONVENTIONS	
	Recognize and delete unnecessary commas based on a careful reading of a complicated sentence (e.g., between the elements of a compound subject or compound verb joined by *and*) Use apostrophes to indicate simple possessive nouns Recognize inappropriate uses of colons and semicolons Use commas to set off a nonessential/nonrestrictive appositive or clause

TABLE 2C

KENTUCKY High School Writing Core Content for Assessment, Version 4.1	**ACT English and Writing** **College Readiness Standards**
WRITING CONTENT	
WR-HS-1.1.0. Purpose/Audience	
Students will establish and maintain a focused purpose to communicate with an authentic audience by • Narrowing the topic to present an idea or theme • Choosing a perspective authentic to the writer • Analyzing and addressing the needs of the intended audience • Adhering to the characteristics of the form • Applying a suitable tone • Allowing voice to emerge when appropriate	**English** College Readiness Standards **Topic Development in Terms of Purpose and Focus:** Identify the basic purpose or role of a specified phrase or sentence Delete a clause or sentence because it is obviously irrelevant to the essay Identify the central idea or main topic of a straightforward piece of writing Determine relevancy when presented with a variety of sentence-level details Identify the focus of a simple essay, applying that knowledge to add a sentence that sharpens that focus or to determine if an essay has met a specified goal Delete material primarily because it disturbs the flow and development of the paragraph Add a sentence to accomplish a fairly straightforward purpose such as illustrating a given statement Apply an awareness of the focus and purpose of a fairly involved essay to determine the rhetorical effect and suitability of an existing phrase or sentence, or to determine the need to delete plausible but irrelevant material **Word Choice in Terms of Style, Tone, Clarity, and Economy:** Revise expressions that deviate from the style of an essay Use the word or phrase most consistent with the style and tone of a fairly straightforward essay Use the word or phrase most appropriate in terms of the content of the sentence and tone of the essay **Writing** College Readiness Standards **Expressing Judgments:** Show understanding of the persuasive purpose of the task by taking a position on the issue in the prompt Show clear understanding of the persuasive purpose of the task by taking a position on the specific issue in the prompt and offering a broad context for discussion **Focusing on the Topic:** Maintain a focus on the general topic in the prompt throughout the essay and attempt a focus on the specific issue in the prompt Present a thesis that establishes focus on the topic Maintain a focus on discussion of the specific topic and issue in the prompt throughout the essay Present a thesis that establishes a focus on the writer's position on the issue

TABLE 2C

KENTUCKY High School Writing Core Content for Assessment, Version 4.1	**ACT English and Writing** **College Readiness Standards**
WRITING CONTENT	
WR-HS-1.2.0. Idea Development/Support	
Students will support main ideas and deepen the audience's understanding of purpose by • Developing logical, justified and suitable explanations • Providing relevant elaboration • Explaining related connections or reflections • Applying idea development strategies appropriate to the form	**English** College Readiness Standards **Topic Development in Terms of Purpose and Focus:** Identify the basic purpose or role of a specified phrase or sentence Delete a clause or sentence because it is obviously irrelevant to the essay Determine relevancy when presented with a variety of sentence-level details Delete material primarily because it disturbs the flow and development of the paragraph Add a sentence to accomplish a fairly straightforward purpose such as illustrating a given statement Apply an awareness of the focus and purpose of a fairly involved essay to determine the rhetorical effect and suitability of an existing phrase or sentence, or to determine the need to delete plausible but irrelevant material Add a sentence to accomplish a subtle rhetorical purpose such as to emphasize, to add supporting detail, or to express meaning through connotation **Writing** College Readiness Standards **Expressing Judgments:** Show some recognition of the complexity of the issue in the prompt by • acknowledging counterarguments to the writer's position • providing some response to counter-arguments to the writer's position Show recognition of the complexity of the issue in the prompt by • partially evaluating implications and/or complications of the issue, and/or • posing and partially responding to counter-arguments to the writer's position

TABLE 2C

KENTUCKY High School Writing Core Content for Assessment, Version 4.1	**ACT English and Writing** **College Readiness Standards**
WRITING STRUCTURE	
WR-HS-2.3.0. Organization	
Students will create unity and coherence to accomplish the focused purpose by • Engaging the audience • Establishing a context for reading when appropriate • Communicating ideas and support in a meaningful order • Applying transitions and transitional elements to guide the reader through the piece • Developing effective closure	**English** College Readiness Standards **Organization, Unity, and Coherence:** Use conjunctive adverbs or phrases to show time relationships in simple narrative essays (e.g., *then*, *this time*) Select the most logical place to add a sentence in a paragraph Use conjunctive adverbs or phrases to express straightforward logical relationships (e.g., *first*, *afterward*, *in response*) Decide the most logical place to add a sentence in an essay Add a sentence that introduces a simple paragraph Determine the need for conjunctive adverbs or phrases to create subtle logical connections between sentences (e.g., *therefore*, *however*, *in addition*) Rearrange the sentences in a fairly uncomplicated paragraph for the sake of logic Add a sentence to introduce or conclude the essay or to provide a transition between paragraphs when the essay is fairly straightforward **Writing** College Readiness Standards **Expressing Judgments:** Show clear understanding of the persuasive purpose of the task by taking a position on the specific issue in the prompt and offering a broad context for discussion Show clear understanding of the persuasive purpose of the task by taking a position on the specific issue in the prompt and offering a critical context for discussion **Focusing on the Topic:** Present a thesis that establishes focus on the topic Present a thesis that establishes a focus on the writer's position on the issue Present a critical thesis that clearly establishes the focus on the writer's position on the issue **Organizing Ideas:** Provide an adequate but simple organization with logical grouping of ideas in parts of the essay but with little evidence of logical progression of ideas Use some simple and obvious, but appropriate, transitional words and phrases Present a discernible introduction and conclusion with a little development Provide unity and coherence throughout the essay, sometimes with a logical progression of ideas Present a somewhat developed introduction and conclusion

TABLE 2C

KENTUCKY High School Writing Core Content for Assessment, Version 4.1	**ACT English and Writing** **College Readiness Standards**
WRITING STRUCTURE	
WR-HS-2.4.0. Sentence Structure	
Students will create effective sentences by • Applying a variety of structures and lengths • Maintaining parallel structure • Developing complete and correct sentences unless using unconventional structures for an intentional effect when appropriate	**English** College Readiness Standards **Sentence Structure and Formation:** Use conjunctions or punctuation to join simple clauses Revise shifts in verb tense between simple clauses in a sentence or between simple adjoining sentences Determine the need for punctuation and conjunctions to avoid awkward-sounding sentence fragments and fused sentences Decide the appropriate verb tense and voice by considering the meaning of the entire sentence Recognize and correct marked disturbances of sentence flow and structure (e.g., participial phrase fragments, missing or incorrect relative pronouns, dangling or misplaced modifiers) Revise to avoid faulty placement of phrases and faulty coordination and subordination of clauses in sentences with subtle structural problems Maintain consistent verb tense and pronoun person on the basis of the preceding clause or sentence Use sentence-combining techniques, effectively avoiding problematic comma splices, run-on sentences, and sentence fragments, especially in sentences containing compound subjects or verbs Maintain a consistent and logical use of verb tense and pronoun person on the basis of information in the paragraph or essay as a whole **Writing** College Readiness Standards **Using Language:** Show adequate use of language to communicate by • correctly employing many of the conventions of standard English grammar, usage, and mechanics, but with some distracting errors that may occasionally impede understanding • using appropriate vocabulary • using some varied kinds of sentence structures to vary pace Show competent use of language to communicate ideas by • correctly employing most conventions of standard English grammar, usage, and mechanics, with a few distracting errors but none that impede understanding • using some precise and varied vocabulary • using several kinds of sentence structures to vary pace and to support meaning

TABLE 2C

KENTUCKY High School Writing Core Content for Assessment, Version 4.1	**ACT English and Writing** **College Readiness Standards**
WRITING STRUCTURE	
	Show effective use of language to clearly communicate ideas by • correctly employing most conventions of standard English grammar, usage, and mechanics, with just a few, if any, errors • using precise and varied vocabulary • using a variety of kinds of sentence structures to vary pace and to support meaning

TABLE 2C

KENTUCKY High School Writing Core Content for Assessment, Version 4.1	**ACT English and Writing** **College Readiness Standards**
WRITING CONVENTIONS	
WR-HS-3.5.0. Language	
Students will exemplify effective language choices by • Applying correct grammar and usage • Applying concise use of language • Incorporating strong verbs, precise nouns, concrete details and sensory details • Applying language appropriate to the content, purpose and audience	**English** College Readiness Standards **Topic Development in Terms of Purpose and Focus:** Identify the basic purpose or role of a specified phrase or sentence Add a sentence to accomplish a fairly straightforward purpose such as illustrating a given statement Apply an awareness of the focus and purpose of a fairly involved essay to determine the rhetorical effect and suitability of an existing phrase or sentence, or to determine the need to delete plausible but irrelevant material Add a sentence to accomplish a subtle rhetorical purpose such as to emphasize, to add supporting detail, or to express meaning through connotation **Word Choice in Terms of Style, Tone, Clarity, and Economy:** Revise sentences to correct awkward and confusing arrangements of sentence elements Revise vague nouns and pronouns that create obvious logic problems Delete obviously synonymous and wordy material in a sentence Revise expressions that deviate from the style of an essay Delete redundant material when information is repeated in different parts of speech (e.g., “alarmingly startled”) Use the word or phrase most consistent with the style and tone of a fairly straightforward essay Determine the clearest and most logical conjunction to link clauses Revise a phrase that is redundant in terms of the meaning and logic of the entire sentence Identify and correct ambiguous pronoun references Use the word or phrase most appropriate in terms of the content of the sentence and tone of the essay **Sentence Structure and Formation:** Use conjunctions or punctuation to join simple clauses Revise shifts in verb tense between simple clauses in a sentence or between simple adjoining sentences Determine the need for punctuation and conjunctions to avoid awkward-sounding sentence fragments and fused sentences Decide the appropriate verb tense and voice by considering the meaning of the entire sentence Recognize and correct marked disturbances of sentence flow and structure (e.g., participial phrase fragments, missing or incorrect relative pronouns, dangling or misplaced modifiers)

TABLE 2C

KENTUCKY High School Writing Core Content for Assessment, Version 4.1	**ACT English and Writing** **College Readiness Standards**
WRITING CONVENTIONS	
	Revise to avoid faulty placement of phrases and faulty coordination and subordination of clauses in sentences with subtle structural problems Maintain consistent verb tense and pronoun person on the basis of the preceding clause or sentence Use sentence-combining techniques, effectively avoiding problematic comma splices, run-on sentences, and sentence fragments, especially in sentences containing compound subjects or verbs Maintain a consistent and logical use of verb tense and pronoun person on the basis of information in the paragraph or essay as a whole **Conventions of Usage:** Solve such basic grammatical problems as how to form the past and past participle of irregular but commonly used verbs and how to form comparative and superlative adjectives Solve such grammatical problems as whether to use an adverb or adjective form, how to ensure straightforward subject-verb and pronoun-antecedent agreement, and which preposition to use in simple contexts Recognize and use the appropriate word in frequently confused pairs such as *there* and *their*, *past* and *passed*, and *led* and *lead* Use idiomatically appropriate prepositions, especially in combination with verbs (e.g., *long for*, *appeal to*) Ensure that a verb agrees with its subject when there is some text between the two Ensure that a pronoun agrees with its antecedent when the two occur in separate clauses or sentences Identify the correct past and past participle forms of irregular and infrequently used verbs and form present-perfect verbs by using *have* rather than *of* Correctly use reflexive pronouns, the possessive pronouns *its* and *your*, and the relative pronouns *who* and *whom* Ensure that a verb agrees with its subject in unusual situations (e.g., when the subject-verb order is inverted or when the subject is an indefinite pronoun) **Writing** College Readiness Standards **Using Language:** Show adequate use of language to communicate by • correctly employing many of the conventions of standard English grammar, usage, and mechanics, but with some distracting errors that may occasionally impede understanding • using appropriate vocabulary • using some varied kinds of sentence structures to vary pace

TABLE 2C

KENTUCKY High School Writing Core Content for Assessment, Version 4.1	**ACT English and Writing** **College Readiness Standards**
WRITING CONVENTIONS	
	Show competent use of language to communicate ideas by • correctly employing most conventions of standard English grammar, usage, and mechanics, with a few distracting errors but none that impede understanding • using some precise and varied vocabulary • using several kinds of sentence structures to vary pace and to support meaning Show effective use of language to clearly communicate ideas by • correctly employing most conventions of standard English grammar, usage, and mechanics, with just a few, if any, errors • using precise and varied vocabulary • using a variety of kinds of sentence structures to vary pace and to support meaning
WR-HS-3.6.0. Correctness	
Students will communicate clearly by • Applying correct spelling • Applying correct punctuation • Applying correct capitalization • Incorporating acceptable departure from standard correctness to enhance meaning when appropriate • Incorporating appropriate documentation of ideas and information from outside sources (e.g., citing authors or titles within the text, listing sources, documenting sources in text and/or on a Works Cited page)	**English** College Readiness Standards **Conventions of Punctuation:** Delete commas that create basic sense problems (e.g., between verb and direct object) Provide appropriate punctuation in straightforward situations (e.g., items in a series) Delete commas that disturb the sentence flow (e.g., between modifier and modified element) Use commas to set off simple parenthetical phrases Delete unnecessary commas when an incorrect reading of the sentence suggests a pause that should be punctuated (e.g., between verb and direct object clause) Use punctuation to set off complex parenthetical phrases Recognize and delete unnecessary commas based on a careful reading of a complicated sentence (e.g., between the elements of a compound subject or compound verb joined by *and*) Use apostrophes to indicate simple possessive nouns Recognize inappropriate uses of colons and semicolons Use commas to set off a nonessential/nonrestrictive appositive or clause **Writing** College Readiness Standards **Using Language:** Show adequate use of language to communicate by • correctly employing many of the conventions of standard English grammar, usage, and mechanics, but with some distracting errors that may occasionally impede understanding • using appropriate vocabulary • using some varied kinds of sentence structures to vary pace

TABLE 2C

KENTUCKY High School Writing Core Content for Assessment, Version 4.1	**ACT English and Writing** **College Readiness Standards**
WRITING CONVENTIONS	
	Show competent use of language to communicate ideas by • correctly employing most conventions of standard English grammar, usage, and mechanics, with a few distracting errors but none that impede understanding • using some precise and varied vocabulary • using several kinds of sentence structures to vary pace and to support meaning Show effective use of language to clearly communicate ideas by • correctly employing most conventions of standard English grammar, usage, and mechanics, with just a few, if any, errors • using precise and varied vocabulary • using a variety of kinds of sentence structures to vary pace and to support meaning

SUPPLEMENT
TABLES 3A–3C:

MATHEMATICS

TABLE 3A

KENTUCKY Grade 8 Mathematics Core Content for Assessment, Version 4.1	EXPLORE Mathematics College Readiness Standards
NUMBER PROPERTIES AND OPERATIONS	
Middle grades students understand fractions, decimals, percents and integers, compare them and locate their relative positions on a number line. They develop and use proportional reasoning to solve problems. They work with large numbers and small numbers. They use factors, multiples and prime factorizations. They perform arithmetic operations with fractions, decimals and integers, use properties in computation, develop fluency and develop strategies to estimate the result of operations on rational numbers.	**Basic Operations & Applications:** Perform one-operation computation with whole numbers and decimals Solve problems in one or two steps using whole numbers Solve routine one-step arithmetic problems (using whole numbers, fractions, and decimals) such as single-step percent Solve some routine two-step arithmetic problems Solve routine two-step or three-step arithmetic problems involving concepts such as rate and proportion, tax added, percentage off, and computing with a given average **Numbers: Concepts & Properties:** Recognize equivalent fractions and fractions in lowest terms Recognize one-digit factors of a number Identify a digit's place value Exhibit knowledge of elementary number concepts including rounding, the ordering of decimals, pattern identification, absolute value, primes, and greatest common factor Find and use the least common multiple Order fractions Work with numerical factors Work with scientific notation **Graphical Representations:** Identify the location of a point with a positive coordinate on the number line
Number Sense	
MA-08-1.1.1. Students will provide examples of and identify rational numbers and irrational numbers (square roots and π only).	**Numbers: Concepts & Properties:** Recognize equivalent fractions and fractions in lowest terms Exhibit knowledge of elementary number concepts including rounding, the ordering of decimals, pattern identification, absolute value, primes, and greatest common factor Work with squares and square roots of numbers

TABLE 3A

KENTUCKY Grade 8 Mathematics Core Content for Assessment, Version 4.1	EXPLORE Mathematics College Readiness Standards
NUMBER PROPERTIES AND OPERATIONS	
MA-08-1.1.3. Students will convert, compare and order multiple numerical representations (e.g., fractions, decimals, percentages) of rational numbers and irrational numbers (square roots and π only).	**Basic Operations & Applications:** Solve routine one-step arithmetic problems (using whole numbers, fractions, and decimals) such as single-step percent **Numbers: Concepts & Properties:** Recognize equivalent fractions and fractions in lowest terms Exhibit knowledge of elementary number concepts including rounding, the ordering of decimals, pattern identification, absolute value, primes, and greatest common factor Order fractions Work with squares and square roots of numbers
Estimation	
MA-08-1.2.1. Students will estimate to solve real-world and mathematical problems with rational numbers, checking for reasonable and appropriate computational results.	**Basic Operations & Applications:** Perform one-operation computation with whole numbers and decimals Solve problems in one or two steps using whole numbers Solve routine one-step arithmetic problems (using whole numbers, fractions, and decimals) such as single-step percent Solve some routine two-step arithmetic problems Solve routine two-step or three-step arithmetic problems involving concepts such as rate and proportion, tax added, percentage off, and computing with a given average
Number Operations	
MA-08-1.3.1. Students will add, subtract, multiply and divide rational numbers to solve real-world problems and apply order of operations (including positive whole number exponents) to simplify numerical expressions.	**Basic Operations & Applications:** Solve routine one-step arithmetic problems (using whole numbers, fractions, and decimals) such as single-step percent Solve some routine two-step arithmetic problems Solve routine two-step or three-step arithmetic problems involving concepts such as rate and proportion, tax added, percentage off, and computing with a given average Solve multistep arithmetic problems that involve planning or converting units of measure (e.g., feet per second to miles per hour)
Ratios and Proportional Reasoning	
MA-08-1.4.1. Students will apply ratios and proportional reasoning to solve real-world problems (e.g., percents, constant rate of change, unit pricing, percent of increase or decrease).	**Basic Operations & Applications:** Perform common conversions (e.g., inches to feet or hours to minutes) Solve routine two-step or three-step arithmetic problems involving concepts such as rate and proportion, tax added, percentage off, and computing with a given average Solve multistep arithmetic problems that involve planning or converting units of measure (e.g., feet per second to miles per hour)

TABLE 3A

KENTUCKY Grade 8 Mathematics Core Content for Assessment, Version 4.1	EXPLORE Mathematics College Readiness Standards
NUMBER PROPERTIES AND OPERATIONS	
Properties of Numbers and Operations	
MA-08-1.5.2. Students will identify the use of properties (the commutative properties of addition and multiplication, the associative properties of addition and multiplication, the identity properties for addition and multiplication, inverse properties and the distributive property of multiplication over addition and subtraction) to justify a given step in solving problems.	**Numbers: Concepts & Properties:** Exhibit knowledge of elementary number concepts including rounding, the ordering of decimals, pattern identification, absolute value, primes, and greatest common factor **Expressions, Equations, & Inequalities:** Solve equations in the form $x + a = b$, where a and b are whole numbers or decimals Solve one-step equations having integer or decimal answers Combine like terms (e.g., $2x + 5x$) Add and subtract simple algebraic expressions Solve routine first-degree equations

TABLE 3A

KENTUCKY Grade 8 Mathematics Core Content for Assessment, Version 4.1	EXPLORE Mathematics College Readiness Standards
MEASUREMENT	
Students continue to measure and estimate measurements including fractions and decimals. They use formulas to find perimeter, area, circumference and volume. They use rulers and protractors. They use US Customary and metric units of measurement.	**Basic Operations & Applications:** Perform common conversions (e.g., inches to feet or hours to minutes) Solve multistep arithmetic problems that involve planning or converting units of measure (e.g., feet per second to miles per hour **Measurement:** Compute the perimeter of polygons when all side lengths are given Compute the area of rectangles when whole number dimensions are given Compute the area and perimeter of triangles and rectangles in simple problems Use geometric formulas when all necessary information is given Compute the area of triangles and rectangles when one or more additional simple steps are required Compute the area and circumference of circles after identifying necessary information
Measuring Physical Attributes	
MA-08-2.1.1. Students will measure lengths (to the nearest sixteenth of an inch or the nearest millimeter) and will determine and use in real-world or mathematical problems: • area and perimeter of triangles and quadrilaterals; • area and circumference of circles; • area and perimeter of compound figures composed of triangles, quadrilaterals and circles; • area from circumference or perimeter and • circumference or perimeter from area.	**Measurement:** Estimate or calculate the length of a line segment based on other lengths given on a geometric figure Compute the perimeter of polygons when all side lengths are given Compute the area of rectangles when whole number dimensions are given Compute the area and perimeter of triangles and rectangles in simple problems Use geometric formulas when all necessary information is given Compute the area of triangles and rectangles when one or more additional simple steps are required Compute the area and circumference of circles after identifying necessary information
MA-08-2.1.3. Students will evaluate the measures of angles by estimation, measurement with a protractor or angle ruler and determine angle measures in mathematical and/or real-world situations (e.g., supplementary, external, vertical).	**Properties of Plane Figures:** Find the measure of an angle using properties of parallel lines Exhibit knowledge of basic angle properties and special sums of angle measures (e.g., 90°, 180°, and 360°) Use several angle properties to find an unknown angle measure
MA-08-2.1.4. Students will apply formulas to determine the volume of right rectangular prisms in real-world problems.	**Measurement:** Use geometric formulas when all necessary information is given
MA-08-2.1.6. Students will apply the Pythagorean theorem to determine the length of a hypotenuse.	

TABLE 3A

KENTUCKY Grade 8 Mathematics Core Content for Assessment, Version 4.1	**EXPLORE Mathematics** **College Readiness Standards**
MEASUREMENT	
Systems of Measurements	
MA-08-2.2.1. Students will convert units within the same measurement system and use these units to solve real-world problems.	**Basic Operations & Applications:** Perform common conversions (e.g., inches to feet or hours to minutes) Solve multistep arithmetic problems that involve planning or converting units of measure (e.g., feet per second to miles per hour

TABLE 3A

KENTUCKY Grade 8 Mathematics Core Content for Assessment, Version 4.1	EXPLORE Mathematics College Readiness Standards
GEOMETRY	
Middle grade students expand analysis of two-dimensional shapes and three-dimensional shapes. They translate shapes in a coordinate plane. They extend work with congruent and similar figures, including proportionality. They use the Pythagorean theorem.	**Basic Operations & Applications:** Solve routine two-step or three-step arithmetic problems involving concepts such as rate and proportion, tax added, percentage off, and computing with a given average
Shapes and Relationships	
MA-08-3.1.2. Students will identify and compare properties of two-dimensional figures (circles, triangles [acute, right, obtuse, scalene, isosceles, equilateral], quadrilaterals [square, rectangle, rhombus, parallelogram, trapezoid], regular/irregular polygons), and will apply these properties and figures to solve real-world and mathematical problems.	**Properties of Plane Figures:** Find the measure of an angle using properties of parallel lines Exhibit knowledge of basic angle properties and special sums of angle measures (e.g., 90°, 180°, and 360°) Use several angle properties to find an unknown angle measure **Measurement:** Use geometric formulas when all necessary information is given
MA-08-3.1.3. Students will compare properties of three-dimensional figures (spheres, cones, cylinders, prisms, pyramids), and will apply these properties and figures to solve real-world and mathematical problems.	
MA-08-3.1.4. Students will: • provide examples of congruent and similar figures; • apply congruent and similar figures to solve real-world and mathematical problems and • apply proportional reasoning to solve problems involving scale drawings and proportional figures.	**Basic Operations & Applications:** Solve routine two-step or three-step arithmetic problems involving concepts such as rate and proportion, tax added, percentage off, and computing with a given average
Transformations of Shapes	
MA-08-3.2.2. Students will transform (translations, reflections, and dilations with the center of dilation at the origin) figures in a coordinate plane and determine the new coordinates of the image after the transformation.	
Coordinate Geometry	
MA-08-3.3.1. Students will identify and graph ordered pairs on a coordinate system, correctly identifying the origin, axes and ordered pairs; and will apply graphing in the coordinate system to solve real-world and mathematical problems.	**Graphical Representations:** Locate points on the number line and in the first quadrant Locate points in the coordinate plane

TABLE 3A

KENTUCKY Grade 8 Mathematics Core Content for Assessment, Version 4.1	EXPLORE Mathematics College Readiness Standards
DATA ANALYSIS AND PROBABILITY	
Middle grades students extend the early development of data representations and examine the appropriateness of graphs and representations of data. They examine central tendencies and dispersion. They develop organized approaches to counting and use experimental and theoretical probabilities.	**Probability, Statistics, & Data Analysis:** Use the relationship between the probability of an event and the probability of its complement Translate from one representation of data to another (e.g., a bar graph to a circle graph) Determine the probability of a simple event Manipulate data from tables and graphs Compute straightforward probabilities for common situations
Representations of Data Sets	
MA-08-4.1.1. Students will analyze and make inferences from data displays (drawings, tables/charts, pictographs, bar graphs, circle graphs, line plots, Venn diagrams, line graphs, stem-and-leaf plots, scatter plots, histograms, box-and-whiskers plots).	**Probability, Statistics, & Data Analysis:** Perform a single computation using information from a table or chart Read tables and graphs Perform computations on data from tables and graphs
MA-08-4.1.4. Students will: • construct data displays (Venn diagrams, tables, line graphs, stem-and-leaf plots, circle graphs, scatter plots); • explain why the type of display is appropriate for the data and • explain how misleading representations affect interpretations and conclusions about data (e.g., changing the scale on a graph).	**Probability, Statistics, & Data Analysis:** Translate from one representation of data to another (e.g., a bar graph to a circle graph) Manipulate data from tables and graphs
Characteristics of Data Sets	
MA-08-4.2.1. Students will: • determine the mean, median, mode, and range of a set of data; • identify clusters, gaps, and outliers and • apply these concepts to compare sets of data.	**Probability, Statistics, & Data Analysis:** Calculate the average of a list of positive whole numbers Perform a single computation using information from a table or chart Calculate the average of a list of numbers Calculate the average, given the number of data values and the sum of the data values Perform computations on data from tables and graphs Calculate the missing data value, given the average and all data values but one Calculate the average, given the frequency counts of all the data values Manipulate data from tables and graphs
Experiments and Samples	
[no statement at this level]	
Probability	
MA-08-4.4.1. Students will apply counting techniques to determine the size of a sample space for a real-world or mathematical situation.	

TABLE 3A

KENTUCKY Grade 8 Mathematics Core Content for Assessment, Version 4.1	EXPLORE Mathematics College Readiness Standards
DATA ANALYSIS AND PROBABILITY	
MA-08-4.4.2. Students will: • determine theoretical probabilities of events, including compound events (e.g. dependent, independent); • determine probabilities based on the results of an experiment and • make inferences from probability data.	**Probability, Statistics, & Data Analysis:** Perform computations on data from tables and graphs Use the relationship between the probability of an event and the probability of its complement Determine the probability of a simple event Manipulate data from tables and graphs Compute straightforward probabilities for common situations

TABLE 3A

KENTUCKY Grade 8 Mathematics Core Content for Assessment, Version 4.1	EXPLORE Mathematics College Readiness Standards
ALGEBRAIC THINKING	
Middle grade students extend pattern work to include arithmetic sequences. They use linear functions and linear equations. They plot rational number pairs in the Cartesian plane. They simplify algebraic and numeric expressions. They explore the effects of change on related variables. They use and solve two-step single variable equations and inequalities.	**Numbers: Concepts & Properties:** Exhibit knowledge of elementary number concepts including rounding, the ordering of decimals, pattern identification, absolute value, primes, and greatest common factor **Expressions, Equations, & Inequalities:** Solve equations in the form $x + a = b$, where a and b are whole numbers or decimals Solve one-step equations having integer or decimal answers Combine like terms (e.g., $2x + 5x$) Add and subtract simple algebraic expressions Solve routine first-degree equations Solve real-world problems using first-degree equations **Graphical Representations:** Locate points in the coordinate plane
Patterns, Relations and Functions	
MA-08-5.1.2. Students will represent, analyze and generalize simple first and second degree functional relationships using tables, graphs, words and algebraic notations and will apply the first degree relationships to solve real-world and mathematical problems.	**Probability, Statistics, & Data Analysis:** Perform computations on data from tables and graphs Translate from one representation of data to another (e.g., a bar graph to a circle graph) **Expressions, Equations, & Inequalities:** Perform straightforward word-to-symbol translations Solve real-world problems using first-degree equations Write expressions, equations, or inequalities with a single variable for common pre-algebra settings (e.g., rate and distance problems and problems that can be solved by using proportions) Identify solutions to simple quadratic equations
MA-08-5.1.5. Students will explain how the change in one variable affects the change in another variable (e.g., if rate remains constant, an increase in time results in an increase in distance).	
Variables, Expressions and Operations	
MA-08-5.2.1. Students will evaluate and simplify algebraic expressions applying the order of operations.	**Expressions, Equations, & Inequalities:** Substitute whole numbers for unknown quantities to evaluate expressions Combine like terms (e.g., $2x + 5x$) Evaluate algebraic expressions by substituting integers for unknown quantities Add and subtract simple algebraic expressions

TABLE 3A

KENTUCKY Grade 8 Mathematics Core Content for Assessment, Version 4.1	**EXPLORE Mathematics** **College Readiness Standards**
ALGEBRAIC THINKING	
Equations and Inequalities	
MA-08-5.3.1. Students will model and solve single variable, first-degree real-world and mathematical problems (e.g., 5x + 2 = x + 22, x – 4 < –60).	**Expressions, Equations, & Inequalities:** Solve equations in the form *x* + *a* = *b*, where *a* and *b* are whole numbers or decimals Solve one-step equations having integer or decimal answers Solve routine first-degree equations Perform straightforward word-to-symbol translations Solve real-world problems using first-degree equations Write expressions, equations, or inequalities with a single variable for common pre-algebra settings (e.g., rate and distance problems and problems that can be solved by using proportions)

TABLE 3B

KENTUCKY High School Mathematics Core Content for Assessment, Version 4.1	**PLAN Mathematics** **College Readiness Standards**
NUMBER PROPERTIES AND OPERATIONS	
High school students should enter high school with a strong background in rational numbers and numerical operations and expand this to real numbers. This becomes the foundation for algebra and working with algebraic symbols. They understand large and small numbers and their representations, powers and roots. They compare and contrast properties of numbers and number systems and develop strategies to estimate the results of operations on real numbers. Students will use, and understand the limitations of, graphing calculators and computer spreadsheets appropriately as learning tools.	**Numbers: Concepts & Properties:** Work with scientific notation Work with squares and square roots of numbers Work problems involving positive integer exponents Work with cubes and cube roots of numbers Apply number properties involving prime factorization Apply number properties involving even/odd numbers and factors/multiples Apply number properties involving positive/negative numbers Apply rules of exponents
Number Sense	
[no statement at this level]	
Estimation	
[no statement at this level]	
Number Operations	
MA-HS-1.3.1. Students will solve real-world and mathematical problems to specified accuracy levels by simplifying expressions with real numbers involving addition, subtraction, multiplication, division, absolute value, integer exponents, roots (square, cube) and factorials.	**Basic Operations & Applications:** Perform one-operation computation with whole numbers and decimals Solve problems in one or two steps using whole numbers Perform common conversions (e.g., inches to feet or hours to minutes) Solve routine one-step arithmetic problems (using whole numbers, fractions, and decimals) such as single-step percent Solve some routine two-step arithmetic problems Solve routine two-step or three-step arithmetic problems involving concepts such as rate and proportion, tax added, percentage off, and computing with a given average Solve multistep arithmetic problems that involve planning or converting units of measure (e.g., feet per second to miles per hour) **Probability, Statistics, & Data Analysis:** Exhibit knowledge of simple counting techniques Apply counting techniques **Numbers: Concepts & Properties:** Exhibit knowledge of elementary number concepts including rounding, the ordering of decimals, pattern identification, absolute value, primes, and greatest common factor Work with scientific notation Work with squares and square roots of numbers Work problems involving positive integer exponents Work with cubes and cube roots of numbers Apply rules of exponents

TABLE 3B

KENTUCKY High School Mathematics Core Content for Assessment, Version 4.1	**PLAN Mathematics** **College Readiness Standards**
NUMBER PROPERTIES AND OPERATIONS	
MA-HS-1.3.2. Students will: • describe and extend arithmetic and geometric sequences; • determine a specific term of a sequence given an explicit formula; • determine an explicit rule for the nth term of an arithmetic sequence and • apply sequences to solve real-world problems.	**Numbers: Concepts & Properties:** Exhibit knowledge of elementary number concepts including rounding, the ordering of decimals, pattern identification, absolute value, primes, and greatest common factor **Expressions, Equations, & Inequalities:** Evaluate algebraic expressions by substituting integers for unknown quantities Write expressions, equations, or inequalities with a single variable for common pre-algebra settings (e.g., rate and distance problems and problems that can be solved by using proportions) Manipulate expressions and equations
Ratios and Proportional Reasoning	
MA-HS-1.4.1. Students will apply ratios, percents and proportional reasoning to solve real-world problems (e.g., those involving slope and rate, percent of increase and decrease) and will explain how slope determines a rate of change in linear functions representing real-world problems.	**Basic Operations & Applications:** Solve routine one-step arithmetic problems (using whole numbers, fractions, and decimals) such as single-step percent Solve routine two-step or three-step arithmetic problems involving concepts such as rate and proportion, tax added, percentage off, and computing with a given average Solve multistep arithmetic problems that involve planning or converting units of measure (e.g., feet per second to miles per hour) Solve word problems containing several rates, proportions, or percentages **Graphical Representations:** Determine the slope of a line from points or equations Interpret and use information from graphs in the coordinate plane
Properties of Numbers and Operations	
[no statement at this level]	

TABLE 3B

KENTUCKY High School Mathematics Core Content for Assessment, Version 4.1	**PLAN Mathematics** **College Readiness Standards**
MEASUREMENT	
High school students continue to measure and estimate measurements including fractions and decimals. They use formulas to find surface area and volume. They use US Customary and metric units of measurement. They use the Pythagorean theorem and other right triangle relationships to solve real-world problems.	**Basic Operations & Applications:** Solve multistep arithmetic problems that involve planning or converting units of measure (e.g., feet per second to miles per hour) **Properties of Plane Figures:** Recognize Pythagorean triples Apply properties of 30°-60°-90°, 45°-45°-90°, similar, and congruent triangles Use the Pythagorean theorem **Measurement:** Use geometric formulas when all necessary information is given
Measuring Physical Attributes	
MA-HS-2.1.1. Students will determine the surface area and volume of right rectangular prisms, pyramids, cylinders, cones and spheres in real-world and mathematical problems.	**Measurement:** Use geometric formulas when all necessary information is given Use relationships involving area, perimeter, and volume of geometric figures to compute another measure
MA-HS-2.1.2. Students will describe how a change in one or more dimensions of a geometric figure affects the perimeter, area and volume of the figure.	
MA-HS-2.1.3. Students will apply definitions and properties of right triangle relationships (right triangle trigonometry and the Pythagorean theorem) to determine length and angle measures to solve real-world and mathematical problems.	**Properties of Plane Figures:** Exhibit knowledge of basic angle properties and special sums of angle measures (e.g., 90°, 180°, and 360°) Recognize Pythagorean triples Apply properties of 30°-60°-90°, 45°-45°-90°, similar, and congruent triangles Use the Pythagorean theorem
Systems of Measurements	
[no statement at this level]	

TABLE 3B

KENTUCKY High School Mathematics Core Content for Assessment, Version 4.1	PLAN Mathematics College Readiness Standards
GEOMETRY	
High school students expand analysis of two-dimensional shapes and three-dimensional shapes. They translate shapes in a coordinate plane. They extend work with congruent and similar figures, including proportionality.	**Properties of Plane Figures:** Apply properties of 30°-60°-90°, 45°-45°-90°, similar, and congruent triangles
Shapes and Relationships	
MA-HS-3.1.1. Students will analyze and apply spatial relationships (not using Cartesian coordinates) among points, lines and planes (e.g., betweenness of points, midpoint, segment length, collinear, coplanar, parallel, perpendicular, skew).	
MA-HS-3.1.3. Students will analyze and apply angle relationships (e.g., linear pairs, vertical, complementary, supplementary, corresponding and alternate interior angles) in real-world or mathematical problems.	**Properties of Plane Figures:** Exhibit some knowledge of the angles associated with parallel lines Find the measure of an angle using properties of parallel lines Exhibit knowledge of basic angle properties and special sums of angle measures (e.g., 90°, 180°, and 360°) Use several angle properties to find an unknown angle measure
MA-HS-3.1.5. Students will classify and apply properties of two-dimensional geometric figures (e.g., number of sides, vertices, length of sides, sum of interior and exterior angle measures).	**Properties of Plane Figures:** Exhibit knowledge of basic angle properties and special sums of angle measures (e.g., 90°, 180°, and 360°) Use several angle properties to find an unknown angle measure **Measurement:** Use geometric formulas when all necessary information is given
MA-HS-3.1.7. Students will solve real-world and mathematical problems by applying properties of triangles (e.g., Triangle Sum theorem and Isosceles Triangle theorems).	**Properties of Plane Figures:** Exhibit knowledge of basic angle properties and special sums of angle measures (e.g., 90°, 180°, and 360°) Use properties of isosceles triangles Use the Pythagorean theorem
MA-HS-3.1.9. Students will classify and apply properties of three-dimensional geometric figures (e.g., number of edges, faces, vertices).	
MA-HS-3.1.12. Students will apply the concepts of congruence and similarity to solve real-world and mathematical problems.	**Basic Operations & Applications:** Solve word problems containing several rates, proportions, or percentages **Properties of Plane Figures:** Apply properties of 30°-60°-90°, 45°-45°-90°, similar, and congruent triangles
Transformations of Shapes	
MA-HS-3.2.1. Students will identify and describe properties of and apply geometric transformations within a plane to solve real-world and mathematical problems.	

TABLE 3B

KENTUCKY High School Mathematics Core Content for Assessment, Version 4.1	**PLAN Mathematics College Readiness Standards**
GEOMETRY	
Coordinate Geometry	
MA-HS-3.3.1. Students will apply algebraic concepts and graphing in the coordinate plane to analyze and solve problems (e.g., finding the final coordinates for a specified polygon, midpoints, betweenness of points, parallel and perpendicular lines, the distance between two points, the slope of a segment).	**Graphical Representations:** Determine the slope of a line from points or equations Find the midpoint of a line segment Interpret and use information from graphs in the coordinate plane Use the distance formula Use properties of parallel and perpendicular lines to determine an equation of a line or coordinates of a point
Foundational Statements	
[no statement at this level]	

TABLE 3B

KENTUCKY High School Mathematics Core Content for Assessment, Version 4.1	PLAN Mathematics College Readiness Standards
DATA ANALYSIS AND PROBABILITY	
High school students extend data representations, interpretations and conclusions. They describe data distributions in multiple ways and connect data gathering issues with data interpretation issues. They relate curve of best fit with two variable data and determine line of best fit for a given set of data. They distinguish between combinations and permutations and compare and contrast theoretical and experimental probability.	**Probability, Statistics, & Data Analysis:** Perform computations on data from tables and graphs Use the relationship between the probability of an event and the probability of its complement Translate from one representation of data to another (e.g., a bar graph to a circle graph) Determine the probability of a simple event Exhibit knowledge of simple counting techniques Manipulate data from tables and graphs Compute straightforward probabilities for common situations Use Venn diagrams in counting Interpret and use information from figures, tables, and graphs Apply counting techniques Compute a probability when the event and/or sample space are not given or obvious **Graphical Representations:** Determine the slope of a line from points or equations Match linear graphs with their equations
Data Representations	
MA-HS-4.1.1. Students will analyze and make inferences from a set of data with no more than two variables and will analyze problems for the use and misuse of data representations.	**Probability, Statistics, & Data Analysis:** Interpret and use information from figures, tables, and graphs
MA-HS-4.1.2. Students will construct data displays for data with no more than two variables.	**Probability, Statistics, & Data Analysis:** Perform computations on data from tables and graphs Translate from one representation of data to another (e.g., a bar graph to a circle graph) Manipulate data from tables and graphs Interpret and use information from figures, tables, and graphs
Characteristics of Data Sets	
MA-HS-4.2.1. Students will describe and compare data distributions and make inferences from the data based on the shapes of graphs, measures of center (mean, median, mode) and measures of spread (range, standard deviation).	**Probability, Statistics, & Data Analysis:** Calculate the average of a list of positive whole numbers Calculate the average of a list of numbers Calculate the average, given the number of data values and the sum of the data values Calculate the missing data value, given the average and all data values but one Calculate the average, given the frequency counts of all the data values Calculate or use a weighted average Interpret and use information from figures, tables, and graphs

TABLE 3B

KENTUCKY High School Mathematics Core Content for Assessment, Version 4.1	**PLAN Mathematics College Readiness Standards**
DATA ANALYSIS AND PROBABILITY	
MA-HS-4.2.3. Students will: • identify an appropriate curve of best fit (linear, quadratic, exponential) for a set of two-variable data; • determine a line of best fit equation for a set of linear two-variable data and • apply a line of best fit to make predictions within and beyond a given set of two-variable data.	**Probability, Statistics, & Data Analysis:** Perform computations on data from tables and graphs Manipulate data from tables and graphs Interpret and use information from figures, tables, and graphs **Graphical Representations:** Determine the slope of a line from points or equations Match linear graphs with their equations
Experiments and Samples	
MA-HS-4.3.1. Students will recognize potential for bias resulting from the misuse of sampling methods (e.g., non-random sampling, polling only a specific group of people, using limited or extremely small sample sizes) and explain why these samples can lead to inaccurate inferences.	**Probability, Statistics, & Data Analysis:** Interpret and use information from figures, tables, and graphs
Probability	
MA-HS-4.4.1. Students will: • determine theoretical and experimental (from given data) probabilities; • make predictions and draw inferences from probabilities; • compare theoretical and experimental probabilities and • determine probabilities involving replacement and non-replacement.	**Probability, Statistics, & Data Analysis:** Use the relationship between the probability of an event and the probability of its complement Determine the probability of a simple event Compute straightforward probabilities for common situations Compute a probability when the event and/or sample space are not given or obvious

TABLE 3B

KENTUCKY High School Mathematics Core Content for Assessment, Version 4.1	**PLAN Mathematics** **College Readiness Standards**
ALGEBRAIC THINKING	
High school students extend analysis and use of functions and focus on linear, quadratic, absolute value and exponential functions. They explore parametric changes on graphs of functions. They use rules and properties to simplify algebraic expressions. They combine simple rational expressions and combine simple polynomial expressions. They factor polynomial expressions and quadratics of the form $1x^2 + bx + c$.	**Expressions, Equations, & Inequalities:** Combine like terms (e.g., $2x + 5x$) Add and subtract simple algebraic expressions Add, subtract, and multiply polynomials Factor simple quadratics (e.g., the difference of squares and perfect square trinomials) Manipulate expressions and equations **Graphical Representations:** Match linear graphs with their equations
Patterns, Relations and Functions	
MA-HS-5.1.1. Students will identify and apply multiple representations (tables, graphs, equations) of functions (linear, quadratic, absolute value, exponential) to solve real-world or mathematical problems.	**Probability, Statistics, & Data Analysis:** Interpret and use information from figures, tables, and graphs **Expressions, Equations, & Inequalities:** Write expressions, equations, and inequalities for common algebra settings **Graphical Representations:** Determine the slope of a line from points or equations Match linear graphs with their equations Interpret and use information from graphs in the coordinate plane
MA-HS-5.1.5. Students will: • determine if a relation is a function; • determine the domain and range of a function (linear and quadratic); • determine the slope and intercepts of a linear function; • determine the maximum, minimum, and intercepts (roots/zeros) of quadratic function and • evaluate a function written in function notation for a specified rational number.	**Probability, Statistics, & Data Analysis:** Interpret and use information from figures, tables, and graphs **Graphical Representations:** Determine the slope of a line from points or equations Interpret and use information from graphs in the coordinate plane
MA-HS-5.1.8. Students will identify the changes and explain how changes in parameters affect graphs of functions (linear, quadratic, absolute value, exponential) (e.g., compare $y = x^2$, $y = 2x^2$, $y = (x - 4)^2$, and $y = x^2 + 3$).	**Graphical Representations:** Exhibit knowledge of slope Match linear graphs with their equations
Variables, Expressions, and Operations	
MA-HS-5.2.1. Students will apply order of operations, real number properties (identity, inverse, commutative, associative, distributive, closure) and rules of exponents (integer) to simplify algebraic expressions.	**Numbers: Concepts & Properties:** Apply rules of exponents **Expressions, Equations, & Inequalities:** Combine like terms (e.g., $2x + 5x$) Add and subtract simple algebraic expressions

TABLE 3B

KENTUCKY High School Mathematics Core Content for Assessment, Version 4.1	**PLAN Mathematics** **College Readiness Standards**
ALGEBRAIC THINKING	
MA-HS-5.2.3. Students will: • add, subtract and multiply polynomial expressions; • factor polynomial expressions using the greatest common monomial factor and • factor quadratic polynomials of the form $ax^2 + bx + c$, when a = 1 and b and c are integers.	**Expressions, Equations, & Inequalities:** Multiply two binomials Add, subtract, and multiply polynomials Factor simple quadratics (e.g., the difference of squares and perfect square trinomials) Manipulate expressions and equations
MA-HS-5.2.5. Students will add, subtract, multiply and divide simple rational expressions with monomial first-degree denominators and integer numerators (e.g., $\frac{3}{5x} + \frac{4}{3y}; \frac{9}{2a} - \frac{-7}{4b}; \frac{3}{-5x} \times \frac{-4}{7y}; \frac{5}{2c} \div \frac{9}{-11d}$) and will express the results in simplified form.	**Expressions, Equations, & Inequalities:** Manipulate expressions and equations
Equations and Inequalities	
MA-HS-5.3.1. Students will model, solve and graph first degree, single variable equations and inequalities, including absolute value, based in real-world and mathematical problems and graph the solutions on a number line.	**Expressions, Equations, & Inequalities:** Perform straightforward word-to-symbol translations Solve real-world problems using first-degree equations Write expressions, equations, or inequalities with a single variable for common pre-algebra settings (e.g., rate and distance problems and problems that can be solved by using proportions) Solve first-degree inequalities that do not require reversing the inequality sign Write expressions, equations, and inequalities for common algebra settings Solve linear inequalities that require reversing the inequality sign Solve absolute value equations **Graphical Representations:** Identify the graph of a linear inequality on the number line Match number line graphs with solution sets of linear inequalities
MA-HS-5.3.3. Students will model, solve and graph first degree, two-variable equations and inequalities in real-world and mathematical problems.	**Probability, Statistics, & Data Analysis:** Translate from one representation of data to another (e.g., a bar graph to a circle graph) Interpret and use information from figures, tables, and graphs **Expressions, Equations, & Inequalities:** Perform straightforward word-to-symbol translations Write expressions, equations, or inequalities with a single variable for common pre-algebra settings (e.g., rate and distance problems and problems that can be solved by using proportions) Solve first-degree inequalities that do not require reversing the inequality sign Write expressions, equations, and inequalities for common algebra settings

TABLE 3B

KENTUCKY High School Mathematics Core Content for Assessment, Version 4.1	**PLAN Mathematics College Readiness Standards**
ALGEBRAIC THINKING	
	Solve linear inequalities that require reversing the inequality sign **Graphical Representations:** Determine the slope of a line from points or equations Match linear graphs with their equations
MA-HS-5.3.4. Students will model, solve and graph systems of two linear equations in real-world and mathematical problems.	**Expressions, Equations, & Inequalities:** Perform straightforward word-to-symbol translations Write expressions, equations, or inequalities with a single variable for common pre-algebra settings (e.g., rate and distance problems and problems that can be solved by using proportions) Write expressions, equations, and inequalities for common algebra settings Find solutions to systems of linear equations **Graphical Representations:** Determine the slope of a line from points or equations Match linear graphs with their equations
MA-HS-5.3.6. Students will model, solve and graph quadratic equations in real-world and mathematical problems.	**Expressions, Equations, & Inequalities:** Perform straightforward word-to-symbol translations Write expressions, equations, or inequalities with a single variable for common pre-algebra settings (e.g., rate and distance problems and problems that can be solved by using proportions) Identify solutions to simple quadratic equations Factor simple quadratics (e.g., the difference of squares and perfect square trinomials) Write expressions, equations, and inequalities for common algebra settings Solve quadratic equations

TABLE 3C

KENTUCKY High School Mathematics Core Content for Assessment, Version 4.1	**ACT Mathematics College Readiness Standards and WorkKeys Applied Mathematics Skills**
NUMBER PROPERTIES AND OPERATIONS	
High school students should enter high school with a strong background in rational numbers and numerical operations and expand this to real numbers. This becomes the foundation for algebra and working with algebraic symbols. They understand large and small numbers and their representations, powers and roots. They compare and contrast properties of numbers and number systems and develop strategies to estimate the results of operations on real numbers. Students will use, and understand the limitations of, graphing calculators and computer spreadsheets appropriately as learning tools.	**ACT Mathematics** College Readiness Standards **Numbers: Concepts & Properties:** Work with scientific notation Work with squares and square roots of numbers Work problems involving positive integer exponents Work with cubes and cube roots of numbers Apply number properties involving prime factorization Apply number properties involving even/odd numbers and factors/multiples Apply number properties involving positive/negative numbers Apply rules of exponents Draw conclusions based on number concepts, algebraic properties, and/or relationships between expressions and numbers
Number Sense	
[no statement at this level]	
Estimation	
[no statement at this level]	
Number Operations	
MA-HS-1.3.1. Students will solve real-world and mathematical problems to specified accuracy levels by simplifying expressions with real numbers involving addition, subtraction, multiplication, division, absolute value, integer exponents, roots (square, cube) and factorials.	**ACT Mathematics** College Readiness Standards **Basic Operations & Applications:** Perform one-operation computation with whole numbers and decimals Solve problems in one or two steps using whole numbers Perform common conversions (e.g., inches to feet or hours to minutes) Solve routine one-step arithmetic problems (using whole numbers, fractions, and decimals) such as single-step percent Solve some routine two-step arithmetic problems Solve routine two-step or three-step arithmetic problems involving concepts such as rate and proportion, tax added, percentage off, and computing with a given average Solve multistep arithmetic problems that involve planning or converting units of measure (e.g., feet per second to miles per hour) **Probability, Statistics, & Data Analysis:** Exhibit knowledge of simple counting techniques Apply counting techniques **Numbers: Concepts & Properties:** Exhibit knowledge of elementary number concepts including rounding, the ordering of decimals, pattern identification, absolute value, primes, and greatest common factor

TABLE 3C

KENTUCKY High School Mathematics Core Content for Assessment, Version 4.1	**ACT Mathematics College Readiness Standards and WorkKeys Applied Mathematics Skills**
NUMBER PROPERTIES AND OPERATIONS	
	Work with scientific notation Work with squares and square roots of numbers Work problems involving positive integer exponents Work with cubes and cube roots of numbers Apply rules of exponents **WorkKeys Applied Mathematics** Skills Solve problems that require a single type of mathematics operation (addition, subtraction, multiplication, and division) using whole numbers Calculate averages, simple ratios, simple proportions, or rates using whole numbers and decimals Add commonly known fractions, decimals, or percentages (e.g., ½, .75, 25%) Look up a formula and perform single-step conversions within or between systems of measurement Calculate percentage discounts or markups Use fractions, negative numbers, ratios, percentages, or mixed numbers Rearrange a formula before solving a problem Solve problems that include nonlinear functions and/or that involve more than one unknown
MA-HS-1.3.2. Students will: • describe and extend arithmetic and geometric sequences; • determine a specific term of a sequence given an explicit formula; • determine an explicit rule for the nth term of an arithmetic sequence and • apply sequences to solve real-world problems.	**ACT Mathematics** College Readiness Standards **Numbers: Concepts & Properties:** Exhibit knowledge of elementary number concepts including rounding, the ordering of decimals, pattern identification, absolute value, primes, and greatest common factor Distinguish between mean, median, and mode for a list of numbers Analyze and draw conclusions based on information from figures, tables, and graphs **Expressions, Equations, & Inequalities:** Evaluate algebraic expressions by substituting integers for unknown quantities Write expressions, equations, or inequalities with a single variable for common pre-algebra settings (e.g., rate and distance problems and problems that can be solved by using proportions) Manipulate expressions and equations Write expressions that require planning and/or manipulating to accurately model a situation **WorkKeys Applied Mathematics** Skills Look up a formula and perform single-step conversions within or between systems of measurement Rearrange a formula before solving a problem Use two formulas to change from one unit to another within the same system of measurement

TABLE 3C

KENTUCKY High School Mathematics Core Content for Assessment, Version 4.1	**ACT Mathematics College Readiness Standards and WorkKeys Applied Mathematics Skills**
NUMBER PROPERTIES AND OPERATIONS	
	Use two formulas to change from one unit in one system of measurement to a unit in another system of measurement
Ratios and Proportional Reasoning	
MA-HS-1.4.1. Students will apply ratios, percents and proportional reasoning to solve real-world problems (e.g., those involving slope and rate, percent of increase and decrease) and will explain how slope determines a rate of change in linear functions representing real-world problems.	**ACT Mathematics** College Readiness Standards **Basic Operations & Applications:** Solve routine one-step arithmetic problems (using whole numbers, fractions, and decimals) such as single-step percent Solve routine two-step or three-step arithmetic problems involving concepts such as rate and proportion, tax added, percentage off, and computing with a given average Solve multistep arithmetic problems that involve planning or converting units of measure (e.g., feet per second to miles per hour) Solve word problems containing several rates, proportions, or percentages Solve complex arithmetic problems involving percent of increase or decrease and problems requiring integration of several concepts from pre-algebra and/or pre-geometry (e.g., comparing percentages or averages, using several ratios, and finding ratios in geometry settings) **Graphical Representations:** Comprehend the concept of length on the number line Match linear graphs with their equations Interpret and use information from graphs in the coordinate plane **WorkKeys Applied Mathematics** Skills Calculate averages, simple ratios, simple proportions, or rates using whole numbers and decimals Add commonly known fractions, decimals, or percentages (e.g., ½, .75, 25%) Find the best deal using one- and two-step calculations and then comparing results Calculate percentage discounts or markups Use fractions, negative numbers, ratios, percentages, or mixed numbers Find the best deal and use the result for another calculation Calculate multiple rates Convert between systems of measurement that involve fractions, mixed numbers, decimals, and/or percentages Find the best deal when there are several choices
Properties of Numbers and Operations	
[no statement at this level]	

TABLE 3C

KENTUCKY High School Mathematics Core Content for Assessment, Version 4.1	**ACT Mathematics College Readiness Standards and WorkKeys Applied Mathematics Skills**
MEASUREMENT	
High school students continue to measure and estimate measurements including fractions and decimals. They use formulas to find surface area and volume. They use US Customary and metric units of measurement. They use the Pythagorean theorem and other right triangle relationships to solve real-world problems.	**ACT Mathematics** College Readiness Standards **Basic Operations & Applications:** Solve multistep arithmetic problems that involve planning or converting units of measure (e.g., feet per second to miles per hour) **Properties of Plane Figures:** Recognize Pythagorean triples Apply properties of 30°-60°-90°, 45°-45°-90°, similar, and congruent triangles Use the Pythagorean theorem **Measurement:** Use geometric formulas when all necessary information is given
Measuring Physical Attributes	
MA-HS-2.1.1. Students will determine the surface area and volume of right rectangular prisms, pyramids, cylinders, cones and spheres in real-world and mathematical problems.	**ACT Mathematics** College Readiness Standards **Measurement:** Use geometric formulas when all necessary information is given Use relationships involving area, perimeter, and volume of geometric figures to compute another measure **WorkKeys Applied Mathematics** Skills Calculate multiple areas and volumes of spheres, cylinders, or cones
MA-HS-2.1.2. Students will describe how a change in one or more dimensions of a geometric figure affects the perimeter, area and volume of the figure.	**ACT Mathematics** College Readiness Standards **Properties of Plane Figures:** Draw conclusions based on a set of conditions
MA-HS-2.1.3. Students will apply definitions and properties of right triangle relationships (right triangle trigonometry and the Pythagorean theorem) to determine length and angle measures to solve real-world and mathematical problems.	**ACT Mathematics** College Readiness Standards **Properties of Plane Figures:** Exhibit knowledge of basic angle properties and special sums of angle measures (e.g., 90°, 180°, and 360°) Recognize Pythagorean triples Apply properties of 30°-60°-90°, 45°-45°-90°, similar, and congruent triangles Use the Pythagorean theorem **Functions:** Apply basic trigonometric ratios to solve right-triangle problems Use trigonometric concepts and basic identities to solve problems
Systems of Measurements	
[no statement at this level]	

TABLE 3C

KENTUCKY High School Mathematics Core Content for Assessment, Version 4.1	**ACT Mathematics College Readiness Standards and WorkKeys Applied Mathematics Skills**
GEOMETRY	
High school students expand analysis of two-dimensional shapes and three-dimensional shapes. They translate shapes in a coordinate plane. They extend work with congruent and similar figures, including proportionality.	**ACT Mathematics** College Readiness Standards **Properties of Plane Figures:** Apply properties of 30°-60°-90°, 45°-45°-90°, similar, and congruent triangles Draw conclusions based on a set of conditions Solve multistep geometry problems that involve integrating concepts, planning, visualization, and/or making connections with other content areas
Shapes and Relationships	
MA-HS-3.1.1. Students will analyze and apply spatial relationships (not using Cartesian coordinates) among points, lines and planes (e.g., betweenness of points, midpoint, segment length, collinear, coplanar, parallel, perpendicular, skew).	**ACT Mathematics** College Readiness Standards **Properties of Plane Figures:** Draw conclusions based on a set of conditions
MA-HS-3.1.3. Students will analyze and apply angle relationships (e.g., linear pairs, vertical, complementary, supplementary, corresponding and alternate interior angles) in real-world or mathematical problems.	**ACT Mathematics** College Readiness Standards **Properties of Plane Figures:** Exhibit some knowledge of the angles associated with parallel lines Find the measure of an angle using properties of parallel lines Exhibit knowledge of basic angle properties and special sums of angle measures (e.g., 90°, 180°, and 360°) Use several angle properties to find an unknown angle measure
MA-HS-3.1.5. Students will classify and apply properties of two-dimensional geometric figures (e.g., number of sides, vertices, length of sides, sum of interior and exterior angle measures).	**ACT Mathematics** College Readiness Standards **Properties of Plane Figures:** Exhibit knowledge of basic angle properties and special sums of angle measures (e.g., 90°, 180°, and 360°) Use several angle properties to find an unknown angle measure **Measurement:** Use geometric formulas when all necessary information is given **WorkKeys Applied Mathematics** Skills Calculate perimeters and areas of basic shapes (rectangles and circles) Find areas of basic shapes when it may be necessary to rearrange the formula, convert units of measurement in the calculations, or use the result in further calculations
MA-HS-3.1.7. Students will solve real-world and mathematical problems by applying properties of triangles (e.g., Triangle Sum theorem and Isosceles Triangle theorems).	**ACT Mathematics** College Readiness Standards **Properties of Plane Figures:** Exhibit knowledge of basic angle properties and special sums of angle measures (e.g., 90°, 180°, and 360°) Use properties of isosceles triangles Use the Pythagorean theorem

TABLE 3C

KENTUCKY High School Mathematics Core Content for Assessment, Version 4.1	**ACT Mathematics College Readiness Standards and WorkKeys Applied Mathematics Skills**
GEOMETRY	
MA-HS-3.1.9. Students will classify and apply properties of three-dimensional geometric figures (e.g., number of edges, faces, vertices).	
MA-HS-3.1.12. Students will apply the concepts of congruence and similarity to solve real-world and mathematical problems.	**ACT Mathematics** College Readiness Standards **Basic Operations & Applications:** Solve word problems containing several rates, proportions, or percentages **Properties of Plane Figures:** Apply properties of 30°-60°-90°, 45°-45°-90°, similar, and congruent triangles **Measurement:** Use scale factors to determine the magnitude of a size change
Transformations of Shapes	
MA-HS-3.2.1. Students will identify and describe properties of and apply geometric transformations within a plane to solve real-world and mathematical problems.	**ACT Mathematics** College Readiness Standards **Properties of Plane Figures:** Solve multistep geometry problems that involve integrating concepts, planning, visualization, and/or making connections with other content areas
Coordinate Geometry	
MA-HS-3.3.1. Students will apply algebraic concepts and graphing in the coordinate plane to analyze and solve problems (e.g., finding the final coordinates for a specified polygon, midpoints, betweenness of points, parallel and perpendicular lines, the distance between two points, the slope of a segment).	**ACT Mathematics** College Readiness Standards **Graphical Representations:** Determine the slope of a line from points or equations Find the midpoint of a line segment Interpret and use information from graphs in the coordinate plane Use the distance formula Use properties of parallel and perpendicular lines to determine an equation of a line or coordinates of a point Solve problems integrating multiple algebraic and/or geometric concepts Analyze and draw conclusions based on information from graphs in the coordinate plane
Foundational Statements	
[no statement at this level]	

TABLE 3C

KENTUCKY High School Mathematics Core Content for Assessment, Version 4.1	**ACT Mathematics College Readiness Standards and WorkKeys Applied Mathematics Skills**
DATA ANALYSIS AND PROBABILITY	
High school students extend data representations, interpretations and conclusions. They describe data distributions in multiple ways and connect data gathering issues with data interpretation issues. They relate curve of best fit with two variable data and determine line of best fit for a given set of data. They distinguish between combinations and permutations and compare and contrast theoretical and experimental probability.	**ACT Mathematics** College Readiness Standards **Probability, Statistics, & Data Analysis:** Perform computations on data from tables and graphs Use the relationship between the probability of an event and the probability of its complement Translate from one representation of data to another (e.g., a bar graph to a circle graph) Determine the probability of a simple event Exhibit knowledge of simple counting techniques Manipulate data from tables and graphs Compute straightforward probabilities for common situations Use Venn diagrams in counting Interpret and use information from figures, tables, and graphs Apply counting techniques Compute a probability when the event and/or sample space are not given or obvious Analyze and draw conclusions based on information from figures, tables, and graphs Exhibit knowledge of conditional and joint probability **Graphical Representations:** Determine the slope of a line from points or equations Match linear graphs with their equations Recognize special characteristics of parabolas and circles (e.g., the vertex of a parabola and the center or radius of a circle) Identify characteristics of graphs based on a set of conditions or on a general equation such as $y = ax^2 + c$
Data Representations	
MA-HS-4.1.1. Students will analyze and make inferences from a set of data with no more than two variables and will analyze problems for the use and misuse of data representations.	**ACT Mathematics** College Readiness Standards **Probability, Statistics, & Data Analysis:** Interpret and use information from figures, tables, and graphs Analyze and draw conclusions based on information from figures, tables, and graphs **WorkKeys Applied Mathematics** Skills Find the best deal using one- and two-step calculations and then comparing results Find the best deal and use the result for another calculation

TABLE 3C

KENTUCKY High School Mathematics Core Content for Assessment, Version 4.1	**ACT Mathematics College Readiness Standards and WorkKeys Applied Mathematics Skills**
DATA ANALYSIS AND PROBABILITY	
MA-HS-4.1.2. Students will construct data displays for data with no more than two variables.	**ACT Mathematics** College Readiness Standards **Probability, Statistics, & Data Analysis:** Perform computations on data from tables and graphs Translate from one representation of data to another (e.g., a bar graph to a circle graph) Manipulate data from tables and graphs Interpret and use information from figures, tables, and graphs
Characteristics of Data Sets	
MA-HS-4.2.1. Students will describe and compare data distributions and make inferences from the data based on the shapes of graphs, measures of center (mean, median, mode) and measures of spread (range, standard deviation).	**ACT Mathematics** College Readiness Standards **Probability, Statistics, & Data Analysis:** Calculate the average of a list of positive whole numbers Calculate the average of a list of numbers Calculate the average, given the number of data values and the sum of the data values Calculate the missing data value, given the average and all data values but one Calculate the average, given the frequency counts of all the data values Calculate or use a weighted average Interpret and use information from figures, tables, and graphs Distinguish between mean, median, and mode for a list of numbers Analyze and draw conclusions based on information from figures, tables, and graphs
MA-HS-4.2.3. Students will: • identify an appropriate curve of best fit (linear, quadratic, exponential) for a set of two-variable data; • determine a line of best fit equation for a set of linear two-variable data and • apply a line of best fit to make predictions within and beyond a given set of two-variable data.	**ACT Mathematics** College Readiness Standards **Probability, Statistics, & Data Analysis:** Perform computations on data from tables and graphs Manipulate data from tables and graphs Interpret and use information from figures, tables, and graphs Analyze and draw conclusions based on information from figures, tables, and graphs **Graphical Representations:** Determine the slope of a line from points or equations Match linear graphs with their equations Recognize special characteristics of parabolas and circles (e.g., the vertex of a parabola and the center or radius of a circle) Identify characteristics of graphs based on a set of conditions or on a general equation such as $y = ax^2 + c$ Analyze and draw conclusions based on information from graphs in the coordinate plane

TABLE 3C

KENTUCKY High School Mathematics Core Content for Assessment, Version 4.1	**ACT Mathematics College Readiness Standards and WorkKeys Applied Mathematics Skills**
DATA ANALYSIS AND PROBABILITY	
Experiments and Samples	
MA-HS-4.3.1. Students will recognize potential for bias resulting from the misuse of sampling methods (e.g., non-random sampling, polling only a specific group of people, using limited or extremely small sample sizes) and explain why these samples can lead to inaccurate inferences.	**ACT Mathematics** College Readiness Standards **Probability, Statistics, & Data Analysis:** Interpret and use information from figures, tables, and graphs Analyze and draw conclusions based on information from figures, tables, and graphs
Probability	
MA-HS-4.4.1. Students will: • determine theoretical and experimental (from given data) probabilities; • make predictions and draw inferences from probabilities; • compare theoretical and experimental probabilities and • determine probabilities involving replacement and non-replacement.	**ACT Mathematics** College Readiness Standards **Probability, Statistics, & Data Analysis:** Use the relationship between the probability of an event and the probability of its complement Determine the probability of a simple event Compute straightforward probabilities for common situations Compute a probability when the event and/or sample space are not given or obvious Exhibit knowledge of conditional and joint probability

TABLE 3C

KENTUCKY High School Mathematics Core Content for Assessment, Version 4.1	**ACT Mathematics College Readiness Standards and WorkKeys Applied Mathematics Skills**
ALGEBRAIC THINKING	
High school students extend analysis and use of functions and focus on linear, quadratic, absolute value and exponential functions. They explore parametric changes on graphs of functions. They use rules and properties to simplify algebraic expressions. They combine simple rational expressions and combine simple polynomial expressions. They factor polynomial expressions and quadratics of the form $1x^2 + bx + c$.	**ACT Mathematics** College Readiness Standards **Expressions, Equations, & Inequalities:** Combine like terms (e.g., $2x + 5x$) Add and subtract simple algebraic expressions Add, subtract, and multiply polynomials Factor simple quadratics (e.g., the difference of squares and perfect square trinomials) Manipulate expressions and equations **Graphical Representations:** Match linear graphs with their equations Identify characteristics of graphs based on a set of conditions or on a general equation such as $y = ax^2 + c$
Patterns, Relations and Functions	
MA-HS-5.1.1. Students will identify and apply multiple representations (tables, graphs, equations) of functions (linear, quadratic, absolute value, exponential) to solve real-world or mathematical problems.	**ACT Mathematics** College Readiness Standards **Probability, Statistics, & Data Analysis:** Interpret and use information from figures, tables, and graphs Analyze and draw conclusions based on information from figures, tables, and graphs **Expressions, Equations, & Inequalities:** Write expressions, equations, and inequalities for common algebra settings Write expressions that require planning and/or manipulating to accurately model a situation Write equations and inequalities that require planning, manipulating, and/or solving **Graphical Representations:** Determine the slope of a line from points or equations Match linear graphs with their equations Interpret and use information from graphs in the coordinate plane Recognize special characteristics of parabolas and circles (e.g., the vertex of a parabola and the center or radius of a circle) Identify characteristics of graphs based on a set of conditions or on a general equation such as $y = ax^2 + c$ **WorkKeys Applied Mathematics** Skills Find the best deal using one- and two-step calculations and then comparing results Find the best deal and use the result for another calculation Solve problems that include nonlinear functions and/or that involve more than one unknown

TABLE 3C

KENTUCKY High School Mathematics Core Content for Assessment, Version 4.1	**ACT Mathematics College Readiness Standards and WorkKeys Applied Mathematics Skills**
ALGEBRAIC THINKING	
MA-HS-5.1.5. Students will: • determine if a relation is a function; • determine the domain and range of a function (linear and quadratic); • determine the slope and intercepts of a linear function; • determine the maximum, minimum, and intercepts (roots/zero) of quadratic function and • evaluate a function written in function notation for a specified rational number.	**ACT Mathematics** College Readiness Standards **Probability, Statistics, & Data Analysis:** Interpret and use information from figures, tables, and graphs Analyze and draw conclusions based on information from figures, tables, and graphs **Graphical Representations:** Determine the slope of a line from points or equations Interpret and use information from graphs in the coordinate plane Recognize special characteristics of parabolas and circles (e.g., the vertex of a parabola and the center or radius of a circle) Identify characteristics of graphs based on a set of conditions or on a general equation such as $y = ax^2 + c$ **Functions:** Evaluate quadratic functions, expressed in function notation, at integer values Evaluate polynomial functions, expressed in function notation, at integer values Evaluate composite functions at integer values
MA-HS-5.1.8. Students will identify the changes and explain how changes in parameters affect graphs of functions (linear, quadratic, absolute value, exponential) (e.g., compare $y = x^2$, $y = 2x^2$, $y = (x - 4)^2$, and $y = x^2 + 3$).	**ACT Mathematics** College Readiness Standards **Graphical Representations:** Exhibit knowledge of slope Match linear graphs with their equations Recognize special characteristics of parabolas and circles (e.g., the vertex of a parabola and the center or radius of a circle) Identify characteristics of graphs based on a set of conditions or on a general equation such as $y = ax^2 + c$
Variables, Expressions, and Operations	
MA-HS-5.2.1. Students will apply order of operations, real number properties (identity, inverse, commutative, associative, distributive, closure) and rules of exponents (integer) to simplify algebraic expressions.	**ACT Mathematics** College Readiness Standards **Numbers: Concepts & Properties:** Apply rules of exponents **Expressions, Equations, & Inequalities:** Combine like terms (e.g., $2x + 5x$) Add and subtract simple algebraic expressions
MA-HS-5.2.3. Students will: • add, subtract and multiply polynomial expressions; • factor polynomial expressions using the greatest common monomial factor and • factor quadratic polynomials of the form $ax^2 + bx + c$, when a = 1 and b and c are integers.	**ACT Mathematics** College Readiness Standards **Expressions, Equations, & Inequalities:** Multiply two binomials Add, subtract, and multiply polynomials Factor simple quadratics (e.g., the difference of squares and perfect square trinomials) Manipulate expressions and equations

TABLE 3C

KENTUCKY High School Mathematics Core Content for Assessment, Version 4.1	**ACT Mathematics College Readiness Standards and WorkKeys Applied Mathematics Skills**
ALGEBRAIC THINKING	
MA-HS-5.2.5. Students will add, subtract, multiply and divide simple rational expressions with monomial first-degree denominators and integer numerators (e.g., $\frac{3}{5x} + \frac{4}{3y}; \frac{9}{2a} - \frac{-7}{4b}; \frac{3}{-5x} \times \frac{-4}{7y}; \frac{5}{2c} \div \frac{9}{-11d}$) and will express the results in simplified form.	**ACT Mathematics** College Readiness Standards **Expressions, Equations, & Inequalities:** Manipulate expressions and equations
Equations and Inequalities	
MA-HS-5.3.1. Students will model, solve and graph first degree, single variable equations and inequalities, including absolute value, based in real-world and mathematical problems and graph the solutions on a number line.	**ACT Mathematics** College Readiness Standards **Expressions, Equations, & Inequalities:** Perform straightforward word-to-symbol translations Solve real-world problems using first-degree equations Write expressions, equations, or inequalities with a single variable for common pre-algebra settings (e.g., rate and distance problems and problems that can be solved by using proportions) Solve first-degree inequalities that do not require reversing the inequality sign Write expressions, equations, and inequalities for common algebra settings Solve linear inequalities that require reversing the inequality sign Solve absolute value equations Write expressions that require planning and/or manipulating to accurately model a situation Write equations and inequalities that require planning, manipulating, and/or solving Solve simple absolute value inequalities **Graphical Representations:** Identify the graph of a linear inequality on the number line Match number line graphs with solution sets of linear inequalities **WorkKeys Applied Mathematics** Skills Find the best deal using one- and two-step calculations and then comparing results Find the best deal and use the result for another calculation Solve problems that include nonlinear functions and/or that involve more than one unknown

TABLE 3C

KENTUCKY High School Mathematics Core Content for Assessment, Version 4.1	**ACT Mathematics College Readiness Standards and WorkKeys Applied Mathematics Skills**
ALGEBRAIC THINKING	
MA-HS-5.3.3. Students will model, solve and graph first degree, two-variable equations and inequalities in real-world and mathematical problems.	**ACT Mathematics** College Readiness Standards **Probability, Statistics, & Data Analysis:** Translate from one representation of data to another (e.g., a bar graph to a circle graph) Interpret and use information from figures, tables, and graphs **Expressions, Equations, & Inequalities:** Perform straightforward word-to-symbol translations Write expressions, equations, or inequalities with a single variable for common pre-algebra settings (e.g., rate and distance problems and problems that can be solved by using proportions) Solve first-degree inequalities that do not require reversing the inequality sign Write expressions, equations, and inequalities for common algebra settings Solve linear inequalities that require reversing the inequality sign Write expressions that require planning and/or manipulating to accurately model a situation Write equations and inequalities that require planning, manipulating, and/or solving **Graphical Representations:** Determine the slope of a line from points or equations Match linear graphs with their equations
MA-HS-5.3.4. Students will model, solve and graph systems of two linear equations in real-world and mathematical problems.	**ACT Mathematics** College Readiness Standards **Expressions, Equations, & Inequalities:** Perform straightforward word-to-symbol translations Write expressions, equations, or inequalities with a single variable for common pre-algebra settings (e.g., rate and distance problems and problems that can be solved by using proportions) Write expressions, equations, and inequalities for common algebra settings Find solutions to systems of linear equations Write expressions that require planning and/or manipulating to accurately model a situation Write equations and inequalities that require planning, manipulating, and/or solving **Graphical Representations:** Determine the slope of a line from points or equations Match linear graphs with their equations Solve problems integrating multiple algebraic and/or geometric concepts

TABLE 3C

KENTUCKY High School Mathematics Core Content for Assessment, Version 4.1	**ACT Mathematics College Readiness Standards and WorkKeys Applied Mathematics Skills**
ALGEBRAIC THINKING	
MA-HS-5.3.6. Students will model, solve and graph quadratic equations in real-world and mathematical problems.	**ACT Mathematics** College Readiness Standards **Expressions, Equations, & Inequalities:** Perform straightforward word-to-symbol translations Write expressions, equations, or inequalities with a single variable for common pre-algebra settings (e.g., rate and distance problems and problems that can be solved by using proportions) Identify solutions to simple quadratic equations Factor simple quadratics (e.g., the difference of squares and perfect square trinomials) Write expressions, equations, and inequalities for common algebra settings Solve quadratic equations Write expressions that require planning and/or manipulating to accurately model a situation Write equations and inequalities that require planning, manipulating, and/or solving **Graphical Representations:** Recognize special characteristics of parabolas and circles (e.g., the vertex of a parabola and the center or radius of a circle) Identify characteristics of graphs based on a set of conditions or on a general equation such as $y = ax^2 + c$

Supplement
TABLES 4A–4C

Science

TABLE 4A

KENTUCKY Grade 8 Science Core Content for Assessment, Version 4.1	EXPLORE Science College Readiness Standards
STRUCTURE AND TRANSFORMATION OF MATTER	
A basic understanding of matter is essential to the conceptual development of other big ideas in science. In the elementary years of conceptual development, students will be studying properties of matter and physical changes of matter at the macro level through direct observations, forming the foundation for subsequent learning. During the middle years, physical and chemical changes in matter are observed, and students begin to relate these changes to the smaller constituents of matter—namely, atoms and molecules. By high school, students will be dealing with evidence from both direct and indirect observations (microscopic level and smaller) to consider theories related to change and conservation of matter. The use of models (and an understanding of their scales and limitations) is an effective means of learning about the structure of matter. Looking for patterns in properties is also critical to comparing and explaining differences in matter.	**Evaluation of Models, Inferences, and Experimental Results:** Select a simple hypothesis, prediction, or conclusion that is supported by a data presentation or a model Identify key issues or assumptions in a model Select a simple hypothesis, prediction, or conclusion that is supported by two or more data presentations or models Identify strengths and weaknesses in one or more models Identify similarities and differences between models Determine which model(s) is(are) supported or weakened by new information
Physical Science	
SC-08-1.1.1. Students will: • interpret models/representations of atoms of elements; • classify elements based upon patterns in their physical (e.g., density, boiling point, solubility) and chemical (e.g., flammability, reactivity) properties.	
SC-08-1.1.2. Students will understand that matter is made of minute particles called atoms, and atoms are composed of even smaller components. The components of an atom have measurable properties such as mass and electrical charge. Each atom has a positively charged nucleus surrounded by negatively charged electrons. The electric force between the nucleus and the electrons holds the atom together.	
SC-08-1.1.3. Students will understand that the atom's nucleus is composed of protons and neutrons that are much more massive than electrons.	
SC-08-1.1.4. Students will describe interactions which cause the movement of each element among the solid Earth, oceans, atmosphere and organisms (biogeochemical cycles).	

= Measured by EXPLORE Science Test
_____ = Content sampled by EXPLORE Science Test

TABLE 4A

KENTUCKY Grade 8 Science Core Content for Assessment, Version 4.1	**EXPLORE Science** **College Readiness Standards**
MOTION AND FORCES	
Whether observing airplanes, baseballs, planets, or people, the motion of all bodies is governed by the same basic rules. In the elementary years of conceptual development, students need multiple opportunities to experience, observe and describe (in words and pictures) motion, including factors (pushing and pulling) that affect motion. At the middle level, qualitative descriptions of the relationship between forces and motion will provide the foundation for quantitative applications of Newton's Laws. These ideas are more fully developed at the high school level along with the use of models to support evidence of motion in abstract or invisible phenomena such as electromagnetism.	
Physical Science	
SC-08-1.2.1. Students will describe and explain the effects of balanced and unbalanced forces on motion as found in real-life phenomena.	

= Measured by EXPLORE Science Test
_____ = Content sampled by EXPLORE Science Test

TABLE 4A

KENTUCKY Grade 8 Science Core Content for Assessment, Version 4.1	EXPLORE Science College Readiness Standards
THE EARTH AND THE UNIVERSE	
The Earth system is in a constant state of change. These changes affect life on earth in many ways. Development of conceptual understandings about processes that shape the Earth begin at the elementary level with understanding what Earth materials are and that change occurs. At the middle level, students investigate how these changes occur. Finally, at the high school level, most of the emphasis is on why these changes occur. An understanding of systems and their interacting components will enable students to evaluate supporting theories of earth changes. At the heart of elementary students' initial understanding of the Earth's place in the universe is direct observation of the earth-sun-moon system. Students can derive important conceptual understandings about the system as they describe interactions resulting in shadows, moon phases and day and night. The use of models and observance of patterns to explain common phenomena is essential to building a conceptual foundation and supporting ideas with evidence at all levels. In middle school, students begin to look beyond what can be directly observed as they explore the earth-sun-moon system, as well as the rest of our solar system, employing the concept of scale within their models. Patterns play an important role as students seek to develop a conceptual understanding of gravity in their world and in the universe. High school is the time to bring all of the ideas together to look at the universe as a whole. Students will use evidence to evaluate and analyze theories related to the origin of the universe and all components of the universe.	**Evaluation of Models, Inferences, and Experimental Results:** Select a simple hypothesis, prediction, or conclusion that is supported by a data presentation or a model Identify key issues or assumptions in a model Select a simple hypothesis, prediction, or conclusion that is supported by two or more data presentations or models Identify strengths and weaknesses in one or more models Identify similarities and differences between models Determine which model(s) is(are) supported or weakened by new information
Earth/Space Science	
SC-08-2.3.1. Students will describe various techniques for estimating geological time (radioactive dating, observing rock sequences, comparing fossils);	
SC-08-2.3.2. Students will understand that earthquakes and volcanic eruptions can be observed on a human time scale, but many processes, such as mountain building and plate movements, take place over hundreds of millions of years.	
SC-08-2.3.3. Students will • explain the transfer of Earth's internal heat in the mantle (crustal movement, hotspots, geysers); • describe the interacting components (convection currents) within the Earth's system.	
SC-08-2.3.4. Students will understand that the Sun, Earth and the rest of the solar system formed approximately 4.6 billion years ago.	

= Measured by EXPLORE Science Test
_____ = Content sampled by EXPLORE Science Test

TABLE 4A

KENTUCKY Grade 8 Science Core Content for Assessment, Version 4.1	**EXPLORE Science** **College Readiness Standards**
UNITY AND DIVERSITY	
All matter is comprised of the same basic elements, goes through the same kinds of energy transformations, and uses the same kinds of forces to move. Living organisms are no exception. Elementary students begin to observe the macroscopic features of organisms in order to make comparisons and classifications based upon likenesses and differences. Looking for patterns in the appearance and behavior of an organism leads to the notion that offspring are much like the parents, but not exactly alike. In middle school, students begin to compare, contrast and classify the microscopic features of organisms—the cells, as well as investigate reproduction as the essential process to the continuation of all species. Expected patterns of genetic traits are predicted. Distinctions are made between learned behaviors and inherited traits. At the high school level, an in-depth study of the specialization and chemical changes occurring at the cellular level builds upon the foundational ideas developed earlier to investigate DNA and effects of alterations in DNA for an individual organism as well as for a species. Emphasis at every level should be placed upon the understanding that while every living thing is composed of similar small constituents that combine in predictable ways, it is the subtle variations within these small building blocks that account for both the likenesses and differences in form and function that create the diversity of life.	
Biological Science	
SC-08-3.4.1. Students will explain the relationship between structure and function of the cell components using a variety of representations.	
SC-08-3.4.2. Students will understand that in the development of multicellular organisms, cells multiply (mitosis) and differentiate to form many specialized cells, tissues and organs. This differentiation is regulated through the expression of different genes.	
SC-08-3.4.3. Students will form or justify conclusions as to whether a response is innate or learned using data/evidence on behavioral responses to internal and external stimuli.	
SC-08-3.4.4. Students will describe and explain patterns found within groups of organisms in order to make biological classifications of those organisms.	
SC-08-3.4.5. Students will understand that multicellular animals have nervous systems that generate behavior. Nerve cells communicate with each other by secreting specific molecules.	

= Measured by EXPLORE Science Test
_____ = Content sampled by EXPLORE Science Test

TABLE 4A

KENTUCKY Grade 8 Science Core Content for Assessment, Version 4.1	**EXPLORE Science** **College Readiness Standards**
BIOLOGICAL CHANGE	
The only thing certain is that everything changes. Elementary students build a foundational knowledge of change by observing slow and fast changes caused by nature in their own environment, noting changes that humans and other organisms cause in their environment and observing fossils found in or near their environment. At the middle school level, students study relationships among populations and ecosystems that contribute to the success or demise of a specific population or species. Students construct basic explanations that can account for the great diversity among organisms. The stage is set for high school students to evaluate the role natural selection plays in the diversity of species. Modern ideas of evolution provide a scientific explanation for three main sets of observable facts about life on earth: the enormous number of different life forms we see about us, the systematic similarities in anatomy and molecular chemistry we see within that diversity and the sequence of changes in fossils found in successive layers of rock that have been formed over more than a billion years.	
Biological Science	
SC-08-3.5.1. Students will draw conclusions and make inferences about the consequences of change over time that can account for the similarities among diverse species.	

= Measured by EXPLORE Science Test
_____ = Content sampled by EXPLORE Science Test

TABLE 4A

KENTUCKY Grade 8 Science Core Content for Assessment, Version 4.1	EXPLORE Science College Readiness Standards
ENERGY TRANSFORMATIONS	
Energy transformations are inherent in almost every system in the universe—from tangible examples at the elementary level, such as heat production in simple earth and physical systems to more abstract ideas beginning at middle school, such as those transformations involved in the growth, dying and decay of living systems. The use of models to illustrate the often invisible and abstract notions of energy transfer will aid in conceptualization, especially as students move from the macroscopic level of observation and evidence (primarily elementary school) to the microscopic interactions at the atomic level (middle and high school levels). Students in high school expand their understanding of constancy through the study of a variety of phenomena. Conceptual understanding and application of the laws of thermodynamics connect ideas about matter with energy transformations within all living, physical and earth systems.	**Evaluation of Models, Inferences, and Experimental Results:** Select a simple hypothesis, prediction, or conclusion that is supported by a data presentation or a model Identify key issues or assumptions in a model Select a simple hypothesis, prediction, or conclusion that is supported by two or more data presentations or models Identify strengths and weaknesses in one or more models Identify similarities and differences between models Determine which model(s) is(are) supported or weakened by new information
Unifying Ideas	
SC-08-4.6.1. Students will • explain the cause and effect relationships between global climate and energy transfer; • use evidence to make inferences or predictions about global climate issues.	
SC-08-4.6.2. Students will • describe or explain energy transfer and energy conservation; • evaluate alternative solutions to energy problems.	
SC-08-4.6.3. Students will understand that all energy can be considered to be kinetic energy, potential energy, or energy contained by a field (e.g., electric, magnetic, gravitational).	
SC-08-4.6.4. Students will • analyze information/data about waves and energy transfer; • describe the transfer of energy via waves in real life phenomena.	
SC-08-4.6.5. Students will • describe the relationships between organisms and energy flow in ecosystems (food chains and energy pyramids); • explain the effects of change to any component of the ecosystem.	

= Measured by EXPLORE Science Test
_____ = Content sampled by EXPLORE Science Test

TABLE 4A

KENTUCKY Grade 8 Science Core Content for Assessment, Version 4.1	EXPLORE Science College Readiness Standards
INTERDEPENDENCE	
It is not difficult for students to grasp the general notion that species depend on one another and on the environment for survival. But their awareness must be supported by knowledge of the kinds of relationships that exist among organisms, the kinds of physical conditions that organisms must cope with, the kinds of environments created by the interaction of organisms with one another and their physical surroundings and the complexity of such systems. Elementary learners need to become acquainted with ecosystems that are easily observable to them by beginning to study the habitats of many types of local organisms. Students begin to investigate the survival needs of different organisms and how the environment affects optimum conditions for survival. In middle school, students should be guided from specific examples of the interdependency of organisms to a more systematic view of the interactions that take place among organisms and their surroundings. At the high school level, the concept of an ecosystem should bring coherence to the complex array of relationships among organisms and environments that students have encountered. Students growing understanding of systems in general will reinforce the concept of ecosystems. Stability and change in ecosystems can be considered in terms of variables such as population size, number and kinds of species, productivity and the effect of human intervention.	
Unifying Ideas	
SC-08-4.7.1. Students will describe the interrelationships and interdependencies within an ecosystem and predict the effects of change on one or more components within an ecosystem.	
SC-08-4.7.2. Students will • explain the interactions of the components of the Earth system (e.g., solid Earth, oceans, atmosphere, living organisms); • propose solutions to detrimental interactions.	

= Measured by EXPLORE Science Test
_____ = Content sampled by EXPLORE Science Test

TABLE 4B

KENTUCKY High School Science Core Content for Assessment, Version 4.1	**PLAN Science** **College Readiness Standards**
STRUCTURE AND TRANSFORMATION OF MATTER	
A basic understanding of matter is essential to the conceptual development of other big ideas in science. In the elementary years of conceptual development, students will be studying properties of matter and physical changes of matter at the macro level through direct observations, forming the foundation for subsequent learning. During the middle years, physical and chemical changes in matter are observed and students begin to relate these changes to the smaller constituents of matter—namely, atoms and molecules. By high school, students will be dealing with evidence from both direct and indirect observations (microscopic level and smaller) to consider theories related to change and conservation of matter. The use of models (and an understanding of their scales and limitations) is an effective means of learning about the structure of matter. Looking for patterns in properties is also critical to comparing and explaining differences in matter.	**Evaluation of Models, Inferences, and Experimental Results:** Select a simple hypothesis, prediction, or conclusion that is supported by a data presentation or a model Identify key issues or assumptions in a model Select a simple hypothesis, prediction, or conclusion that is supported by two or more data presentations or models Identify strengths and weaknesses in one or more models Identify similarities and differences between models Determine which model(s) is(are) supported or weakened by new information
Physical Science	
SC-HS-1.1.1. Students will classify or make generalizations about elements from data of observed patterns in atomic structure and/or position on the periodic table.	
SC-HS-1.1.2. Students will understand that the atom's nucleus is composed of protons and neutrons that are much more massive than electrons. When an element has atoms that differ in the number of neutrons, these atoms are called different isotopes of the element.	
SC-HS-1.1.3. Students will understand that solids, liquids and gases differ in the distances between molecules or atoms and therefore the energy that binds them together. In solids, the structure is nearly rigid; in liquids, molecules or atoms move around each other but do not move apart; and in gases, molecules or atoms move almost independently of each other and are relatively far apart. The behavior of gases and the relationship of the variables influencing them can be described and predicted.	
SC-HS-1.1.4. Students will understand that in conducting materials, electrons flow easily; whereas, in insulating materials, they can hardly flow at all. Semiconducting materials have intermediate behavior. At low temperatures, some materials become superconductors and offer no resistance to the flow of electrons.	
SC-HS-1.1.5. Students will explain the role of intermolecular or intramolecular interactions on the physical properties (solubility, density, polarity, conductivity, boiling/melting points) of compounds.	
SC-HS-1.1.6. Students will • identify variables that affect reaction rates; • predict effects of changes in variables (concentration, temperature, properties of reactants, surface area and catalysts) based on evidence/data from chemical reactions.	

= Measured by PLAN Science Test
_____ = Content sampled by PLAN Science Test

TABLE 4B

KENTUCKY High School Science Core Content for Assessment, Version 4.1	**PLAN Science** **College Readiness Standards**
STRUCTURE AND TRANSFORMATION OF MATTER	
SC-HS-1.1.7. Students will • construct diagrams to illustrate ionic or covalent bonding; • predict compound formation and bond type as either ionic or covalent (polar, nonpolar) and represent the products formed with simple chemical formulas.	
SC-HS-1.1.8. Students will • explain the importance of chemical reactions in a real-world context; • justify conclusions using evidence/data from chemical reactions.	

= Measured by PLAN Science Test
_____ = Content sampled by PLAN Science Test

TABLE 4B

KENTUCKY High School Science Core Content for Assessment, Version 4.1	**PLAN Science** **College Readiness Standards**
MOTION AND FORCES	
Whether observing airplanes, baseballs, planets, or people, the motion of all bodies is governed by the same basic rules. In the elementary years of conceptual development, students need multiple opportunities to experience, observe and describe (in words and pictures) motion, including factors (pushing and pulling) that affect motion. At the middle level, qualitative descriptions of the relationship between forces and motion will provide the foundation for quantitative applications of Newton's Laws. These ideas are more fully developed at the high school level along with the use of models to support evidence of motion in abstract or invisible phenomena such as electromagnetism.	**Evaluation of Models, Inferences, and Experimental Results:** Select a simple hypothesis, prediction, or conclusion that is supported by a data presentation or a model Identify key issues or assumptions in a model Select a simple hypothesis, prediction, or conclusion that is supported by two or more data presentations or models Identify strengths and weaknesses in one or more models Identify similarities and differences between models Determine which model(s) is(are) supported or weakened by new information
Physical Science	
SC-HS-1.2.1. Students will • select or construct accurate and appropriate representations for motion (visual, graphical and mathematical); • defend conclusions/explanations about the motion of objects and real-life phenomena from evidence/data.	
SC-HS-1.2.2. Students will • explain the relationship between electricity and magnetism; • propose solutions to real life problems involving electromagnetism.	
SC-HS-1.2.3. Students will understand that the electric force is a universal force that exists between any two charged objects. Opposite charges attract while like charges repel.	

= Measured by PLAN Science Test
_____ = Content sampled by PLAN Science Test

TABLE 4B

KENTUCKY High School Science Core Content for Assessment, Version 4.1	**PLAN Science** **College Readiness Standards**
THE EARTH AND THE UNIVERSE	
The Earth system is in a constant state of change. These changes affect life on earth in many ways. Development of conceptual understandings about processes that shape the Earth begin at the elementary level with understanding what Earth materials are and that change occurs. At the middle level, students investigate how these changes occur. Finally, at the high school level, most of the emphasis is on why these changes occur. An understanding of systems and their interacting components will enable students to evaluate supporting theories of earth changes. At the heart of elementary students' initial understanding of the Earth's place in the universe is direct observation of the earth-sun-moon system. Students can derive important conceptual understandings about the system as they describe interactions resulting in shadows, moon phases and day and night. The use of models and observance of patterns to explain common phenomena is essential to building a conceptual foundation and supporting ideas with evidence at all levels. In middle school, students begin to look beyond what can be directly observed as they explore the earth-sun-moon system, as well as the rest of our solar system, employing the concept of scale within their models. Patterns play an important role as students seek to develop a conceptual understanding of gravity in their world and in the universe. High school is the time to bring all of the ideas together to look at the universe as a whole. Students will use evidence to evaluate and analyze theories related to the origin of the universe and all components of the universe.	**Evaluation of Models, Inferences, and Experimental Results:** Select a simple hypothesis, prediction, or conclusion that is supported by a data presentation or a model Identify key issues or assumptions in a model Select a simple hypothesis, prediction, or conclusion that is supported by two or more data presentations or models Identify strengths and weaknesses in one or more models Identify similarities and differences between models Determine which model(s) is(are) supported or weakened by new information
Earth/Space Science	
SC-HS-2.3.1. Students will • explain phenomena (falling objects, planetary motion, satellite motion) related to gravity; • describe the factors that affect gravitational force.	
SC-HS-2.3.2. Students will • describe the current scientific theory of the formation of the universe (Big Bang) and its evidence; • explain the role of gravity in the formation of the universe and its components.	
SC-HS-2.3.3. Students will explain the origin of the heavy elements in planetary objects (planets, stars).	
SC-HS-2.3.4. Students will understand that stars have life cycles of birth through death that are analogous to those of living organisms. During their lifetimes, stars generate energy from nuclear fusion reactions that create successively heavier chemical elements.	
SC-HS-2.3.5. Students will understand that the Sun, Earth and the rest of the solar system formed approximately 4.6 billion years ago from a nebular cloud of dust and gas.	

= Measured by PLAN Science Test
_____ = Content sampled by PLAN Science Test

TABLE 4B

KENTUCKY High School Science Core Content for Assessment, Version 4.1	**PLAN Science** **College Readiness Standards**
THE EARTH AND THE UNIVERSE	
SC-HS-2.3.6. Students will • compare the limitations/benefits of various techniques (radioactive dating, observing rock sequences and comparing fossils) for estimating geological time; • justify deductions about age of geologic features.	
SC-HS-2.3.7. Students will • explain real-life phenomena caused by the convection of the Earth's mantle; • predict the consequences of this motion on humans and other living things on the planet.	
SC-HS-2.3.8. Students will predict consequences of both rapid (volcanoes, earthquakes) and slow (mountain building, plate movement) earth processes from evidence/data and justify reasoning.	

= Measured by PLAN Science Test
_____ = Content sampled by PLAN Science Test

TABLE 4B

KENTUCKY High School Science Core Content for Assessment, Version 4.1	**PLAN Science** **College Readiness Standards**
UNITY AND DIVERSITY	
All matter is comprised of the same basic elements, goes through the same kinds of energy transformations, and uses the same kinds of forces to move. Living organisms are no exception. Elementary students begin to observe the macroscopic features of organisms in order to make comparisons and classifications based upon likenesses and differences. Looking for patterns in the appearance and behavior of an organism leads to the notion that offspring are much like the parents, but not exactly alike. In middle school, students begin to compare, contrast and classify the microscopic features of organisms—the cells, as well as investigate reproduction as the essential process to the continuation of all species. Expected patterns of genetic traits are predicted. Distinctions are made between learned behaviors and inherited traits. At the high school level, an in-depth study of the specialization and chemical changes occurring at the cellular level builds upon the foundational ideas developed earlier to investigate DNA and effects of alterations in DNA for an individual organism as well as for a species. Emphasis at every level should be placed upon the understanding that while every living thing is composed of similar small constituents that combine in predictable ways, it is the subtle variations within these small building blocks that account for both the likenesses and differences in form and function that create the diversity of life.	
Biological Science	
SC-HS-3.4.1. Students will explain the role of DNA in protein synthesis.	
SC-HS-3.4.2. Students will understand that most cell functions involve chemical reactions. Food molecules taken into cells react to provide the chemical constituents needed to synthesize other molecules. Both breakdown and synthesis are made possible by a large set of protein catalysts, called enzymes. The breakdown of some of the food molecules enables the cell to store energy in specific chemicals that are used to carry out the many functions of the cell.	
SC-HS-3.4.3. Students will • describe cell regulation (enzyme function, diffusion, osmosis, homeostasis); • predict consequences of internal/external environmental change on cell function/regulation.	
SC-HS-3.4.4. Students will understand that plant cells contain chloroplasts, the site of photosynthesis. Plants and many microorganisms (e.g., Euglena) use solar energy to combine molecules of carbon dioxide and water into complex, energy-rich organic compounds and release oxygen to the environment. This process of photosynthesis provides a vital link between the Sun and energy needs of living systems.	

= Measured by PLAN Science Test
_____ = Content sampled by PLAN Science Test

TABLE 4B

KENTUCKY High School Science Core Content for Assessment, Version 4.1	**PLAN Science** **College Readiness Standards**
UNITY AND DIVERSITY	
SC-HS-3.4.5. Students will • explain the relationship between sexual reproduction (meiosis) and the transmission of genetic information; • draw conclusions/make predictions based on hereditary evidence/data (pedigrees, punnet squares).	
SC-HS-3.4.6. Students will understand that in all organisms and viruses, the instructions for specifying the characteristics are carried in nucleic acids. The chemical and structural properties of nucleic acids determine how the genetic information that underlies heredity is both encoded in genes and replicated.	
SC-HS-3.4.7. Students will • classify organisms into groups based on similarities; • infer relationships based on internal and external structures and chemical processes.	
SC-HS-3.4.8. Students will understand that multicellular animals have nervous systems that generate behavior. Nerve cells communicate with each other by secreting specific molecules. Specialized cells in sense organs detect light, sound and specific chemicals enabling animals to monitor what is going on in the world around them.	

= Measured by PLAN Science Test
_____ = Content sampled by PLAN Science Test

TABLE 4B

KENTUCKY High School Science Core Content for Assessment, Version 4.1	**PLAN Science** **College Readiness Standards**
BIOLOGICAL CHANGE	
The only thing certain is that everything changes. Elementary students build a foundational knowledge of change by observing slow and fast changes caused by nature in their own environment, noting changes that humans and other organisms cause in their environment and observing fossils found in or near their environment. At the middle school level, students study relationships among populations and ecosystems that contribute to the success or demise of a specific population or species. Students construct basic explanations that can account for the great diversity among organisms. The stage is set for high school students to evaluate the role natural selection plays in the diversity of species. Modern ideas of evolution provide a scientific explanation for three main sets of observable facts about life on earth: the enormous number of different life forms we see about us, the systematic similarities in anatomy and molecular chemistry we see within that diversity and the sequence of changes in fossils found in successive layers of rock that have been formed over more than a billion years.	
Biological Change	
SC-HS-3.5.1. Students will • predict the impact on species of changes to 1) the potential for a species to increase its numbers, (2) the genetic variability of offspring due to mutation and recombination of genes, (3) a finite supply of the resources required for life, or (4) natural selection; • propose solutions to real-world problems of endangered and extinct species.	
SC-HS-3.5.2. Students will • predict the success of patterns of adaptive behaviors based on evidence/data; • justify explanations of organism survival based on scientific understandings of behavior.	

= Measured by PLAN Science Test
_____ = Content sampled by PLAN Science Test

TABLE 4B

KENTUCKY High School Science Core Content for Assessment, Version 4.1	**PLAN Science** **College Readiness Standards**
ENERGY TRANSFORMATIONS	
Energy transformations are inherent in almost every system in the universe—from tangible examples at the elementary level, such as heat production in simple earth and physical systems to more abstract ideas beginning at middle school, such as those transformations involved in the growth, dying and decay of living systems. The use of models to illustrate the often invisible and abstract notions of energy transfer will aid in conceptualization, especially as students move from the macroscopic level of observation and evidence (primarily elementary school) to the microscopic interactions at the atomic level (middle and high school levels). Students in high school expand their understanding of constancy through the study of a variety of phenomena. Conceptual understanding and application of the laws of thermodynamics connect ideas about matter with energy transformations within all living, physical and earth systems.	**Evaluation of Models, Inferences, and Experimental Results:** Select a simple hypothesis, prediction, or conclusion that is supported by a data presentation or a model Identify key issues or assumptions in a model Select a simple hypothesis, prediction, or conclusion that is supported by two or more data presentations or models Identify strengths and weaknesses in one or more models Identify similarities and differences between models Determine which model(s) is(are) supported or weakened by new information
Unifying Ideas	
SC-HS-4.6.1. Students will • explain the relationships and connections between matter, energy, living systems and the physical environment; • give examples of conservation of matter and energy.	
SC-HS-4.6.2. Students will • predict wave behavior and energy transfer; • apply knowledge of waves to real life phenomena/investigations.	
SC-HS-4.6.3. Students will understand that electromagnetic waves, including radio waves, microwaves, infrared radiation, visible light, ultraviolet radiation, x-rays and gamma rays, result when a charged object is accelerated.	
SC-HS-4.6.4. Students will • describe the components and reservoirs involved in biogeochemical cycles (water, nitrogen, carbon dioxide and oxygen); • explain the movement of matter and energy in biogeochemical cycles and related phenomena.	
SC-HS-4.6.5. Students will describe and explain the role of carbon-containing molecules and chemical reactions in energy transfer in living systems.	
SC-HS-4.6.6. Students will understand that heat is the manifestation of the random motion and vibrations of atoms.	
SC-HS-4.6.7. Students will • explain real world applications of energy using information/data; • evaluate explanations of mechanical systems using current scientific knowledge about energy.	

= Measured by PLAN Science Test
_____ = Content sampled by PLAN Science Test

TABLE 4B

KENTUCKY High School Science Core Content for Assessment, Version 4.1	**PLAN Science** **College Readiness Standards**
ENERGY TRANSFORMATIONS	
SC-HS-4.6.8. Students will • describe the connections between the functioning of the Earth system and its sources of energy (internal and external); • predict the consequences of changes to any component of the Earth system.	
SC-HS-4.6.9. Students will • explain the cause and effect relationship between global climate and weather patterns and energy transfer (cloud cover, location of mountain ranges, oceans); • predict the consequences of changes to the global climate and weather patterns.	
SC-HS-4.6.10. Students will • identify the components and mechanisms of energy stored and released from food molecules (photosynthesis and respiration); • apply information to real-world situations.	
SC-HS-4.6.11. Students will • explain the difference between alpha and beta decay, fission and fusion; • identify the relationship between nuclear reactions and energy.	
SC-HS-4.6.12. Students will understand that the forces that hold the nucleus together, at nuclear distances, are usually stronger than the forces that would make it fly apart.	

= Measured by PLAN Science Test
_____ = Content sampled by PLAN Science Test

TABLE 4B

KENTUCKY High School Science Core Content for Assessment, Version 4.1	**PLAN Science** **College Readiness Standards**
INTERDEPENDENCE	
It is not difficult for students to grasp the general notion that species depend on one another and on the environment for survival. But their awareness must be supported by knowledge of the kinds of relationships that exist among organisms, the kinds of physical conditions that organisms must cope with, the kinds of environments created by the interaction of organisms with one another and their physical surroundings and the complexity of such systems. Elementary learners need to become acquainted with ecosystems that are easily observable to them by beginning to study the habitats of many types of local organisms. Students begin to investigate the survival needs of different organisms and how the environment affects optimum conditions for survival. In middle school, students should be guided from specific examples of the interdependency of organisms to a more systematic view of the interactions that take place among organisms and their surroundings. At the high school level, the concept of an ecosystem should bring coherence to the complex array of relationships among organisms and environments that students have encountered. Students growing understanding of systems in general will reinforce the concept of ecosystems. Stability and change in ecosystems can be considered in terms of variables such as population size, number and kinds of species, productivity and the effect of human intervention.	
Unifying Ideas	
SC-HS-4.7.1. Students will • analyze relationships and interactions among organisms in ecosystems; • predict the effects on other organisms of changes to one or more components of the ecosystem.	
SC-HS-4.7.2. Students will • evaluate proposed solutions from multiple perspectives to environmental problems caused by human interaction; • justify positions using evidence/data.	
SC-HS-4.7.3. Students will • predict the consequences of changes to any component (atmosphere, solid Earth, oceans, living things) of the Earth System; • propose justifiable solutions to global problems.	
SC-HS-4.7.4. Students will understand that evidence for one-celled forms of life, the bacteria, extends back more than 3.5 billion years. The changes in life over time caused dramatic changes in the composition of the Earth's atmosphere, which did not originally contain oxygen.	
SC-HS-4.7.5. Students will • predict the consequences of changes in resources to a population; • select or defend solutions to real-world problems of population control.	

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TABLE 4C

KENTUCKY High School Science Core Content for Assessment, Version 4.1	**ACT Science** **College Readiness Standards**
STRUCTURE AND TRANSFORMATION OF MATTER	
A basic understanding of matter is essential to the conceptual development of other big ideas in science. In the elementary years of conceptual development, students will be studying properties of matter and physical changes of matter at the macro level through direct observations, forming the foundation for subsequent learning. During the middle years, physical and chemical changes in matter are observed and students begin to relate these changes to the smaller constituents of matter—namely, atoms and molecules. By high school, students will be dealing with evidence from both direct and indirect observations (microscopic level and smaller) to consider theories related to change and conservation of matter. The use of models (and an understanding of their scales and limitations) is an effective means of learning about the structure of matter. Looking for patterns in properties is also critical to comparing and explaining differences in matter.	**Evaluation of Models, Inferences, and Experimental Results:** Select a simple hypothesis, prediction, or conclusion that is supported by a data presentation or a model Identify key issues or assumptions in a model Select a simple hypothesis, prediction, or conclusion that is supported by two or more data presentations or models Identify strengths and weaknesses in one or more models Identify similarities and differences between models Determine which model(s) is(are) supported or weakened by new information
Physical Science	
SC-HS-1.1.1. Students will classify or make generalizations about elements from data of observed patterns in atomic structure and/or position on the periodic table.	
SC-HS-1.1.2. Students will understand that the atom's nucleus is composed of protons and neutrons that are much more massive than electrons. When an element has atoms that differ in the number of neutrons, these atoms are called different isotopes of the element.	
SC-HS-1.1.3. Students will understand that solids, liquids and gases differ in the distances between molecules or atoms and therefore the energy that binds them together. In solids, the structure is nearly rigid; in liquids, molecules or atoms move around each other but do not move apart; and in gases, molecules or atoms move almost independently of each other and are relatively far apart. The behavior of gases and the relationship of the variables influencing them can be described and predicted.	
SC-HS-1.1.4. Students will understand that in conducting materials, electrons flow easily; whereas, in insulating materials, they can hardly flow at all. Semiconducting materials have intermediate behavior. At low temperatures, some materials become superconductors and offer no resistance to the flow of electrons.	
SC-HS-1.1.5. Students will explain the role of intermolecular or intramolecular interactions on the physical properties (solubility, density, polarity, conductivity, boiling/melting points) of compounds.	
SC-HS-1.1.6. Students will • identify variables that affect reaction rates; • predict effects of changes in variables (concentration, temperature, properties of reactants, surface area and catalysts) based on evidence/data from chemical reactions.	

= Measured by the ACT Science Test
_____ = Content sampled by the ACT Science Test

TABLE 4C

KENTUCKY High School Science Core Content for Assessment, Version 4.1	**ACT Science** **College Readiness Standards**
STRUCTURE AND TRANSFORMATION OF MATTER	
SC-HS-1.1.7. Students will • construct diagrams to illustrate ionic or covalent bonding; • predict compound formation and bond type as either ionic or covalent (polar, nonpolar) and represent the products formed with simple chemical formulas.	
SC-HS-1.1.8. Students will • explain the importance of chemical reactions in a real-world context; • justify conclusions using evidence/data from chemical reactions.	

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TABLE 4C

KENTUCKY High School Science Core Content for Assessment, Version 4.1	**ACT Science** **College Readiness Standards**
MOTION AND FORCES	
Whether observing airplanes, baseballs, planets, or people, the motion of all bodies is governed by the same basic rules. In the elementary years of conceptual development, students need multiple opportunities to experience, observe and describe (in words and pictures) motion, including factors (pushing and pulling) that affect motion. At the middle level, qualitative descriptions of the relationship between forces and motion will provide the foundation for quantitative applications of Newton's Laws. These ideas are more fully developed at the high school level along with the use of models to support evidence of motion in abstract or invisible phenomena such as electromagnetism.	**Evaluation of Models, Inferences, and Experimental Results:** Select a simple hypothesis, prediction, or conclusion that is supported by a data presentation or a model Identify key issues or assumptions in a model Select a simple hypothesis, prediction, or conclusion that is supported by two or more data presentations or models Identify strengths and weaknesses in one or more models Identify similarities and differences between models Determine which model(s) is(are) supported or weakened by new information
Physical Science	
SC-HS-1.2.1. Students will • select or construct accurate and appropriate representations for motion (visual, graphical and mathematical); • defend conclusions/explanations about the motion of objects and real-life phenomena from evidence/data.	
SC-HS-1.2.2. Students will • explain the relationship between electricity and magnetism; • propose solutions to real life problems involving electromagnetism.	
SC-HS-1.2.3. Students will understand that the electric force is a universal force that exists between any two charged objects. Opposite charges attract while like charges repel.	

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TABLE 4C

KENTUCKY High School Science Core Content for Assessment, Version 4.1	**ACT Science** **College Readiness Standards**
THE EARTH AND THE UNIVERSE	
The Earth system is in a constant state of change. These changes affect life on earth in many ways. Development of conceptual understandings about processes that shape the Earth begin at the elementary level with understanding what Earth materials are and that change occurs. At the middle level, students investigate how these changes occur. Finally, at the high school level, most of the emphasis is on why these changes occur. An understanding of systems and their interacting components will enable students to evaluate supporting theories of earth changes. At the heart of elementary students' initial understanding of the Earth's place in the universe is direct observation of the earth-sun-moon system. Students can derive important conceptual understandings about the system as they describe interactions resulting in shadows, moon phases and day and night. The use of models and observance of patterns to explain common phenomena is essential to building a conceptual foundation and supporting ideas with evidence at all levels. In middle school, students begin to look beyond what can be directly observed as they explore the earth-sun-moon system, as well as the rest of our solar system, employing the concept of scale within their models. Patterns play an important role as students seek to develop a conceptual understanding of gravity in their world and in the universe. High school is the time to bring all of the ideas together to look at the universe as a whole. Students will use evidence to evaluate and analyze theories related to the origin of the universe and all components of the universe.	**Evaluation of Models, Inferences, and Experimental Results:** Select a simple hypothesis, prediction, or conclusion that is supported by a data presentation or a model Identify key issues or assumptions in a model Select a simple hypothesis, prediction, or conclusion that is supported by two or more data presentations or models Identify strengths and weaknesses in one or more models Identify similarities and differences between models Determine which model(s) is(are) supported or weakened by new information
Earth/Space Science	
SC-HS-2.3.1. Students will • explain phenomena (falling objects, planetary motion, satellite motion) related to gravity; • describe the factors that affect gravitational force.	
SC-HS-2.3.2. Students will • describe the current scientific theory of the formation of the universe (Big Bang) and its evidence; • explain the role of gravity in the formation of the universe and its components.	
SC-HS-2.3.3. Students will explain the origin of the heavy elements in planetary objects (planets, stars).	
SC-HS-2.3.4. Students will understand that stars have life cycles of birth through death that are analogous to those of living organisms. During their lifetimes, stars generate energy from nuclear fusion reactions that create successively heavier chemical elements.	
SC-HS-2.3.5. Students will understand that the Sun, Earth and the rest of the solar system formed approximately 4.6 billion years ago from a nebular cloud of dust and gas.	

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TABLE 4C

KENTUCKY High School Science Core Content for Assessment, Version 4.1	**ACT Science** **College Readiness Standards**
THE EARTH AND THE UNIVERSE	
SC-HS-2.3.6. Students will • compare the limitations/benefits of various techniques (radioactive dating, observing rock sequences and comparing fossils) for estimating geological time; • justify deductions about age of geologic features.	
SC-HS-2.3.7. Students will • explain real-life phenomena caused by the convection of the Earth's mantle; • predict the consequences of this motion on humans and other living things on the planet.	
SC-HS-2.3.8. Students will predict consequences of both rapid (volcanoes, earthquakes) and slow (mountain building, plate movement) earth processes from evidence/data and justify reasoning.	

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TABLE 4C

KENTUCKY High School Science Core Content for Assessment, Version 4.1	**ACT Science** **College Readiness Standards**
UNITY AND DIVERSITY	
All matter is comprised of the same basic elements, goes through the same kinds of energy transformations, and uses the same kinds of forces to move. Living organisms are no exception. Elementary students begin to observe the macroscopic features of organisms in order to make comparisons and classifications based upon likenesses and differences. Looking for patterns in the appearance and behavior of an organism leads to the notion that offspring are much like the parents, but not exactly alike. In middle school, students begin to compare, contrast and classify the microscopic features of organisms—the cells, as well as investigate reproduction as the essential process to the continuation of all species. Expected patterns of genetic traits are predicted. Distinctions are made between learned behaviors and inherited traits. At the high school level, an in-depth study of the specialization and chemical changes occurring at the cellular level builds upon the foundational ideas developed earlier to investigate DNA and effects of alterations in DNA for an individual organism as well as for a species. Emphasis at every level should be placed upon the understanding that while every living thing is composed of similar small constituents that combine in predictable ways, it is the subtle variations within these small building blocks that account for both the likenesses and differences in form and function that create the diversity of life.	
Biological Science	
SC-HS-3.4.1. Students will explain the role of DNA in protein synthesis.	
SC-HS-3.4.2. Students will understand that most cell functions involve chemical reactions. Food molecules taken into cells react to provide the chemical constituents needed to synthesize other molecules. Both breakdown and synthesis are made possible by a large set of protein catalysts, called enzymes. The breakdown of some of the food molecules enables the cell to store energy in specific chemicals that are used to carry out the many functions of the cell.	
SC-HS-3.4.3. Students will • describe cell regulation (enzyme function, diffusion, osmosis, homeostasis); • predict consequences of internal/external environmental change on cell function/regulation.	
SC-HS-3.4.4. Students will understand that plant cells contain chloroplasts, the site of photosynthesis. Plants and many microorganisms (e.g., Euglena) use solar energy to combine molecules of carbon dioxide and water into complex, energy-rich organic compounds and release oxygen to the environment. This process of photosynthesis provides a vital link between the Sun and energy needs of living systems.	

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TABLE 4C

KENTUCKY High School Science Core Content for Assessment, Version 4.1	**ACT Science** **College Readiness Standards**
UNITY AND DIVERSITY	
SC-HS-3.4.5. Students will • explain the relationship between sexual reproduction (meiosis) and the transmission of genetic information; • draw conclusions/make predictions based on hereditary evidence/data (pedigrees, punnet squares).	
SC-HS-3.4.6. Students will understand that in all organisms and viruses, the instructions for specifying the characteristics are carried in nucleic acids. The chemical and structural properties of nucleic acids determine how the genetic information that underlies heredity is both encoded in genes and replicated.	
SC-HS-3.4.7. Students will • classify organisms into groups based on similarities; • infer relationships based on internal and external structures and chemical processes.	
SC-HS-3.4.8. Students will understand that multicellular animals have nervous systems that generate behavior. Nerve cells communicate with each other by secreting specific molecules. Specialized cells in sense organs detect light, sound and specific chemicals enabling animals to monitor what is going on in the world around them.	

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TABLE 4C

KENTUCKY High School Science Core Content for Assessment, Version 4.1	**ACT Science** **College Readiness Standards**
BIOLOGICAL CHANGE	
The only thing certain is that everything changes. Elementary students build a foundational knowledge of change by observing slow and fast changes caused by nature in their own environment, noting changes that humans and other organisms cause in their environment and observing fossils found in or near their environment. At the middle school level, students study relationships among populations and ecosystems that contribute to the success or demise of a specific population or species. Students construct basic explanations that can account for the great diversity among organisms. The stage is set for high school students to evaluate the role natural selection plays in the diversity of species. Modern ideas of evolution provide a scientific explanation for three main sets of observable facts about life on earth: the enormous number of different life forms we see about us, the systematic similarities in anatomy and molecular chemistry we see within that diversity and the sequence of changes in fossils found in successive layers of rock that have been formed over more than a billion years.	
Biological Change	
SC-HS-3.5.1. Students will • predict the impact on species of changes to 1) the potential for a species to increase its numbers, (2) the genetic variability of offspring due to mutation and recombination of genes, (3) a finite supply of the resources required for life, or (4) natural selection; • propose solutions to real-world problems of endangered and extinct species.	
SC-HS-3.5.2. Students will • predict the success of patterns of adaptive behaviors based on evidence/data; • justify explanations of organism survival based on scientific understandings of behavior.	

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TABLE 4C

KENTUCKY High School Science Core Content for Assessment, Version 4.1	**ACT Science** **College Readiness Standards**
ENERGY TRANSFORMATIONS	
Energy transformations are inherent in almost every system in the universe—from tangible examples at the elementary level, such as heat production in simple earth and physical systems to more abstract ideas beginning at middle school, such as those transformations involved in the growth, dying and decay of living systems. The use of models to illustrate the often invisible and abstract notions of energy transfer will aid in conceptualization, especially as students move from the macroscopic level of observation and evidence (primarily elementary school) to the microscopic interactions at the atomic level (middle and high school levels). Students in high school expand their understanding of constancy through the study of a variety of phenomena. Conceptual understanding and application of the laws of thermodynamics connect ideas about matter with energy transformations within all living, physical and earth systems.	**Evaluation of Models, Inferences, and Experimental Results:** Select a simple hypothesis, prediction, or conclusion that is supported by a data presentation or a model Identify key issues or assumptions in a model Select a simple hypothesis, prediction, or conclusion that is supported by two or more data presentations or models Identify strengths and weaknesses in one or more models Identify similarities and differences between models Determine which model(s) is(are) supported or weakened by new information
Unifying Ideas	
SC-HS-4.6.1. Students will • explain the relationships and connections between matter, energy, living systems and the physical environment; • give examples of conservation of matter and energy.	
SC-HS-4.6.2. Students will • predict wave behavior and energy transfer; • apply knowledge of waves to real life phenomena/investigations.	
SC-HS-4.6.3. Students will understand that electromagnetic waves, including radio waves, microwaves, infrared radiation, visible light, ultraviolet radiation, x-rays and gamma rays, result when a charged object is accelerated.	
SC-HS-4.6.4. Students will • describe the components and reservoirs involved in biogeochemical cycles (water, nitrogen, carbon dioxide and oxygen); • explain the movement of matter and energy in biogeochemical cycles and related phenomena.	
SC-HS-4.6.5. Students will describe and explain the role of carbon-containing molecules and chemical reactions in energy transfer in living systems.	
SC-HS-4.6.6. Students will understand that heat is the manifestation of the random motion and vibrations of atoms.	
SC-HS-4.6.7. Students will • explain real world applications of energy using information/data; • evaluate explanations of mechanical systems using current scientific knowledge about energy.	

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TABLE 4C

KENTUCKY High School Science Core Content for Assessment, Version 4.1	**ACT Science** **College Readiness Standards**
ENERGY TRANSFORMATIONS	
SC-HS-4.6.8. Students will • describe the connections between the functioning of the Earth system and its sources of energy (internal and external); • predict the consequences of changes to any component of the Earth system.	
SC-HS-4.6.9. Students will • explain the cause and effect relationship between global climate and weather patterns and energy transfer (cloud cover, location of mountain ranges, oceans); • predict the consequences of changes to the global climate and weather patterns.	
SC-HS-4.6.10. Students will • identify the components and mechanisms of energy stored and released from food molecules (photosynthesis and respiration); • apply information to real-world situations.	
SC-HS-4.6.11. Students will • explain the difference between alpha and beta decay, fission and fusion; • identify the relationship between nuclear reactions and energy.	
SC-HS-4.6.12. Students will understand that the forces that hold the nucleus together, at nuclear distances, are usually stronger than the forces that would make it fly apart.	

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TABLE 4C

KENTUCKY High School Science Core Content for Assessment, Version 4.1	**ACT Science** **College Readiness Standards**
INTERDEPENDENCE	
It is not difficult for students to grasp the general notion that species depend on one another and on the environment for survival. But their awareness must be supported by knowledge of the kinds of relationships that exist among organisms, the kinds of physical conditions that organisms must cope with, the kinds of environments created by the interaction of organisms with one another and their physical surroundings and the complexity of such systems. Elementary learners need to become acquainted with ecosystems that are easily observable to them by beginning to study the habitats of many types of local organisms. Students begin to investigate the survival needs of different organisms and how the environment affects optimum conditions for survival. In middle school, students should be guided from specific examples of the interdependency of organisms to a more systematic view of the interactions that take place among organisms and their surroundings. At the high school level, the concept of an ecosystem should bring coherence to the complex array of relationships among organisms and environments that students have encountered. Students growing understanding of systems in general will reinforce the concept of ecosystems. Stability and change in ecosystems can be considered in terms of variables such as population size, number and kinds of species, productivity and the effect of human intervention.	
Unifying Ideas	
SC-HS-4.7.1. Students will • analyze relationships and interactions among organisms in ecosystems; • predict the effects on other organisms of changes to one or more components of the ecosystem.	
SC-HS-4.7.2. Students will • evaluate proposed solutions from multiple perspectives to environmental problems caused by human interaction; • justify positions using evidence/data.	
SC-HS-4.7.3. Students will • predict the consequences of changes to any component (atmosphere, solid Earth, oceans, living things) of the Earth System; • propose justifiable solutions to global problems.	
SC-HS-4.7.4. Students will understand that evidence for one-celled forms of life, the bacteria, extends back more than 3.5 billion years. The changes in life over time caused dramatic changes in the composition of the Earth's atmosphere, which did not originally contain oxygen.	
SC-HS-4.7.5. Students will • predict the consequences of changes in resources to a population; • select or defend solutions to real-world problems of population control.	

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