

**EXPLORE
ENGLISH
TEST**

Table 3: The College Readiness Standards

The Standards describe what students who score in the specified score ranges are *likely* to know and to be able to do. The ideas for progress help teachers identify ways of enhancing students' learning based on the scores students receive. The score range at the Benchmark level of achievement is highlighted.

		Topic Development in Terms of Purpose and Focus	Organization, Unity, and Coherence	Word Choice in Terms of Style, Tone, Clarity, and Economy
1–12	Standards	<ul style="list-style-type: none"> Students who score in the 1–12 range are most likely beginning to develop the knowledge and skills assessed in the other score ranges. 		
	ideas for progress	<ul style="list-style-type: none"> read and discuss the work of favorite writers regularly write informal responses to literature (fiction and nonfiction) in their journals identify sentences that convey the main ideas in a variety of texts and then practice composing such sentences 	<ul style="list-style-type: none"> write short texts in a variety of genres, illustrating simple organization use paragraphing as an organizational device 	<ul style="list-style-type: none"> revise writing to clarify sentences containing too many phrases and clauses check writing to make sure pronoun references are clear revise writing to edit out empty words (e.g., <i>really, very, big, kind of</i>)
13–15	Standards		<ul style="list-style-type: none"> Use conjunctive adverbs or phrases to show time relationships in simple narrative essays (e.g., <i>then, this time</i>) 	<ul style="list-style-type: none"> Revise sentences to correct awkward and confusing arrangements of sentence elements Revise vague nouns and pronouns that create obvious logic problems
	ideas for progress	<ul style="list-style-type: none"> read writers of various genres and imitate their work revise writing to ensure that every sentence is necessary to the purpose of the piece and that no important information has been left out 	<ul style="list-style-type: none"> write many simply organized short texts of various genres revise writing to ensure that information is in the best order 	<ul style="list-style-type: none"> identify and revise obviously wordy, redundant, or cluttered material
16–19	Standards	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Select the most logical place to add a sentence in a paragraph 	<ul style="list-style-type: none"> Delete obviously synonymous and wordy material in a sentence Revise expressions that deviate from the style of an essay
	ideas for progress	<ul style="list-style-type: none"> continue reading writers of various genres and imitating their work write longer and more complicated essays, stories, reviews, etc. state the main theme of or summarize essays they have written revise essays by eliminating sentences or ideas that violate the essay's focus 	<ul style="list-style-type: none"> recognize and experiment with more sophisticated organizational structures (e.g., comparison-contrast, cause-effect) revise writing to delete illogical conjunctive adverbs discuss the most logical place to add specific information in a draft essay discuss the purpose and the importance of the opening paragraph for directing the rest of the piece 	<ul style="list-style-type: none"> revise writing to make it more concise and precise discuss and model tone and style

<i>Sentence Structure and Formation</i>	<i>Conventions of Usage</i>	<i>Conventions of Punctuation</i>
<ul style="list-style-type: none"> ■ vary sentence length by combining simple sentences ■ check writing to make sure verb tenses are consistent 	<ul style="list-style-type: none"> ■ make sure to use adjectives like <i>well</i>, <i>less</i>, and <i>worst</i> correctly 	<ul style="list-style-type: none"> ■ learn to recognize when commas are overused
<ul style="list-style-type: none"> ■ Use conjunctions or punctuation to join simple clauses ■ Revise shifts in verb tense between simple clauses in a sentence or between simple adjoining sentences 	<ul style="list-style-type: none"> ■ 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 	<ul style="list-style-type: none"> ■ Delete commas that create basic sense problems (e.g., between verb and direct object)
<ul style="list-style-type: none"> ■ revise writing to correct glaring shifts in verb tense or voice 	<ul style="list-style-type: none"> ■ revise writing to correct basic grammar and punctuation errors ■ practice and understand correct usage of common homonyms (e.g., <i>their/there</i>, <i>past/passed</i>) 	<ul style="list-style-type: none"> ■ practice using punctuation correctly in simple sentences (e.g., “He ran, jumped, and swam.”) ■ check for and correct unnecessary commas
<ul style="list-style-type: none"> ■ 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 	<ul style="list-style-type: none"> ■ 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 <i>there</i> and <i>their</i>, <i>past</i> and <i>passed</i>, and <i>led</i> and <i>lead</i> 	<ul style="list-style-type: none"> ■ 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)
<ul style="list-style-type: none"> ■ experiment with writing more sophisticated sentences; check to ensure verbs agree with subjects and modifiers don't dangle 	<ul style="list-style-type: none"> ■ revise sentences to ensure that each verb agrees with its subject when there is some text between the two 	<ul style="list-style-type: none"> ■ use commas to set off parenthetical phrases

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Table 3 (continued): The College Readiness Standards

The Standards describe what students who score in the specified score ranges are *likely* to know and to be able to do. The ideas for progress help teachers identify ways of enhancing students' learning based on the scores students receive. The score range at the Benchmark level of achievement is highlighted.

		Topic Development in Terms of Purpose and Focus	Organization, Unity, and Coherence	Word Choice in Terms of Style, Tone, Clarity, and Economy
20–23	Standards	<ul style="list-style-type: none"> Identify the central idea or main topic of a straightforward piece of writing Determine relevancy when presented with a variety of sentence-level details 	<ul style="list-style-type: none"> Use conjunctive adverbs or phrases to express straightforward logical relationships (e.g., <i>first, afterward, in response</i>) Decide the most logical place to add a sentence in an essay Add a sentence that introduces a simple paragraph 	<ul style="list-style-type: none"> 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
	ideas for progress	<ul style="list-style-type: none"> continue reading the work of writers of various genres; begin experimenting with a variety of writing styles revise fairly straightforward writing to sharpen focus and coherence of entire piece 	<ul style="list-style-type: none"> experiment with using words and phrases that create clear transitions in writing rearrange sentences in a paragraph in order to improve its coherence write introductions that capture the reader's interest, write conclusions that provide a sense of closure, and describe the rhetorical effects that each creates 	<ul style="list-style-type: none"> continue to edit sentences for empty language, wordiness, and redundancy revise structurally complex sentences to correct vague or ambiguous pronoun references
24–25	Standards	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Determine the need for conjunctive adverbs or phrases to create subtle logical connections between sentences (e.g., <i>therefore, however, in addition</i>) 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 	<ul style="list-style-type: none"> 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
	ideas for progress	<ul style="list-style-type: none"> develop awareness of ways that form and content can be changed as the audience for the writing changes learn how meaning can be expressed through connotation 	<ul style="list-style-type: none"> experiment with more subtle organizational structures revise writing by refining introductions, conclusions, and transitions in complex paragraphs 	<ul style="list-style-type: none"> select and manipulate words, phrases, and clauses to convey shades of meaning and tone avoid clutter and use vivid verbs and specific nouns

<i>Sentence Structure and Formation</i>	<i>Conventions of Usage</i>	<i>Conventions of Punctuation</i>
<ul style="list-style-type: none"> ■ Recognize and correct marked disturbances of sentence flow and structure (e.g., participial phrase fragments, missing or incorrect relative pronouns, dangling or misplaced modifiers) 	<ul style="list-style-type: none"> ■ Use idiomatically appropriate prepositions, especially in combination with verbs (e.g., <i>long for</i>, <i>appeal to</i>) ■ Ensure that a verb agrees with its subject when there is some text between the two 	<ul style="list-style-type: none"> ■ 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)
<ul style="list-style-type: none"> ■ revise writing to correct faulty coordination and subordination of clauses ■ revise sentences to correct inconsistencies in verb tense and pronoun person 	<ul style="list-style-type: none"> ■ check to be sure pronouns agree with antecedents in increasingly complex sentences 	<ul style="list-style-type: none"> ■ use punctuation to set off nonessential information in a sentence ■ recognize inappropriate uses of commas
<ul style="list-style-type: none"> ■ 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 	<ul style="list-style-type: none"> ■ 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 <i>have</i> rather than <i>of</i> 	<ul style="list-style-type: none"> ■ 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 a compound verb joined by <i>and</i>) ■ Use apostrophes to indicate simple possessive nouns ■ Recognize inappropriate uses of colons and semicolons
<ul style="list-style-type: none"> ■ use sentence-combining techniques to create more sophisticated sentences; check to avoid fragments, comma splices, and run-ons 	<ul style="list-style-type: none"> ■ recognize the difference between <i>its</i> and <i>it's</i>, <i>your</i> and <i>you're</i>, <i>who</i> and <i>whom</i> 	<ul style="list-style-type: none"> ■ use commas to set off nonessential appositives or clauses ■ use semicolons to indicate relationships between independent clauses

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Table 6: The College Readiness Standards

The Standards describe what students who score in the specified score ranges are *likely* to know and to be able to do. The ideas for progress help teachers identify ways of enhancing students' learning based on the scores students receive. The score range at the Benchmark level of achievement is highlighted.

		Main Ideas and Author's Approach	Supporting Details
1–12	Standards	<ul style="list-style-type: none"> Students who score in the 1–12 range are most likely beginning to develop the knowledge and skills assessed in the other score ranges. 	
	ideas for progress	<ul style="list-style-type: none"> locate details in a literary text that suggest the author's or narrator's intent speculate about an author's or narrator's beliefs, motives, or thinking 	<ul style="list-style-type: none"> write, exchange, and answer a series of questions that examine significant details presented in a text locate and discuss details presented in a text (e.g., who, what, where)
13–15	Standards	<ul style="list-style-type: none"> Recognize a clear intent of an author or narrator in uncomplicated literary narratives 	<ul style="list-style-type: none"> Locate basic facts (e.g., names, dates, events) clearly stated in a passage
	ideas for progress	<ul style="list-style-type: none"> work with peers to create logical statements about the main idea or purpose of simple paragraphs 	<ul style="list-style-type: none"> determine which details in a text are essential to understanding the author's or narrator's intended message scan a text in order to locate specific details (e.g., dates, specialized terms, facts) identify the author's or narrator's reasons for including specific information in the text

Descriptions of the EXPLORE Reading Passages

Uncomplicated Literary Narratives refers to excerpts from essays, short stories, and novels that tend to use simple language and structure, have a clear purpose and a familiar style, present straightforward interactions between characters, and employ only a limited number of literary devices such as metaphor, simile, or hyperbole.

More Challenging Literary Narratives refers to excerpts from essays, short stories, and novels that tend to make moderate use of figurative language, have a more intricate structure and messages conveyed with some subtlety, and may feature somewhat complex interactions between characters.

<i>Sequential, Comparative, and Cause-Effect Relationships</i>	<i>Meanings of Words</i>	<i>Generalizations and Conclusions</i>
<ul style="list-style-type: none"> ■ use various strategies (e.g., timelines, event chains, discussion) to determine whether an event occurred and, if so, when it occurred ■ discuss an issue of interest, determining how past events affected the present ■ locate evidence in a text that explicitly states why an event or a series of events occurred ■ search for patterns or clues (e.g., signal words) that indicate cause-effect relationships 	<ul style="list-style-type: none"> ■ use various resources (e.g., dictionary, thesaurus) to explore connotations of familiar words or descriptive language 	<ul style="list-style-type: none"> ■ recognize generalizations about the main character in a literary text ■ combine several pieces of information to make a reasonable generalization about a specific character ■ make predictions about characters and events presented in a literary text, verifying or rejecting those predictions and making new ones as they read
<ul style="list-style-type: none"> ■ 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 	<ul style="list-style-type: none"> ■ Understand the implication of a familiar word or phrase and of simple descriptive language 	<ul style="list-style-type: none"> ■ Draw simple generalizations and conclusions about the main characters in uncomplicated literary narratives
<ul style="list-style-type: none"> ■ analyze how an author or narrator uses description, dialogue, and action to suggest relationships between characters in written or nonprint sources (e.g., films, ads) ■ select phrases or statements from a literary text that illustrate how a specific character feels toward others in the text ■ read portions of a literary text, predicting how a person's actions or words would likely impact a specific situation ■ use various strategies (e.g., questioning, role-playing) to determine plausible cause-effect relationships 	<ul style="list-style-type: none"> ■ examine specific language in a text and propose plausible interpretations based in part on their own viewpoints and experiences 	<ul style="list-style-type: none"> ■ analyze the reasonableness of generalizations by reviewing information presented in the text and from other sources ■ compose generalizations that include qualifying language (e.g., <i>a few</i>, <i>sometimes</i>) when limited evidence is presented by the author or narrator ■ determine what a literary narrative is generally about, organizing the text's information into general statements that are supported by details from the text ■ draw reasonable conclusions about people and situations using evidence presented in a text

Uncomplicated Informational Passages

refers to materials that tend to contain a limited amount of data, address basic concepts using familiar language and conventional organizational patterns, have a clear purpose, and are written to be accessible.

More Challenging Informational Passages

refers to materials that tend to present concepts that are not always stated explicitly and that are accompanied or illustrated by more—and more detailed—supporting data, include some difficult context-dependent words, and are written in a somewhat more demanding and less accessible style.

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Table 6 (continued): The College Readiness Standards

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		<i>Main Ideas and Author's Approach</i>	<i>Supporting Details</i>
16–19	Standards	<ul style="list-style-type: none"> ■ Identify a clear main idea or purpose of straightforward paragraphs in uncomplicated literary narratives 	<ul style="list-style-type: none"> ■ Locate simple details at the sentence and paragraph level in uncomplicated passages ■ Recognize a clear function of a part of an uncomplicated passage
	ideas for progress	<ul style="list-style-type: none"> ■ analyze techniques used by the author of a text to reveal or conceal his or her point of view 	<ul style="list-style-type: none"> ■ explain in their own words the significance of specific information in written or nonprint sources ■ distinguish between what is most and least important in a text
20–23	Standards	<ul style="list-style-type: none"> ■ 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 	<ul style="list-style-type: none"> ■ Locate important details in uncomplicated passages ■ Make simple inferences about how details are used in passages
	ideas for progress	<ul style="list-style-type: none"> ■ determine how an inference might change based on the inclusion of additional information ■ synthesize information from challenging texts to clarify understanding of important concepts and ideas ■ distinguish between key concepts and subordinate ideas in a text and write a concise summary ■ search for clues that suggest the viewpoint from which a literary text is written or told and determine whether the author's or narrator's point of view is valid or biased ■ analyze the relationship between an author's or narrator's intended message and the rhetorical devices used to convey that message (e.g., language used, evidence provided) 	<ul style="list-style-type: none"> ■ gather and interpret details presented in a text, determining the contribution of each to the author's or narrator's intended message ■ identify details that clearly support the key point(s) of written or nonprint sources ■ check inferences against information provided in a text, identifying what is and is not sufficiently supported by the text

<i>Sequential, Comparative, and Cause-Effect Relationships</i>	<i>Meanings of Words</i>	<i>Generalizations and Conclusions</i>
<ul style="list-style-type: none"> ■ Identify relationships between main characters in uncomplicated literary narratives ■ Recognize clear cause-effect relationships within a single paragraph in uncomplicated literary narratives 	<ul style="list-style-type: none"> ■ Use context to understand basic figurative language 	<ul style="list-style-type: none"> ■ Draw simple generalizations and conclusions about people, ideas, and so on in uncomplicated passages
<ul style="list-style-type: none"> ■ place events from a literary text in chronological order by locating substantial evidence from the text ■ identify similarities and differences between people, objects, events, or ideas, drawing accurate conclusions ■ identify interrelationships between and among people, objects, events, or ideas in written or nonprint sources ■ determine factors that have clearly influenced the outcome of a situation ■ identify statements in texts that clearly state the cause(s) and effect(s) of specific events 	<ul style="list-style-type: none"> ■ clarify the meanings of words or descriptive phrases by searching for clues in the text (e.g., sentence structure, context, prefixes/suffixes, spelling patterns) 	<ul style="list-style-type: none"> ■ make accurate generalizations about people and events based on evidence presented in the text ■ identify inaccurate generalizations (e.g., stereotypes) in written or nonprint sources ■ identify details in a challenging text that confirm or disprove conclusions drawn by the author or narrator and by the students themselves or their peers ■ make reasoned judgments about ideas and events based on evidence from written or nonprint sources
<ul style="list-style-type: none"> ■ 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 	<ul style="list-style-type: none"> ■ Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements in uncomplicated passages 	<ul style="list-style-type: none"> ■ 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
<ul style="list-style-type: none"> ■ analyze the sequence of events in written or nonprint sources ■ map sequences of events in texts or films or from everyday occurrences, defending their reasoning ■ evaluate the extent to which comparisons made by the author or narrator help clarify specific textual relationships ■ search for clues embedded in a text that suggest cause-effect relationships ■ examine events in written or nonprint sources to determine the precipitating cause(s) and final outcome(s) 	<ul style="list-style-type: none"> ■ investigate the meanings of words and their possible effect(s) on the perceptions and behavior of people ■ research words and phrases from different sources, identifying their shades of meaning in various contexts or situations 	<ul style="list-style-type: none"> ■ defend or challenge the author's or narrator's assertions by locating several key pieces of information in a challenging text ■ make accurate generalizations based on implicit information in the text ■ analyze specific parts of a text, drawing accurate conclusions

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The Standards describe what students who score in the specified score ranges are *likely* to know and to be able to do. The ideas for progress help teachers identify ways of enhancing students' learning based on the scores students receive. The score range at the Benchmark level of achievement is highlighted.

		<i>Main Ideas and Author's Approach</i>	<i>Supporting Details</i>
24–25	Standards	<ul style="list-style-type: none"> ■ 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 	<ul style="list-style-type: none"> ■ 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
	ideas for progress	<ul style="list-style-type: none"> ■ develop a reasonable interpretation of the central theme(s) or main point(s) of a challenging text ■ divide challenging texts into sections, determining what the key points are for each section ■ determine the primary purpose of specific sections of a text or the text as a whole ■ use two different mediums (e.g., sculpture, poetry, photography, music) to present a synopsis of the main idea(s) of a text, thereby expanding understanding of the text's meaning ■ identify subtle evidence that conveys the author's or narrator's point of view in challenging texts ■ change the wording of a text in order to convey a different tone or attitude (e.g., from persuasive to serious) 	<ul style="list-style-type: none"> ■ enumerate aspects or characteristics of people, objects, events, or ideas ■ interpret and integrate details in a text in order to verify or contradict a specific point or claim made by the author or narrator ■ recognize and study the evolution of an author's argument(s) as presented in a complex informational text

<i>Sequential, Comparative, and Cause-Effect Relationships</i>	<i>Meanings of Words</i>	<i>Generalizations and Conclusions</i>
<ul style="list-style-type: none"> ■ 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 	<ul style="list-style-type: none"> ■ 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 	<ul style="list-style-type: none"> ■ 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
<ul style="list-style-type: none"> ■ read texts containing challenging sequences (e.g., flashback, flash-forward), discussing how the order of events affects understanding of the text ■ explain how altering a series of events would likely change the outcome of a situation or the actions of the characters ■ develop an in-depth understanding of the fine distinctions between literary characters in a challenging text by closely examining the language used by the author or narrator ■ identify relationships between ideas and/or people in a challenging text and how those relationships develop over the course of the text ■ identify clues in a challenging text that suggest possible motives for and effects of a person's actions or words ■ read conflicting viewpoints of an event and use textual evidence to identify which one has the most reasonable explanations of causes and effects 	<ul style="list-style-type: none"> ■ develop and use strategies for deciphering the meanings of words or phrases embedded in richly figurative or technical contexts ■ analyze figurative and technical language in the media, relating some instances to a personal experience 	<ul style="list-style-type: none"> ■ synthesize information in challenging texts, making valid generalizations or conclusions about people and situations ■ confirm or disprove generalizations suggested in texts by providing examples or counterexamples from other sources

**EXPLORE
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Table 4: The College Readiness Standards

The Standards describe what students who score in the specified score ranges are *likely* to know and to be able to do. The ideas for progress help teachers identify ways of enhancing students' learning based on the scores students receive. The score range at the Benchmark level of achievement is highlighted.

		<i>Basic Operations & Applications</i>	<i>Probability, Statistics, & Data Analysis</i>	<i>Numbers: Concepts & Properties</i>
1–12	Standards	<ul style="list-style-type: none"> Students who score in the 1–12 range are most likely beginning to develop the knowledge and skills assessed in the other score ranges. 		
	ideas for progress	<ul style="list-style-type: none"> practice and apply estimation and computation using whole numbers and decimals choose the appropriate method of computation to solve multistep problems (e.g., calculator, mental, or pencil and paper) practice selecting appropriate units of measure (e.g., inches or feet, hours or minutes, centimeters or meters) and converting between units model and connect physical, verbal, and symbolic representations of money 	<ul style="list-style-type: none"> interpret data from a variety of displays and use it in computation (e.g., mean, median, mode, range) organize, display, and analyze data in a variety of ways 	
13–15	Standards	<ul style="list-style-type: none"> 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) 	<ul style="list-style-type: none"> Calculate the average of a list of positive whole numbers Perform a single computation using information from a table or chart 	<ul style="list-style-type: none"> Recognize equivalent fractions and fractions in lowest terms
	ideas for progress	<ul style="list-style-type: none"> investigate and build understanding of the concept of percentage as a comparison of a part to a whole use multiple operations to solve multistep arithmetic problems 	<ul style="list-style-type: none"> solve real-world problems that involve measures of central tendency (e.g., mean, median, mode) interpret data from a variety of displays (e.g., box-and-whisker plot) and use it along with additional information to solve real-world problems conduct simple probability experiments and represent results using different formats 	<ul style="list-style-type: none"> recognize and apply place value, rounding, and elementary number theory concepts

<i>Expressions, Equations, & Inequalities</i>	<i>Graphical Representations</i>	<i>Properties of Plane Figures</i>	<i>Measurement</i>
<ul style="list-style-type: none"> ■ model a variety of problem situations with expressions and/or equations ■ use the inverse relationships for the basic operations of addition and subtraction to determine unknown quantities 	<ul style="list-style-type: none"> ■ locate and describe points in terms of their position on the number line 		<ul style="list-style-type: none"> ■ identify line segments in geometric figures and estimate or calculate their measure
<ul style="list-style-type: none"> ■ Exhibit knowledge of basic expressions (e.g., identify an expression for a total as $b + g$) ■ Solve equations in the form $x + a = b$, where a and b are whole numbers or decimals 	<ul style="list-style-type: none"> ■ Identify the location of a point with a positive coordinate on the number line 		<ul style="list-style-type: none"> ■ Estimate or calculate the length of a line segment based on other lengths given on a geometric figure
<ul style="list-style-type: none"> ■ use mathematical symbols and variables to express a relationship between quantities (e.g., the number of 59¢ candy bars that you can buy for \$5 must satisfy $59n \leq 500$) ■ evaluate algebraic expressions and solve simple equations using integers 	<ul style="list-style-type: none"> ■ locate and describe objects in terms of their position on the number line and on a grid 	<ul style="list-style-type: none"> ■ describe, compare, and contrast plane and solid figures using their attributes 	<ul style="list-style-type: none"> ■ distinguish between area and perimeter, and find the area or perimeter when all relevant dimensions are given

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Table 4 (continued): The College Readiness Standards

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		<i>Basic Operations & Applications</i>	<i>Probability, Statistics, & Data Analysis</i>	<i>Numbers: Concepts & Properties</i>
16–19	Standards	<ul style="list-style-type: none"> ■ Solve routine one-step arithmetic problems (using whole numbers, fractions, and decimals) such as single-step percent ■ Solve some routine two-step arithmetic problems 	<ul style="list-style-type: none"> ■ Calculate the average of a list of numbers ■ Calculate the average, given the number of data values and the sum of the data values ■ Read tables and graphs ■ Perform computations on data from tables and graphs ■ Use the relationship between the probability of an event and the probability of its complement 	<ul style="list-style-type: none"> ■ Recognize one-digit factors of a number ■ Identify a digit's place value
	ideas for progress	<ul style="list-style-type: none"> ■ solve routine arithmetic problems that involve rates, proportions, and percents ■ model and solve problems that contain verbal and symbolic representations of money ■ do multistep computations with rational numbers 	<ul style="list-style-type: none"> ■ interpret data and use appropriate measures of central tendency to find unknown values ■ find the probability of a simple event in a variety of settings ■ gather, organize, display, and analyze data in a variety of ways to use in problem solving ■ conduct simple probability experiments, use a variety of counting techniques (e.g., Venn diagrams, Fundamental Counting Principle, organized lists), and represent results from data using different formats 	<ul style="list-style-type: none"> ■ apply elementary number concepts, including identifying patterns pictorially and numerically (e.g., triangular numbers, arithmetic and geometric sequences), ordering numbers, and factoring ■ recognize, identify, and apply field axioms (e.g., commutative)
20–23	Standards	<ul style="list-style-type: none"> ■ 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 	<ul style="list-style-type: none"> ■ Calculate the missing data value, given the average and all data values but one ■ Translate from one representation of data to another (e.g., a bar graph to a circle graph) ■ Determine the probability of a simple event 	<ul style="list-style-type: none"> ■ Exhibit knowledge of elementary number concepts including rounding, the ordering of decimals, pattern identification, absolute value, primes, and greatest common factor
	ideas for progress	<ul style="list-style-type: none"> ■ apply and use number properties to model and solve problems that involve reasoning with proportions ■ select and use appropriate units when solving problems that involve one or more units of measure 	<ul style="list-style-type: none"> ■ construct and analyze Venn diagrams to help determine simple probabilities 	<ul style="list-style-type: none"> ■ use the inverse relationships for the four basic operations, exponentiation, and root extractions to determine unknown quantities

<i>Expressions, Equations, & Inequalities</i>	<i>Graphical Representations</i>	<i>Properties of Plane Figures</i>	<i>Measurement</i>
<ul style="list-style-type: none"> ■ Substitute whole numbers for unknown quantities to evaluate expressions ■ Solve one-step equations having integer or decimal answers ■ Combine like terms (e.g., $2x + 5x$) 	<ul style="list-style-type: none"> ■ Locate points on the number line and in the first quadrant 	<ul style="list-style-type: none"> ■ Exhibit some knowledge of the angles associated with parallel lines 	<ul style="list-style-type: none"> ■ Compute the perimeter of polygons when all side lengths are given ■ Compute the area of rectangles when whole number dimensions are given
<ul style="list-style-type: none"> ■ create expressions that model mathematical situations using combinations of symbols and numbers ■ evaluate algebraic expressions and solve multistep first-degree equations 	<ul style="list-style-type: none"> ■ sketch and identify line segments, midpoints, intersections, and vertical and horizontal lines 	<ul style="list-style-type: none"> ■ describe angles and triangles using mathematical terminology and apply their properties 	<ul style="list-style-type: none"> ■ find area and perimeter of a variety of polygons by substituting given values into standard geometric formulas
<ul style="list-style-type: none"> ■ Evaluate algebraic expressions by substituting integers for unknown quantities ■ Add and subtract simple algebraic expressions ■ Solve routine first-degree equations ■ Perform straightforward word-to-symbol translations 	<ul style="list-style-type: none"> ■ Locate points in the coordinate plane 	<ul style="list-style-type: none"> ■ 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°) 	<ul style="list-style-type: none"> ■ Compute the area and perimeter of triangles and rectangles in simple problems ■ Use geometric formulas when all necessary information is given
<ul style="list-style-type: none"> ■ identify, interpret, and generate symbolic representations that model the context of a problem ■ factor and perform the basic operations on polynomials ■ create and solve linear equations and inequalities that model real-world situations ■ solve literal equations for any variable 	<ul style="list-style-type: none"> ■ represent and interpret relationships defined by equations and formulas; translate between representations as ordered pairs, graphs, and equations; and investigate symmetry and transformations (e.g., reflections, translations, rotations) 	<ul style="list-style-type: none"> ■ recognize what geometric properties and relationships for parallel lines to apply to find unknown angle measures ■ recognize when to apply geometric properties and relationships of triangles to find unknown angle measures 	<ul style="list-style-type: none"> ■ apply a variety of strategies to determine the circumference or perimeter and the area for circles, triangles, rectangles, and composite geometric figures

**EXPLORE
MATHEMATICS
TEST**

Table 4 (continued): The College Readiness Standards

The Standards describe what students who score in the specified score ranges are *likely* to know and to be able to do. The ideas for progress help teachers identify ways of enhancing students' learning based on the scores students receive. The score range at the Benchmark level of achievement is highlighted.

		<i>Basic Operations & Applications</i>	<i>Probability, Statistics, & Data Analysis</i>	<i>Numbers: Concepts & Properties</i>
24–25	Standards	<ul style="list-style-type: none"> ■ Solve multistep arithmetic problems that involve planning or converting units of measure (e.g., feet per second to miles per hour) 	<ul style="list-style-type: none"> ■ Calculate the average, given the frequency counts of all the data values ■ Manipulate data from tables and graphs ■ Compute straightforward probabilities for common situations 	<ul style="list-style-type: none"> ■ Find and use the least common multiple ■ Order fractions ■ Work with numerical factors ■ Work with scientific notation ■ Work with squares and square roots of numbers
	ideas for progress	<ul style="list-style-type: none"> ■ model and solve real-world problems that involve a combination of rates, proportions, and/or percents 	<ul style="list-style-type: none"> ■ find the probability of simple events, disjoint events, compound events, and independent events in a variety of settings using a variety of counting techniques 	<ul style="list-style-type: none"> ■ apply and use elementary number concepts and number properties to model and solve nonroutine problems that involve new ideas

<i>Expressions, Equations, & Inequalities</i>	<i>Graphical Representations</i>	<i>Properties of Plane Figures</i>	<i>Measurement</i>
<ul style="list-style-type: none"> ■ 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 		<ul style="list-style-type: none"> ■ Use several angle properties to find an unknown angle measure 	<ul style="list-style-type: none"> ■ 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
<ul style="list-style-type: none"> ■ create and use basic families of functions (which include linear, absolute value, and quadratic) to model and solve problems in common settings ■ explore and use different methods to solve systems of equations ■ manipulate radical expressions (e.g., rationalize denominators) 	<ul style="list-style-type: none"> ■ graph linear equations and inequalities, determine slopes of lines, identify parallel and perpendicular lines, and find distances ■ identify characteristics of figures from a general equation 	<ul style="list-style-type: none"> ■ apply special right-triangle properties and the Pythagorean theorem to solve congruent and similar shape problems 	<ul style="list-style-type: none"> ■ apply a variety of strategies using relationships between perimeter, area, and volume to calculate desired measures