Idaho Standards Achievement Tests

Achievement Level Descriptors

English Language Arts, Mathematics, and High School End-of-Course Assessments for Chemistry and Biology

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Achievement Level

English Language Arts and Mathematics Cut Scores

Grade Level	Lev	el 1	Leve	el 2	Leve	el 3	Lev	el 4
ELA	From	То	From	То	From	То	From	То
3	2000_ 2001	2366	2367	2431	2432	2489	2490	2636_ 2811
4	2198_ 2032	2415	2416	2472	2473	2532	2533	2690_ 2867
5	2239 _ <u>2056</u>	2441	2442	2501	2502	2581	2582	2724 _ <u>2916</u>
6	2259_ 2079	2456	2457	2530	2531	2617	2618	2748 _ <u>2937</u>
7	2268_ 2082	2478	2479	2551	2552	2648	2649	2768 _ <u>2964</u>
8	2292 _ 2097	2486	2487	2566	2567	2667	2668	2790_ 2989
9	<u>2102</u>	<u>2487</u>	<u>2488</u>	<u>2570</u>	<u>2571</u>	<u>2669</u>	<u>2670</u>	<u>3032</u>
10	2102	<u>2490</u>	<u>2491</u>	<u>2576</u>	<u>2577</u>	<u>2676</u>	<u>2677</u>	<u>3032</u>
11	2209 _ <u>2102</u>	2492	2493	2582	2583	2681	2682	3000 _ <u>3032</u>
Math	From	То	From	То	From	То	From	То
3	2000_ 2071	2380	2381	2435	2436	2500	2501	2613_ 2762
4	2255_ 2090	2410	2411	2484	2485	2548	2549	2663_ <u>2834</u>
5	2265_ 2095	2454	2455	2527	2528	2578	2579	2710_ 2891
6	2263_ 2103	2472	2473	2551	2552	2609	2610	2752_ 2911
7	2243_ 2108	2483	2484	2566	2567	2634	2635	2789 _ <u>2964</u>
8	2239_ 2113	2503	2504	2585	2586	2652	2653	2819_ 2993
9	<u>2118</u>	<u>2514</u>	<u>2515</u>	<u>2598</u>	<u>2599</u>	<u>2675</u>	<u>2676</u>	<u>3085</u>
10	<u>2118</u>	<u>2528</u>	<u>2529</u>	<u>2613</u>	<u>2614</u>	<u>2696</u>	<u>2697</u>	<u>3085</u>
11	2242_ <u>2118</u>	2542	2543	2627	2628	2717	2718	3000_ <u>3085</u>

High School End-of-Course Chemistry and Biology Cut Scores

EOC	Below Basic		Basic		Proficient		Advanced	
Chemistry	From	То	From	То	From	То	From	То
	<u>116</u>	187	188	199	200	216	217	<u>283</u>
Biology	From	То	From	То	From	То	From	То
	<u>116</u>	193	194	199	200	213	214	<u>282</u>

	The student who just enters Level 2 should be able to:
READING Literary Text	 Use some details and information from text to partially support answers or basic inferences.
Targets 1-7	 In texts of low-to-moderate complexity, summarize central ideas, key events, or the sequence of events presented in a text.
	 In texts of low-to-moderate complexity, determine intended meaning of words through context, relationships, structure, or resources.
	 In texts of low-to-moderate complexity, explain his or her inferences about characters, feelings, and author's message.
	 Explain how information is presented or connected within or across texts of low-to- moderate complexity.
	Specify or compare relationships across texts of low-to-moderate complexity.
	 Demonstrate knowledge of text structures or text features in texts of low-to- moderate complexity.
	 Interpret use of language by distinguishing literal from non-literal meanings of words or phrases used in context in texts of low-to-moderate complexity.
READING Informational Text Targets 8–14	 Use some details and information from text to partially support answers or basic inferences.
	 In texts of low-to-moderate complexity, summarize central ideas, key events, or the sequence of events presented in a text.
	 In texts of low-to-moderate complexity, determine intended meaning of words through context, relationships, structure, or resources.
	 In texts of low-to-moderate complexity, explain his or her inferences about characters, feelings, and author's message.
	 Explain how information is presented or connected within or across texts of low-to- moderate complexity.
	Specify or compare relationships across texts of low-to-moderate complexity.
	 Demonstrate knowledge of text structures or text features in texts of low-to- moderate complexity.
	 Interpret use of language by distinguishing literal from non-literal meanings of words or phrases used in context in texts of low-to-moderate complexity.

WRITING Targets	 Write or revise one simple-structure paragraph, demonstrating some awareness of narrative techniques, chronology, appropriate transitional strategies for coherence, or outboa's profit appropriate to purpose
1-10	 Write simple complete compositions, demonstrating some narrative techniques: chronology, transitional strategies for coherence, structure, or author's craft with possible demonstration of purpose.0
	• Write or revise one simple-structure informational/explanatory paragraph, demonstrating some awareness of how to organize ideas by stating focus, including transitional strategies for coherence, supporting details, or a conclusion.
	 Write or revise, simple informational/explanatory texts on a topic, occasionally attending to purpose and audience, organizing ideas by stating a focus, including structures and transitional strategies for coherence, including some supporting details and a conclusion.
	 Show some awareness of how to use text features in information texts to enhance meaning with minimal support (e.g., directive or general feedback).
	 Write or revise one simple-structure paragraph demonstrating ability to state an opinion about a topic or source, set a context, loosely organize ideas using linking words, develop some supporting reasons, or provide a partial conclusion.
	 Write simple complete opinion pieces, demonstrating some ability to state opinions about topics or sources, attend to purpose and audience, organize ideas by stating a context and focus, include structures and transitional strategies for coherence, develop few supporting reasons, and provide a conclusion.
	 With some support (e.g., directive and general feedback), use language and vocabulary that is appropriate to the purpose and audience when revising or composing texts.
	 Apply or edit grade-appropriate grammar, usage, and mechanics to clarify a message and edit narrative, informational, and opinion texts.
	 Use tools of technology to produce texts with minimal support (e.g., whole broken into parts).
SPEAKING/ LISTENING Target 4	• Interpret or use information delivered orally or audio-visually with some support (e.g., repeated listening or viewing).

	The student who just enters Level 3 should be able to:
READING Literary Text	 Use explicit details and information from texts of moderate complexity to support answers or basic inferences.
Targets 1-7	 Identify or summarize central ideas, key events, or sequence of events presented in texts of moderate complexity.
	 Determine intended meaning of words through context, relationships, structure, or resources in texts of moderate complexity.
	 Interpret and explain inferences and author's message and distinguish point of view in texts of moderate complexity.
	Specify and compare or contrast relationships across texts of moderate complexity.
	 Demonstrate knowledge of text structures or text features to obtain, interpret, explain, or connect information in texts of moderate complexity.
	 Interpret use of language by distinguishing literal from non-literal meanings of words or phrases used in context in texts of moderate complexity.
READING Informational Text Targets 8–14	 Use explicit details and information from texts of moderate complexity to support answers or basic inferences.
	 Identify or summarize central ideas, key events, or sequence of events presented in texts of moderate complexity.
	 Determine intended meaning of words through context, relationships, structure, or resources in texts of moderate complexity.
	 Interpret and explain inferences and author's message and distinguish point of view in texts of moderate complexity.
	Specify and compare or contrast relationships across texts of moderate complexity.
	 Demonstrate knowledge of text structures or text features to obtain, interpret, explain, or connect information in texts of moderate complexity.
	 Interpret use of language by distinguishing literal from non-literal meanings of words or phrases used in context in texts of moderate complexity.

WRITING Targets 1-10	 Write or revise one paragraph, demonstrating narrative techniques, chronology, appropriate transitional strategies for coherence, or author's craft appropriate to purpose.
	 Write full compositions, demonstrating narrative techniques: chronology, transitional strategies for coherence, or author's craft with minimal demonstration of purpose.
	 Write or revise one or more informational/explanatory paragraphs, demonstrating ability to organize ideas by stating focus, including transitional strategies for coherence, supporting details, or a conclusion.
	• Use text features in information texts to enhance meaning without support.
	 Write or revise one or more paragraphs, demonstrating ability to state an opinion about a topic or source, set a context, organize ideas using linking words, develop supporting reasons, or provide an appropriate conclusion.
	 Write full opinion pieces, demonstrating ability to state opinions about topics or sources, attend to purpose and audience, organize ideas by stating a context and focus, include structures and transitional strategies for coherence, develop supporting reasons, and provide a conclusion.
	 Without support, use grade-level vocabulary appropriate to the purpose and audience when revising and composing text.
	 Apply or edit grade-appropriate grammar, usage, and mechanics to clarify a message and edit narrative, informational, and opinion texts.
	Without support, use tools of technology to produce texts.
SPEAKING/ LISTENING	Interpret and use information delivered orally or audio-visually without support.
Target 4	
	The student who just enters Level 4 should be able to:
READING Literary Text	 Use explicit details and information from the text to support answers and basic inferences in highly complex texts.
Targets 1-7	 Identify and summarize central ideas, key events, or the sequence of events presented in highly complex texts.
	 Determine intended meaning of words through context, relationships, structure, or resources in highly complex texts.
	 Use evidence to interpret and explain inferences and distinguish point of view from that of the narrator/character in highly complex texts.
	Specify, compare, and contrast relationships across highly complex texts.
	 Demonstrate knowledge of text structures and text features to interpret or explain/connect information in highly complex texts.
	 Begin to interpret use of language by distinguishing literal from non-literal meanings of words or phrases used in context in highly complex texts.

READING Informational Text Targets 8–14	 Use explicit details and information from the text to support answers and basic inferences in highly complex texts. Identify and summarize central ideas, key events, or the sequence of events presented in highly complex texts. Determine intended meaning of words through context, relationships, structure, or resources in highly complex texts. Use evidence to interpret and explain inferences and distinguish point of view from that of the narrator/character in highly complex texts. Specify, compare, and contrast relationships across highly complex texts. Demonstrate knowledge of text structures and text features to interpret or explain/connect information in highly complex texts. Begin to interpret use of language by distinguishing literal from non-literal meanings of words or phrases used in context in highly complex texts. Evaluate or interpret the impact/intent of literary devices or connotative meaning of words and phrases used in context and the impact of those word choices on reader interpretation of texts of high complexity.
WRITING Targets 1-10	 Begin to write or revise one or more complex paragraphs, demonstrating specific narrative techniques, chronology, appropriate transitional strategies for coherence, and author's craft appropriate to purpose. Begin to write full, complex compositions, demonstrating specific narrative techniques: chronology, appropriate transitional strategies for coherence, structure, and author's craft appropriate to purpose. Begin to write or revise one or more complex informational/explanatory paragraphs, demonstrating ability to organize ideas by stating focus, including appropriate transitional strategies for coherence, supporting teransitional strategies for coherence, supporting details, and an appropriate conclusion. Begin to write or revise one or more complex paragraphs, demonstrating ability to state opinions about topics or sources, set a context, organize ideas using linking words or phrases, develop supporting reasons, or provide an appropriate, strong conclusion. Begin to write complex opinion pieces, demonstrating ability to state opinions about topics or sources, and audience, organize ideas by stating a context and focus, include structures and appropriate transitional strategies for coherence, develop supporting reasons, and provide an appropriate conclusion. Begin to use complex language and vocabulary appropriate to the purpose and audience when revising and composing texts. Begin to use multiple tools of technology to produce texts.
SPEAKING/ LISTENING Target 4	Begin to critically interpret and use information delivered orally or audio-visually.

	The student who just enters Level 2 should be able to:
READING Literary Text	 Use some details and information from the text to minimally support answers and inferences in texts of low-to-moderate complexity.
Targets 1–7	 Identify or summarize some central ideas/key events in texts of low-to-moderate complexity.
	 Determine the intended meanings of some words, including words with multiple meanings, based on context, word relationships, word structure, and use of resources, with support in texts of low-to-moderate complexity.
	 Use supporting evidence to justify/explain own inferences in texts of low-to- moderate complexity.
	 Interpret, specify, or compare how information is presented across texts of low-to moderate complexity.
	 Relate partial knowledge of text structures, genre-specific features, or formats to obtain, interpret, explain, or connect information within texts of low-to-moderate complexity.
	 Determine some figurative language, literary devices, or connotative meanings of words and phrases used in context in texts of low-to-moderate complexity.
READING Informational	 Identify some details and information from the text to support answers or basic inferences about information presented in texts of low-to-moderate complexity.
Text Targets 8–14	 Identify some central ideas, key events, and procedures with support.
	• Determine intended meanings of some words, academic words, domain-specific words, and words with multiple meanings, based on context, word relationships, word structure, or partial reliance on use of resources in texts of low-to-moderate complexity.
	 Provide some supporting evidence to justify or interpret how information is presented in texts of low-to-moderate complexity.
	 Interpret, explain, or connect information presented within or across texts of low- to-moderate complexity.
	 Relate knowledge of some text structures or text features to obtain, interpret, or explain information in texts of low-to-moderate complexity.
	 Determine some figurative language/literary devices or connotative meanings of words and phrases used in context and partially explain the impact of those word choices on meaning and tone in texts of low-to-moderate complexity.

WRITING Targets 1-10	 Write or revise one simple-structure paragraph, demonstrating some awareness of narrative techniques, chronology, appropriate transitional strategies for coherence, or author's craft.
	 Write simple complete compositions, occasionally demonstrating narrative techniques, appropriate transitional strategies for coherence, or author's craft.
	 Write or revise one simple-structure informational/explanatory paragraph, demonstrating some awareness of how to organize ideas by stating a focus, include transitional strategies for coherence or supporting evidence and elaboration, or write body paragraphs with a conclusion.
	 Write simple informational/explanatory text on a topic, occasionally attending to purpose and audience; using minimal organization of ideas by stating a focus; including structures and transitional strategies for coherence; and including evidence, elaboration, and a conclusion.
	 With some support (e.g., directive and general feedback), show some awareness of how to use text features in informational texts to enhance meaning.
	• Write or revise one simple paragraph, demonstrating a limited ability to state opinions about topics or sources, including few organized ideas, loosely developed evidence/reasons and elaboration, and an undeveloped conclusion.
	 Write simple opinion pieces demonstrating some ability to state opinions about a topic or source, minimally attending to purpose and audience; organize few ideas by stating a context and focus; include some structures and transitional strategies for coherence; include few supporting reasons/evidence; and include a conclusion.
	 With some support (e.g., directive or general feedback) show some awareness of how to use language and vocabulary appropriate to purpose and audience when revising or composing texts.
	 Apply or edit grade-appropriate grammar, usage, and mechanics to clarify a message and edit narrative, informational, and opinion texts with support (e.g., grammar aids).
	 Use tools of technology to gather information, make revisions, or produce texts with support (e.g., whole broken into parts).
SPEAKING/ LISTENING Target 4	• Interpret and use information delivered orally or audio-visually with support (e.g., some directive feedback).
RESEARCH/ INQUIRY	 Conduct short simple research projects to answer single-step questions or to investigate and paraphrase different aspects of a narrow topic or concept.
Targets 1-4	 Locate some information to support ideas and select some information from data or print and non-print text sources.
	• Distinguish relevant-irrelevant information with support (e.g., some directive feedback).
	Generate some conjectures or opinions.

	The student who just enters Level 3 should be able to:
READING Literary Text	 Use details and information from texts of moderate complexity to support answers and inferences.
Targets	Identify or summarize central ideas/key events in texts of moderate complexity.
1-7	 Begin to determine the intended meanings of words, including words with multiple meanings, based on context, word relationships, word structure, and use of resources in texts of moderate complexity.
	 Use supporting evidence to justify/explain own inferences in texts of moderate complexity.
	 Interpret, specify, or compare how information is presented across texts of moderate complexity.
	 Begin to relate knowledge of text structures, genre-specific features, or formats to obtain, interpret, explain, or connect information within texts of moderate complexity.
	 Determine or interpret figurative language, literary devices, or connotative meanings of words and phrases used in context and partially explain the impact of those word choices on meaning and tone in texts of moderate complexity.
READING Informational	 Identify details and information from texts of moderate complexity to support answers or basic inferences about information presented and provided.
Text Targets	 Identify or summarize central ideas, key events, and procedures in texts of moderate complexity.
8-14	 Determine intended meanings of words, academic words, domain-specific words, and words with multiple meanings, based on context, word relationships, word structure, or use of resources, with primary focus on the academic vocabulary common to texts of moderate complexity.
	 Use supporting evidence to justify or interpret how information is presented or integrated in texts of moderate complexity.
	 Interpret, explain, or connect information presented within or across texts of moderate complexity.
	 Relate knowledge of text structures or text features to obtain, interpret, explain, or integrate information in texts of moderate complexity.
	 Determine or interpret figurative language/literary devices or connotative meanings of words and phrases used in context and explain the impact of those word choices on meaning and tone in texts of moderate complexity.
	 Use supporting evidence to justify or interpret how information is presented or integrated in texts of moderate complexity.
	 Interpret, explain, or connect information presented within or across texts of moderate complexity.
	 Relate knowledge of text structures or text features to obtain, interpret, explain, or integrate information in texts of moderate complexity.
	 Determine or interpret figurative language/literary devices or connotative meanings of words and phrases used in context and explain the impact of those word choices on meaning and tone in texts of moderate complexity.

WRITING Targets 1-10	 Write or revise one paragraph, demonstrating narrative techniques, chronology, appropriate transitional strategies for coherence, and begin to use author's craft with appropriate purpose.
	 Write full compositions, demonstrating specific narrative techniques, appropriate transitional strategies for coherence, and begin to use author's craft with limited purpose.
	 Write one full informational/explanatory paragraph, demonstrating ability to organize ideas by stating a focus, including transitional strategies for coherence or supporting evidence and elaboration, and begin to write body paragraphs appropriate to a purpose and audience.
	 Write informational/explanatory texts on a topic, attending to purpose and audience; organize ideas by stating a focus; include structures and transitional strategies for coherence; include supporting evidence and elaboration; and begin to develop a complete conclusion.
	• Use some text features in informational text to enhance meaning without support.
	 Write or revise one paragraph, demonstrating ability to state opinions about topics or sources, set loose context, minimally organize ideas, develop evidence/reasons and elaboration, and develop a conclusion with limited purpose and audience.
	 Write opinion pieces, demonstrating ability to state opinions about topics or sources, attending to purpose and audience; organize ideas by stating a context and focus; include structures and transitions for coherence; include some supporting evidence/reasons and elaboration; and develop an appropriate conclusion.
	 Strategically use language and vocabulary appropriate to purpose and audience when revising or composing texts without support.
	 Apply or edit grade-appropriate grammar, usage, and mechanics to clarify a message and edit narrative, informational, and opinion texts without support.
	Use tools of technology to gather information, make revisions, or produce texts.
SPEAKING/ LISTENING Target 4	Interpret and use information delivered orally or audio-visually without support.
RESEARCH/ INQUIRY	 Conduct short, limited research projects to answer multi-step questions, or to investigate and paraphrase different aspects of a broader topic or concept.
Targets 1-4	 Locate information to support central ideas and subtopics and select information and partially integrate information from data or print and non-print sources.
	Distinguish relevant-irrelevant information without support.
	Generate partial conjectures or opinions and include partial evidence to support them based on evidence collected.

The student who just enters Level 4 should be able to:		
READING Literary Text	 Use explicit details and implicit information from the text to support answers and inferences in highly complex texts. 	
Targets 1-7	 Begin to consistently identify and summarize central ideas/key events in highly complex texts. 	
	 Begin to determine the intended meanings of words, including words with multiple meanings, based on context, word relationships, word structure, and use of resources in highly complex texts. 	
	 Begin to use extensive supporting evidence to justify/explain own inferences in depth in highly complex texts. 	
	 Begin to use extensive detail to interpret, specify, or compare how information is presented across highly complex texts. 	
	 Relate knowledge of text structures, genre-specific features, or formats to obtain, interpret, explain, or connect information within highly complex texts. 	
	 Begin to determine and interpret figurative language, literary devices, or connotative meanings of words and phrases used in context and explain the impact of those word choices on meaning and tone in highly complex texts. 	
READING Informational Text	 Begin to identify and explain explicit details and implicit information from highly complex texts to support answers and inferences about information presented and provided. 	
Targets 8–14	 Identify and summarize central ideas, key details, and procedures in highly complex texts. 	
	 Begin to determine the intended meanings of words, academic words, domain- specific words, and words with multiple meanings, based on context, word relationships, word structure, or use of resources, with primary focus on the academic vocabulary common to highly complex texts. 	
	 Begin to use detailed supporting evidence to justify or interpret how information is presented and integrated in highly complex texts. 	
	 Begin to interpret, explain, or connect information presented within or across highly complex texts. 	
	 Begin to relate knowledge of text structures or text features to obtain, interpret, explain, and integrate information in highly complex texts. 	
	 Begin to determine or interpret figurative language/literary devices or connotative meanings of words and phrases used in context and the impact of those word choices on meaning and tone in highly complex texts. 	

WRITING Targets 1-10	 Begin to write or revise one or more complex paragraphs, demonstrating specific narrative techniques, chronology, appropriate transitional strategies for coherence, or author's craft appropriate to purpose.
	 Begin to write full complex compositions, demonstrating, specific narrative techniques, appropriate transitional strategies for coherence, and author's craft appropriate to purpose.
	 Begin to write or revise more than one complex informational/explanatory paragraph, demonstrating ability to including appropriate transitional strategies for coherence or supporting evidence and elaboration, and writing body paragraphs with a conclusion appropriate to purpose and audience.
	 Begin to write full, complex informational/explanatory texts on a topic, attending to purpose and audience; organize ideas by stating a focus; include structures and appropriate transitional strategies for coherence; and include strong supporting details and a well- developed, appropriate conclusion.
	Begin to use text features in information texts to enhance meaning.
	 Begin to write or revise more than one complex paragraph, demonstrating ability to state opinions about topics or sources, set a context, efficiently organize ideas, develop strong supporting evidence/reasons and elaboration, and develop an appropriate, strong conclusion.
	 Begin to write complex opinion pieces, clearly demonstrating ability to state opinions about topics or sources, attending to purpose and audience; efficiently organize ideas by stating a context and focus; include more complex structures and appropriate transitional strategies for coherence; develop strong supporting evidence/reasons; and provide an appropriate, well-developed conclusion.
	 Begin to strategically use language and vocabulary appropriate to purpose and audience when revising or composing complex texts.
	 Begin to apply or edit appropriate grammar, usage, and mechanics to clarify a message and edit narrative, informational, and opinion texts.
	 Begin to use multiple tools of technology to gather information, make revisions, or produce texts.
SPEAKING/ LISTENING Target 4	Begin to critically interpret and use information delivered orally or audio-visually.
RESEARCH/	Begin to conduct research projects to answer multi-step questions or to investigate
INQUIRY	and paraphrase different aspects of a broader topic or concept.
Targets 1–4	 Begin to locate information to support central ideas and subtopics and select and integrate critical information from two or more data or print and non-print text sources.
	Begin to distinguish relevant-irrelevant information.
	 Begin to generate strong conjectures or opinions and cite relevant evidence to support them based on evidence collected and analyzed.

	The student who just enters Level 2 should be able to:
READING Literary Text	 Cite some textual evidence to support conclusions drawn from texts of low-to- moderate complexity.
Targets 1–7	 Use some explicit and limited implicit information to support emerging inferences or analyses.
	Partially summarize central ideas and some key events.
	 Determine the intended meaning of some grade-appropriate words, including academic and domain-specific words within context.
	 Use some supporting evidence to justify interpretations of information presented or indicate how information is integrated in one or more texts.
	 Identify and begin to compare how information is presented within or across texts of low-to- moderate complexity.
	 Use basic knowledge of text structures or genre-specific features to begin to integrate or analyze information.
	Interpret the meaning of some common figurative language.
READING Informational	Cite some textual evidence to support conclusions drawn from texts of low-to- moderate complexity.
Text Targets	 Use some explicit and limited implicit information to support emerging inferences or analyses.
8-14	Partially summarize central ideas and some key events.
	 Determine the intended meaning of some grade-appropriate words, including academic and domain-specific words within context.
	 Use some supporting evidence to justify interpretations of information presented or indicate how information is integrated in texts of low-to-moderate complexity.
	 Identify and begin to compare how information is presented within or across texts of low-to- moderate complexity.
	 Use basic knowledge of text structures or genre-specific features to begin to integrate or analyze information.
	 Interpret the meaning of some common figurative language.
WRITING Targets	• Write or revise one paragraph, demonstrating some narrative techniques, chronology, appropriate transitional strategies for coherence, or author's craft.
1-10	 Plan, write, revise, and edit a full composition, occasionally demonstrating narrative techniques, chronology, transitional strategies for coherence, or author's craft.
	 Write or revise one informational/explanatory paragraph, demonstrating some ability to organize ideas by stating a focus, including some transitional strategies for coherence or some supporting evidence and elaboration, or writing body paragraphs or a conclusion.
	 Plan, write, revise, and edit full informational/explanatory text on a topic, attending to purpose and audience, organizing ideas by stating a focus, including structures and transitional strategies for coherence, including supporting evidence and elaboration, and developing a conclusion.
	 Use some appropriate text features (headings, bold text, captions, etc.) in informational texts to enhance meaning.
	 Write or revise one paragraph, demonstrating some ability to state opinions about topics or sources, set a loose context, minimally organize ideas using linking words or phrases, develop evidence/reasons and some elaboration, or develop a conclusion.

	 Plan, write, revise, and edit opinion pieces, demonstrating some ability to state opinions about topics or sources, minimally attending to purpose and audience; organize ideas by stating a context and focus; include structures and some transitional strategies for coherence; develop some evidence/reasons and elaboration; and develop a conclusion. With minimal support, use some common language and vocabulary (including academic or domain-specific vocabulary) appropriate to the purpose and audience when revising or composing texts. Show some ability to apply and edit text, demonstrating a partial understanding of Standard English grammar conventions and usage (e.g., capitalization, punctuation, and spelling). Begin to use the tools of technology (including the Internet), with substantial guidance and support, to produce and publish writing.
SPEAKING/ LISTENING Target 4	 Interpret and use information delivered orally or audio-visually with support (e.g., some directive feedback).
RESEARCH/ INQUIRY Targets 1-4	 Begin to conduct simple, short research projects with some guidance. With some guidance, begin to locate information to support central ideas and subtopics; select and integrate information from multiple sources. With some guidance, begin to gather and distinguish relevant information, summarize/paraphrase information from multiple sources, and provide a list of sources. With some guidance, begin to integrate information from several sources on the same topic to generate an informed opinion in order to write about the subject knowledgeably.
	The student who just enters Level 3 should be able to:
READING Literary Text Targets 1–7	 With some consistency, identify some relevant textual evidence to support conclusions drawn from texts of moderate complexity. Identify and interpret the meaning of some figurative language, some literary devices, and some connotative meanings of words and phrases. Accurately summarize central ideas and key events. With some consistency, determine the intended or precise meaning of grade-appropriate words, including academic and domain-specific words. Apply some relevant reasoning and textual evidence to justify developing analyses or judgments. With some consistency, analyze how information is presented within or across texts of moderate complexity, identifying some relationships among targeted aspects. With some consistency, analyze some text structures and genre-specific features or form each form multiple brute and identify the import of the precise or meaning or precise or meaning or precise.
	presentation.

READING Informational Text Targets	 With some consistency, identify some relevant textual evidence to support conclusions drawn from texts of moderate complexity.
	 Identify and interpret the meaning of some figurative language and some literary devices or connotative meanings of words and phrases.
8-14	Accurately summarize central ideas and key events.
	 With some consistency, determine the intended or precise meaning of grade- appropriate words, including academic and domain-specific words.
	 Apply some relevant reasoning and textual evidence to justify developing analyses or judgments.
	• With some consistency, analyze how information is presented within or across texts of moderate complexity, identifying some relationships among targeted aspects.
	 With some consistency, analyze some text structures, genre-specific features, or formats from multiple texts of moderate complexity.
WRITING Targets 1-10	 Write or revise one or more paragraphs, demonstrating narrative techniques, chronology, appropriate transitional strategies for coherence, or author's craft appropriate to purpose, including a conclusion.
	 Plan, write, revise, and edit a full composition, demonstrating narrative techniques, chronology, appropriate transitional strategies for coherence, author's craft appropriate to purpose, including a conclusion, and evidence from texts to support analysis, reflection, and research.
	 Write or revise one or more informational/explanatory paragraphs, demonstrating ability to organize ideas by stating a focus, including transitional strategies for coherence, or supporting evidence and elaboration, or writing body paragraphs or a conclusion appropriate to purpose and audience.
	 Plan, write, revise, and edit full informational/explanatory text on a topic, attending to purpose and audience; organize ideas by stating a focus, include structures and transitional strategies for coherence, include supporting evidence and elaboration, and develop a conclusion.
	 Use appropriate text features (headings, bold text, captions, etc.) in informational texts to enhance meaning.
	 Write or revise one or more paragraphs, demonstrating ability to state opinions about topics or sources, set a context, organize ideas using linking words or phrases, develop supporting evidence/reasons and elaboration, or develop a conclusion appropriate to purpose and audience.
	 Plan, write, revise and edit full opinion pieces, demonstrating ability to state opinions about topics or sources, attend to purpose and audience, organize ideas by stating a context and focus, include structures and transitional strategies for coherence, develop supporting evidence/reasons, and develop a conclusion appropriate to purpose and audience.
	 Use a range of language and vocabulary (including academic or domain-specific vocabulary) appropriate to the purpose and audience when revising or composing texts.
	 Adequately apply and edit text, demonstrating a understanding of Standard English grammar conventions and usage (e.g., capitalization, punctuation, and spelling).
	• Use the tools of technology (including the Internet) to produce and publish writing.
SPEAKING/ LISTENING Target 4	Interpret and use information delivered orally or audio-visually.

RESEARCH/ INQUIRY Targets 1-4	 Conduct short research projects. Locate information to support central ideas and subtopics; select and integrate information from multiple sources. Gather and distinguish relevant information, summarize/paraphrase information from multiple sources, and provide a list of sources. Integrate information from several sources on the same topic to generate an informed opinion and write about the subject knowledgeably.
	The student who just enters Level 4 should be able to:
READING Literary Text Targets 1–7	 Consistently cite specific and relevant textual evidence to support conclusions drawn from highly complex texts. Accurately interpret the meaning and impact of most figurative language and literary devices or cognitive meanings of words and phrases. Consistently and accurately summarize central ideas and key events. Determine the intended and precise meaning of most grade-appropriate words, including academic and domain-specific words. Apply appropriate and relevant reasoning and a range of textual evidence to justify analysis or judgments. Analyze and/or compare how information is presented within or across highly complex texts, identifying relationships among targeted aspects. Consistently evaluate text structures and genre-specific features across texts, and identify the impact of those choices on meaning or presentation.
READING Informational Text Targets 8–14	 Consistently cite specific, relevant textual evidence to support conclusions drawn from highly complex texts. Accurately interpret the meaning and impact of most figurative language and literary devices or connotative meanings of words and phrases. Consistently and accurately summarize central ideas and key events. Determine the intended and precise meaning of most grade-appropriate words, including academic and domain-specific words. Apply appropriate and relevant reasoning and a range of textual evidence to justify analysis or judgments. Analyze and/or compare how information is presented within or across highly complex texts, identifying relationships among targeted aspects. Consistently evaluate text structures across highly complex texts.

WRITING Targets 1-10	• Write or revise more than one complex paragraphs, demonstrating specific narrative techniques, chronology, appropriate transitional strategies for coherence, or author's craft appropriate to purpose, including a strong conclusion.
	 Plan, write, revise, and edit a full, complex composition, clearly demonstrating specific narrative techniques, chronology, appropriate transitional strategies for coherence, and author's craft appropriate to purpose, including a well-developed conclusion and evidence from texts to support analysis, reflection, and research.
	• Write or revise more than one complex informational/explanatory paragraph, demonstrating ability to organize ideas by stating a focus, including appropriate transitional strategies for coherence, or strong supporting evidence and elaboration, or writing body paragraphs or a conclusion appropriate to purpose and audience.
	 Plan, write, revise, and edit full informational/explanatory text on a topic attending to purpose and audience, organizing ideas by stating a focus, including structures and appropriate transitional strategies for coherence, including strong supporting evidence and elaboration, and developing an appropriate conclusion.
	 Use effective text features (headings, bold text, captions, etc.) in informational texts to enhance meaning.
	 Write or revise more than one paragraph, clearly demonstrating the ability to state opinions about topics or sources, set a context, efficiently organize ideas using linking words or phrases, develop supporting evidence/reasons and some elaboration, or develop a conclusion appropriate to purpose and audience.
	 Plan, write, revise and edit full opinion pieces, demonstrating the ability to state opinions about topics or sources, attend to purpose and audience, efficiently organize ideas by stating a context and focus, include some complex structures and appropriate transitional strategies for coherence, develop strong supporting evidence/reasons and elaboration, and develop an appropriate conclusion.
	 Use a broad range of language and vocabulary (including academic or domain- specific vocabulary) appropriate to the purpose and audience when revising or composing texts.
	 Effectively apply and edit text, demonstrating an understanding of Standard English grammar conventions and usage (e.g., capitalization, punctuation, and spelling).
	 Effectively use the tools of technology (including the Internet) to produce and publish writing.
SPEAKING/ LISTENING Target 4	Begin to critically interpret and use information delivered orally or audio-visually.
RESEARCH/	Begin to critically and effectively conduct short research projects with some guidance.
Targets 1-4	 Begin to critically and effectively locate information to support central ideas and subtopics; select and integrate information from multiple sources.
	 Begin to critically and effectively gather and distinguish relevant information, summarize/paraphrase information from multiple sources, and provide a list of sources.
	 Begin to critically and effectively integrate information from several sources on the same topic to generate an informed opinion and write about the subject knowledgeably.

The student who just enters Level 2 should be able to:	
READING Literary Text Targets 1–7	 Cite some textual evidence to support conclusions drawn from text. Use some explicit and limited implicit information to support emerging inferences or analyses. Partially summarize central ideas and key events using some details from texts of low-to- moderate complexity. Determine the intended meaning of some grade-appropriate words including academic and domain-specific words within context. Use some supporting evidence to justify interpretations of information presented or how information is integrated in one or more texts. Identify and begin to compare how information is presented within or across texts. Relate basic knowledge of text structures or genre-specific features to begin to integrate or analyze information. Interpret the intent of some common figurative language.
READING Informational Text Targets 8–14	 Cite some textual evidence to support conclusions drawn from text. Begin to use explicit and limited implicit information to support emerging inferences or analyses. Partially summarize central ideas and some key events. Determine the intended meaning of grade-appropriate words including academic and domain-specific words within context. Use some supporting evidence to justify interpretations of information presented or how information is integrated in one or more text. Identify and begin to compare how information is presented within or across texts. Use basic knowledge of text structures or genre-specific features to begin to integrate or analyze information. Partially interpret intent of some common figurative language.
WRITING Targets 1-10	 Apply some narrative strategies, textual structures, and transitional strategies for coherence. Use minimal relevant details when writing or revising brief narrative texts. Use minimal support and elaboration when writing brief informational/explanatory texts. Demonstrate some ability to use appropriate text features. Produce argumentative texts and attempt to acknowledge a counterclaim. Demonstrate some awareness of audience and purpose when writing. Pay limited attention to word choice and/or syntax. Plan, write, revise, and edit argument texts demonstrating partial ability to state claims about topics or sources. With some support, use basic language appropriate to the purpose and audience when revising or composing text. Apply or edit a piece of writing, demonstrating a partial understanding of Standard English grammar conventions and usage (e.g., capitalization, punctuation, and spelling) when writing.

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SPEAKING/ LISTENING Target 4	• Have limited engagement and interaction with media and source materials and minimally account for elements that contribute to points of view.
RESEARCH/ INQUIRY Targets	 Demonstrate minimal research and evaluation skills. Draw broad conclusions from source materials. Construct a partial claim with limited use of evidence
1-4	 Attempt to summarize main ideas, topics, key events, or procedures in informational texts but use limited supporting or relevant ideas or evidence.
	Develop an argument with a claim and minimal support.
	The student who just enters Level 3 should be able to:
READING Literary Text	• With some consistency, identify relevant textual evidence to support conclusions drawn from texts of moderate complexity.
Targets 1–7	 Identify and interpret some figurative language and some literary devices or connotative meanings of words and phrases.
	Accurately summarize central ideas and key events.
	 With some consistency, determine the intended or precise meaning of grade- appropriate words including academic and domain-specific words.
	 Apply some relevant reasoning and textual evidence to justify developing analyses or judgments made about intended effects.
	 With some consistency, analyze how information is presented within or across texts of moderate complexity, identifying some relationships among targeted aspects, including analysis of authors' points of view.
	 With some consistency, analyze some text structures or genre-specific features or formats from multiple sources of text and identify the impact of those choices on meaning or presentation.
READING Informational Text Targets 8–14	• With some consistency, identify relevant textual evidence to support conclusions drawn from text.
	 Identify and interpret some figurative language and some literary devices or connotative meanings of words and phrases.
	Accurately summarize central ideas and key events.
	 Determine the intended or precise meaning of grade-appropriate words including academic and domain-specific words.
	 Apply some relevant reasoning and textual evidence to justify analyses or judgments made about intended effects.
	 Analyze how information is presented within or across texts, identifying some relationships among targeted aspects.
	 Analyze some text structures, genre-specific features or formats from multiple sources of text and the impact of those choices on meaning or presentation.

 Write longer narrative texts demonstrating use of specific narrative techniques, chronology, and appropriate transitional strategies for coherence. Employ effective text features and visual components appropriate to purpose
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 Demonstrate some ability to plan, write, revise, and edit full argument pieces, demonstrating ability to state claims about topics or sources; attend to purpose and audience; organize ideas by stating a context and focus; include structures and appropriate transitional strategies for coherence; identify supporting evidence/reasons and elaboration from credible sources; and develop an appropriate conclusion.
 Use a range of precise language and vocabulary (including academic words, domain- specific vocabulary, and figurative language) and style appropriate to the purpose and audience when revising or composing text.
 Demonstrate some ability to edit a piece of writing, showing a strong adequate understanding of Standard English grammar conventions and usage (e.g., capitalization, punctuation, and spelling) when writing.
 Demonstrate some use of technology, including the Internet, to produce and publish writing.
Engage and interact with media and source materials and account for elements that contribute to points of view.
 Use research/inquiry methods to explore a topic. Select from and adequately analyze sources from a variety of perspectives and present findings. Adequately analyze authoritative sources of evidence with some diversity of formats to support a presentation. Search for relevant authoritative information and evaluate the uses and limitations of source material. Generate a specific debatable claim or main idea and cite some relevant evidence.
The student who just enters Level 4 should be able to:
 Cite specific, relevant textual evidence to support conclusions drawn from text. Interpret the intent and impact of most figurative language and literary devices or connotative meanings of words and phrases. Summarize central ideas and key events in texts of high complexity. Determine the intended and precise meaning of most grade-appropriate words including academic and domain-specific words. Apply appropriate and relevant reasoning and a range of textual evidence to justify analyses or judgments made about intended effects. Analyze or compare how information is presented within or across texts, identifying relationships among targeted aspects. Evaluate text structures or genre-specific features or formats from multiple sources of text and identify the impact of those choices on meaning or presentation

READING Informational Text Targets 8-14	 Cite specific, relevant textual evidence to support conclusions drawn from text. Interpret the intent and impact of most figurative language and literary devices or cognitive meanings of words and phrases. Summarize central ideas and key events in texts of high complexity. Determine the intended and precise meaning of most grade-appropriate words including academic and domain-specific words. Apply appropriate and relevant reasoning and a range of textual evidence to justify analysis or judgments made about intended effects. Analyze or compare how information is presented within or across texts, identifying relationships among targeted aspects. Evaluate text structures across texts.
WRITING Targets 1-10	 Demonstrate effective use of multiple, specific narrative techniques, chronology, and appropriate transitional strategies for coherence. Demonstrate effective use of precise words and phrases and use relevant descriptive details and sensory language to convey experiences or author's craft appropriate to purpose, including a conclusion that reflects on the narrated experience. Demonstrate use of multiple, specific narrative techniques, chronology, and appropriate transitional strategies for coherence when writing longer narrative texts. Demonstrate effective use of precise language and formal style to organize ideas by stating a focus when writing or revising more than one informational or explanatory paragraph. Employ advanced text features and visual components appropriate to purpose. Effectively use an extensive range of language and vocabulary (including academic words, domain-specific vocabulary, and figurative language) and style appropriate to the purpose and audience when revising or composing text. Effectively apply or edit a piece of writing, demonstrating a strong understanding of Standard English grammar conventions and usage (e.g., capitalization, punctuation, and spelling) when writing.
SPEAKING/ LISTENING Target 4	Effectively engage and interact with media and source materials and account for elements that contribute to points of view.
RESEARCH/ INQUIRY Targets 1-4	 Employ multimodal resources to advance a sustained exploration of a topic. Synthesize multiple sources of relevant, authoritative information and discriminate among them to support an analysis. Search for relevant information from diverse authoritative sources. Systematically evaluate the uses and limitations of sources. Generate an authoritative claim. Evaluate and cite substantial, relevant evidence.

	The student who just enters Level 2 should be able to:
READING Literary Text Targets 1-7	 Use textual evidence to justify analysis regarding theme, story elements, dialogue, and point of view in texts of low-to-moderate complexity.
	 Partially summarize central ideas and key events using some details from texts of low-to- moderate complexity.
	 Partially analyze relationships among literary elements within or across texts of low-to- moderate complexity or differing versions of texts representing various genres and text types.
	 Partially analyze the structure within or between two or more texts and genre- specific features or formats of texts and the impact of those choices on meaning or presentation.
	• Partially determine or interpret the impact/intent of literary devices or connotative meaning of contextually used words and phrases and the impact of those word choices on reader interpretation of texts of low-to-moderate complexity.
READING Informational	 Identify textual evidence from sources across disciplines to support conclusions, inferences, connections, and steps to processes.
Text Targets	 Partially summarize central ideas, topics/subtopics, key events, or procedures using some supporting ideas and details.
8-14	 Partially determine connotative and denotative meanings of academic- and domain- specific words/phrases and words with multiple meanings, based on context-word relationships, word structure, and differentiating vocabulary meanings, in texts of low-to- moderate complexity.
	 Partially apply reasoning and some textual evidence to justify inferences or interpret author's presentation of information; partially delineate and evaluate the argument assessing whether the reasoning is sound.
	 Partially analyze a case in which two or more texts provide conflicting information on the same topic and identify where the texts disagree on matters of fact or interpretation regarding the authors' points of view.
	• Partially relate knowledge of text structures and genre-specific features or formats of texts to compare/analyze the impact of those choices on meaning or presentation.
	 Partially determine or interpret the impact/intent of literary devices or connotative meaning of words and phrases used in context and the impact of those word choices on reader interpretation of texts of low-to-moderate complexity.

WRITING Targets 1-10	 Apply some narrative strategies, textual structures, and transitional strategies for coherence. Use minimal relevant details when writing or revising brief narrative texts. Use minimal support and elaboration when writing brief informational/explanatory texts. Demonstrate some ability to use appropriate text features. Produce argumentative texts and attempt to acknowledge a counterclaim. Demonstrate some awareness of audience and purpose when writing. Pay limited attention to word choice and/or syntax. Plan, write, revise, and edit argument pieces demonstrating partial ability to state claims about topics or sources. With some support, use basic language appropriate to the purpose and audience when revising or composing text. Write or edit texts, demonstrating a partial understanding of Standard English grammar conventions and usage (e.g., capitalization, punctuation, and spelling). Demonstrate limited use of technology, including the Internet, to produce and publish writing.
SPEAKING/ LISTENING Target 4	Have limited engagement and interaction with media and source materials and minimally account for elements that contribute to points of view.
RESEARCH/ INQUIRY Targets 1-4	 Demonstrate minimal research and evaluation skills. Draw broad conclusions from source materials. Construct a partial claim with limited use of evidence. Attempt to summarize main ideas, topics, key events, or procedures in informational texts but use limited supporting or relevant ideas or evidence. Develop an argument with a claim and minimal support.
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	The student who just enters Level 3 should be able to:
READING Literary Text Targets 1–7	 Summarize central ideas/key events using relevant details from texts of moderate complexity to determine a theme and provide an objective summary specifically relating analysis to character, setting, and plot. Determine precise meaning of words and distinguish connotative and figurative meanings of academic- and domain-specific words/phrases. Use a range of relevant textual evidence to justify analysis regarding theme, story elements, dialogue, and point of view (e.g., suspense, humor, dramatic irony) in texts of moderate complexity. Analyze relationships among literary elements by comparing and contrasting them within or across texts of moderate complexity or differing versions of texts representing various genres and text types. Analyze the structures of two or more texts and genre-specific features or formats of texts and the impact of those choices on meaning or presentation. Determine or interpret the impact/intent of literary devices or connotative meaning of contextually used words and phrases and the impact of those word choices on reader interpretation of texts of moderate complexity.

READING Informational Text	 Identify several pieces of relevant textual evidence from sources across disciplines to support conclusions, inferences, connections, and steps to processes.
Targets 8–14	 Summarize central ideas, topics/subtopics, key events, or procedures using relevant supporting ideas and details.
	 Determine connotative and denotative meanings of academic- and domain-specific words/phrases and words with multiple meanings, based on context-word relationships, word structure, and differentiating vocabulary meanings, in texts of moderate complexity.
	 Apply reasoning and a range of textual evidence to justify inferences or interpret author's presentation of information.
	 Analyze a case in which two or more texts provide conflicting information on the same topic and identify where the texts disagree on matters of fact or interpretation regarding the authors' points of view.
	 Relate knowledge of text structures and genre-specific features or formats of texts to compare/analyze the impact of those choices on meaning or presentation.
	• Determine or interpret the impact/intent of literary devices or connotative meaning of words and phrases used in context and the impact of those word choices on reader interpretation of texts of moderate complexity.
WRITING	Apply some narrative strategies when writing or revising one or more paragraphs.
Targets 1–10	 Write longer narrative texts demonstrating use of specific narrative techniques, chronology, and appropriate transitional strategies for coherence.
	Employ effective text features and visual components appropriate to purpose.
	• Demonstrate some ability to plan, write, revise, and edit full argument pieces demonstrating ability to state claims about topics or sources; attend to purpose and audience; organize ideas by stating a context and focus; include structures and appropriate transitional strategies for coherence; identify supporting evidence/reasons and elaboration from credible sources; develop an appropriate conclusion.
	 Use a range of precise language and vocabulary (including academic words, domain- specific vocabulary, and figurative language) and style appropriate to the purpose and audience when revising or composing text.
	 Demonstrate some ability to edit a piece of writing, showing an understanding of Standard English grammar conventions and usage (e.g., capitalization, punctuation, and spelling) when writing.
	 Demonstrate some use of technology, including the Internet, to produce and publish writing.
SPEAKING/ LISTENING Target 4	 Engage and interact with media and source materials and account for elements that contribute to points of view.

RESEARCH/	 Use research/inquiry methods to explore a topic.
INQUIRY Targets	 Select from and adequately analyze sources from a variety of perspectives and present findings.
1-4	 Adequately analyze authoritative sources of evidence with some diversity of formats to support a presentation.
	 Search for relevant authoritative information and evaluate the uses and limitations of source material.
	Generate a specific debatable claim or main idea and cite some relevant evidence.
	The student who just enters Level 4 should be able to:
READING Literary Text	 Evaluate precise meaning of words and distinguish connotative and figurative meanings of academic- and domain-specific words/phrases.
Targets 1–7	 Evaluate meaning of words with multiple meanings based on context-word relationships and word structures; thoroughly differentiate vocabulary meanings in texts of high complexity.
	 Summarize central ideas and key events using the most significant details from longer portions of texts of high complexity.
	 Cite strong and varied textual evidence to justify analysis regarding theme, story elements, dialogue, and point of view (e.g., suspense, humor, dramatic irony) in texts of high complexity.
	 Analyze relationships by comparing and contrasting them among literary elements within or across texts of high complexity.
	• Evaluate the structures of two or more texts and genre-specific features or formats of texts and the impact of those choices on meaning or presentation.
	 Evaluate and interpret the impact and intent of literary devices or connotative meaning of contextually used words and phrases and the impact of those word choices on reader interpretation of texts of high complexity.
READING Informational Text	 Identify several pieces of strong and varied textual evidence from sources across disciplines to support conclusions, inferences, connections, and steps to processes.
Targets 8–14	 Summarize central ideas, topics/subtopics, key events, or procedures using strong supporting ideas and details with texts of high complexity.
	 Determine connotative and denotative meanings of academic- and domain-specific words/phrases and words with multiple meanings, based on context-word relationships, word structure, and differentiating vocabulary meanings, in texts of texts of high complexity.
	 Effectively apply reasoning and a range of textual evidence to justify inferences or interpret author's presentation of information.
	• Delineate and evaluate the argument assessing whether the reasoning is sound.
	 Effectively analyze a case in which two or more texts provide conflicting information on the same topic and identify where the texts disagree on matters of fact or interpretation regarding the authors' points of view.
	 Relate knowledge of text structures and genre-specific features or formats of texts of high complexity to compare/analyze the impact of those choices on meaning or presentation.
	 Evaluate or interpret the impact/intent of literary devices or connotative meaning of words and phrases used in context and the impact of those word choices on reader interpretation of texts of high complexity.

WRITING Targets 1-10	 Demonstrate effective use of multiple, specific narrative techniques, chronology, and appropriate transitional strategies for coherence. Demonstrate effective use of precise words and phrases and use relevant descriptive details and sensory language to convey experiences or authors' craft appropriate to purpose, including a conclusion that reflects on the narrated experience. Demonstrate use of multiple, specific narrative techniques, chronology, and appropriate transitional strategies for coherence when writing longer narrative texts. Demonstrate effective use of precise language and formal style to organize ideas by stating a focus when writing or revising more than one informational or explanatory paragraph. Employ advanced text features and visual components appropriate to purpose. Effectively use an extensive range of language and vocabulary (including academic words, domain-specific vocabulary, and figurative language) and style appropriate to the purpose and audience when revising or composing text. Effectively write or edit texts, demonstrating a strong understanding of Standard English grammar conventions and usage (e.g., capitalization, punctuation, and spelling).
SPEAKING/ LISTENING Target 4	 Effectively engage and interact with media and source materials and account for elements that contribute to points of view.
RESEARCH/ INQUIRY Targets 1-4	 Employ multimodal resources to advance a sustained exploration of a topic. Synthesize multiple sources of relevant, authoritative information and discriminate among them to support an analysis. Search for relevant information from diverse authoritative sources. Systematically evaluate sources' uses and limitations. Generate an authoritative claim. Evaluate and cite substantial, relevant evidence.

The student who just enters Level 2 should be able to:		
READING Literary Text	Cite textual evidence to justify analysis regarding theme, story elements, dialogue, and point of view in texts of low-to-moderate complexity.	
Targets 1-7	 Partially summarize central ideas and key events using some details from texts of low-to-moderate complexity. 	
	 Partially analyze relationships within or between literary elements within or across texts of low-to-moderate complexity or in differing versions of texts representing various genres and text types. 	
	 Partially analyze the structure of two or more texts and genre-specific features or formats of texts of low-to-moderate complexity and the impact of those choices on meaning or presentation. 	
	 Partially determine or interpret the impact/intent of literary devices or connotative meaning of contextually used words and phrases and the impact of those word choices on reader interpretation of texts of low-to-moderate complexity. 	
READING Informational	 Identify textual evidence from sources across disciplines to support conclusions, inferences, connections, and steps to processes. 	
Text Targets	 Partially summarize central ideas, topics/subtopics, key events, or procedures using some supporting ideas and details. 	
8-14	 Partially determine connotative and denotative meanings of academic- and domain- specific words/phrases and words with multiple meanings, based on context-word relationships and word structures, and differentiate vocabulary meanings in texts of low-to- moderate complexity. 	
	 Partially apply reasoning and some textual evidence to justify inferences or interpret author's presentation of information; partially delineate and evaluate the argument assessing whether the reasoning is sound. 	
	 Partially analyze a case in which two or more texts provide conflicting information on the same topic and identify where the texts disagree on matters of fact or interpretation regarding the authors' point of view. 	
	• Partially relate knowledge of text structures and genre-specific features or formats of texts of low-to-moderate complexity to compare/analyze the impact of those choices on meaning or presentation.	
	• Partially determine or interpret the impact/intent of literary devices or connotative meaning of words and phrases used in context and the impact of those word choices on reader interpretation of texts of low-to-moderate complexity.	

WRITING Targets 1–10	 Apply some narrative strategies, textual structures, and transitional strategies for coherence.
	Use minimal relevant details when writing or revising brief narrative texts.
	 Use minimal support and elaboration when writing brief informational/explanatory texts.
	Demonstrate some ability to use appropriate text features.
	Produce argumentative texts and attempt to acknowledge a counterclaim.
	Demonstrate some awareness of audience and purpose when writing.
	Pay limited attention to word choice and/or syntax.
	 Plan, write, revise, and edit argument pieces demonstrating partial ability to state claims about topics or sources.
	 With some support use basic language appropriate to the purpose and audience when revising or composing text.
	 Apply or edit a piece of writing, demonstrating a partial understanding of Standard English grammar conventions and usage (e.g., capitalization, punctuation, and spelling) when writing.
	 Demonstrate limited use of technology, including the Internet, to produce and publish writing.
SPEAKING/ LISTENING Target 4	Have limited engagement and interaction with media and source materials and minimally account for elements that contribute to points of view.
RESEARCH/	Demonstrate minimal research and evaluation skills.
INQUIRY Targets 1-4	Draw broad conclusions from source materials.
	Construct a partial claim with limited use of evidence.
	 Attempt to summarize main ideas, topics, key events, or procedures in informational texts but use limited supporting or relevant ideas or evidence.
	Develop an argument with a claim and minimal support.

	The student who just enters Level 3 should be able to:
READING Literary Text Targets 1-7	 Summarize central ideas/key events using relevant details from texts of moderate complexity to determine a theme and provide an objective summary specifically relating analysis to character, setting, and plot.
	 Determine precise meaning of words and distinguish connotative and figurative meanings of academic- and domain-specific words and phrases.
	 Cite a range of relevant textual evidence to justify analysis regarding theme, story elements, dialogue, and point of view (e.g., suspense, humor, dramatic irony) in texts of moderate complexity.
	• Analyze relationships among literary elements by comparing and contrasting theme within texts of moderate complexity or in differing versions of texts representing various genres and text types.
	 Analyze the structures of two or more texts and genre-specific features or formats of texts of moderate complexity and the impact of those choices on meaning or presentation.
	• Determine or interpret the impact/intent of literary devices or connotative meaning of contextually used words and phrases and the impact of those word choices on reader interpretation of texts of moderate complexity.
READING Informational Text	 Identify several pieces of relevant textual evidence from sources across disciplines to support conclusions, inferences, connections, and steps to processes.
Targets 8-14	 Summarize central ideas, topics/subtopics, key events, or procedures using relevant supporting ideas and details.
	Determine connotative and denotative meanings of words and phrases.
	 Apply reasoning and a range of textual evidence to justify inferences or interpret author's presentation of information.
	• Analyze a case in which two or more texts provide conflicting information on the same topic and identify where the texts disagree on matters of fact or interpretation regarding the authors' points of view.
	 Relate knowledge of text structures and genre-specific features or formats of texts of moderate complexity to compare/analyze the impact of those choices on meaning or presentation.
	 Determine or interpret the impact/intent of literary devices or connotative meaning of words and phrases used in context and the impact of those word choices on reader interpretation of texts of moderate complexity.

WRITING	• Apply some narrative strategies when writing or revising one or more paragraphs.
Targets 1–10	 Write longer narrative texts demonstrating use of specific narrative strategies, structures, and appropriate transitional strategies for coherence.
	Employ effective text features and visual components appropriate to purpose.
	• Demonstrate some ability to plan, write, revise, and edit full argument pieces demonstrating ability to state claims about topics or sources; attend to purpose and audience; organize ideas by stating a context and focus; include structures and appropriate transitional strategies for coherence; identify supporting evidence/reasons and elaboration from credible sources; and develop an appropriate conclusion.
	 Use a range of precise language and vocabulary (including academic words, domain- specific vocabulary, and figurative language) and style appropriate to the purpose and audience when revising or composing text.
	 Demonstrate some ability to edit a piece of writing, showing an understanding of Standard English grammar conventions and usage (e.g., capitalization, punctuation, and spelling) when writing.
	 Demonstrate some use of technology, including the Internet, to produce and publish writing.
SPEAKING/ LISTENING Target 4	Engage and interact with media and source materials and account for elements that contribute to points of view.
RESEARCH/ INQUIRY Targets 1-4	Use research/inquiry methods to explore a topic.
	 Select from and adequately analyze sources from a variety of perspectives and present findings.
	 Adequately analyze authoritative sources of evidence with some diversity of formats to support a presentation.
	 Search for relevant authoritative information and evaluate the uses and limitations of source material.
	• Generate a specific debatable claim or main idea and cite some relevant evidence.

	The student who just enters Level 4 should be able to:
READING Literary Text	 Evaluate precise meaning of words and distinguish connotative and figurative meanings of academic- and domain-specific words and phrases.
Targets 1-7	 Evaluate meaning of words with multiple meanings based on context-word relationships and word structures; thoroughly differentiate vocabulary meanings in texts of high complexity.
	 Summarize central ideas and key events using the most significant details from longer portions of texts of high complexity.
	 Cite strong and varied textual evidence to justify analysis regarding theme, story elements, dialogue, and point of view (e.g., suspense, humor, dramatic irony) in texts of high complexity.
	 Analyze relationships by comparing and contrasting them among literary elements within or across texts of high complexity.
	 Evaluate the structures of two or more texts and genre-specific features or formats of texts of high complexity and the impact of those choices on meaning or presentation.
	 Evaluate and interpret the impact and intent of literary devices or connotative meaning of contextually used words and phrases and the impact of those word choices on reader interpretation of texts of high complexity.
READING Informational	 Identify several pieces of strong and varied textual evidence from sources across disciplines to support conclusions, inferences, connections, and steps to processes.
Text Targets 8–14	 Summarize central ideas, topics/subtopics, key events, or procedures using strong supporting ideas and details.
	 Determine connotative and denotative meanings of academic- and domain-specific words/phrases and words with multiple meanings, based on context-word relationships, word structures, and differentiating vocabulary meanings in texts of high complexity.
	 Apply reasoning and a range of textual evidence to justify inferences or interpret author's presentation of information.
	Delineate and evaluate the argument assessing whether the reasoning is sound.
	 Effectively analyze a case in which two or more texts provide conflicting information on the same topic and identify where the texts disagree on matters of fact or interpretation regarding the authors' points of view.
	 Relate knowledge of text structures and genre-specific features or formats of texts of high complexity to compare/analyze the impact of those choices on meaning or presentation.
	 Evaluate or interpret the impact/intent of literary devices or connotative meaning of words and phrases used in context and the impact of those word choices on reader interpretation of texts of high complexity.

WRITING Targets 1-10	 Demonstrate effective use of multiple, specific narrative strategies, structures, and appropriate transitional strategies for coherence.
	• Demonstrate effective use of precise words and phrases and use relevant descriptive details and sensory language to convey experiences or authors' craft appropriate to purpose, including a conclusion that reflects on the narrated experience.
	 Demonstrate use of multiple, specific narrative strategies, structures, and appropriate transitional strategies for coherence when writing longer narrative texts.
	 Demonstrate effective use of precise language and formal style to organize ideas by stating a focus when writing or revising more than one informational or explanatory paragraph.
	Employ advanced text features and visual components appropriate to purpose.
	 Effectively use an extensive range of language and vocabulary (including academic words, domain-specific vocabulary, and figurative language) and style appropriate to the purpose and audience when revising or composing text.
	 Effectively write or edit texts, demonstrating a strong understanding of Standard English grammar conventions and usage (e.g., capitalization, punctuation, and spelling).
	Effectively use technology, including the Internet, to produce and publish writing.
SPEAKING/ LISTENING Target 4	Thoroughly engage and interact with media and source materials and account for elements that contribute to points of view.
RESEARCH/	• Employ multimodal resources to advance a sustained exploration of a topic.
INQUIRY Targets 1-4	 Synthesize multiple sources of relevant, authoritative information and discriminate among them to support an analysis.
	Search for relevant information from diverse authoritative sources.
	Systematically evaluate uses and limitations of sources.
	Generate an authoritative claim.
	Evaluate and cite substantial, relevant evidence.

	The student who just enters Level 2 should be able to:
READING Literary Text Targets 1-7	 Identify key textual evidence to attempt to support simple inferences or conclusions. Provide a simple summary of key events and/or details of a text. Use sentence- and paragraph-level context and resources to determine meanings of most grade-level words. Apply partial reasoning and use key textual evidence to begin to justify inferences or judgments made about text. Analyze some interrelationships of literary elements in texts of low to moderate complexity. Describe basic text structures and genre-specific features or formats and show a limited understanding of their impact. Identify elements that contribute to points of view and how they impact meaning. Identify and determine meaning and impact of figurative language.
READING Informational Text Targets 8–14	 Identify key textual evidence to attempt to support simple inferences, analysis, interpretations, or conclusions. Provide a simple summary of key events and/or details of a text. Use sentence- and paragraph-level context and resources to determine meanings of words. Apply partial reasoning and use key textual evidence to begin to justify inferences or judgments made about text. Analyze the connection of ideas within and between texts of low-to-moderate complexity. Describe basic text structures and genre-specific features or formats and show a limited understanding of their impact. Demonstrate emerging knowledge of obvious genre interpretations and ideas. Have limited engagements and interaction with source materials in common. Partially account for elements that contribute to points of view. Identify and begin to determine meaning and impact of figurative language.
WRITING Targets: 1 and 3-10	 Apply some narrative strategies, textual structures, and transitional strategies for coherence. Use minimal relevant details when writing or revising brief narrative texts. Use minimal support and elaboration when writing brief informational/explanatory texts. Demonstrate some ability to use appropriate text features. Produce argumentative texts and attempt to acknowledge a counterclaim. Demonstrate some awareness of audience and purpose when writing. Pay limited attention to word choice and/or syntax. Demonstrate some understanding of the conventions of grade-appropriate Standard English grammar usage and mechanics to clarify a message. Apply some revisions to narrative, informational, and argument texts. Use basic technology, with support, for gathering information, making revisions, or producing texts.

SPEAKING/ LISTENING Target 4	Have limited engagement and interaction with media and source materials and minimally account for elements that contribute to points of view.
RESEARCH/ INQUIRY Targets 1-4	 Demonstrate minimal research and evaluation skills. Draw broad conclusions from source materials. Construct a partial or undeveloped claim with limited use of evidence. Attempt to summarize main ideas, topics, key events, or procedures in informational texts but use limited supporting or relevant ideas or evidence. Develop an argument with a claim and minimal support.
	The student who just enters Level 3 should be able to:
READING Literary Text Targets 1–7	 Cite adequate textual evidence to support most inferences made or conclusions drawn about texts of moderate complexity. Summarize themes and some analysis of thematic development over the course of the text using relevant details. Determine intended meanings of most words, including distinguishing connotation/ denotation, figurative language, and words with multiple meanings based on context, word patterns, word relationships, etymology, or use of specialized resources. Apply sufficient reasoning and a range of textual evidence to justify most inferences or judgments made about texts. Adequately analyze interrelationships among literary elements within a text or multiple interpretations of text (including texts from the same period with similar themes, topics, or source materials). Partially analyze text structures, genre-specific features, or formats (visual/graphic/auditory effects) of text and explain the impact(s) of those choices on meaning or presentation. Partially analyze the figurative (e.g., euphemism, oxymoron, hyperbole, paradox) and connotative meanings of words and phrases used in context and the impact(s) of those word choices on meaning and tone.
Threshold Achievement Level Descriptors Grade 11 English Language Arts/Literacy

READING Informational Text Targets 8–14	 Cite adequate textual evidence to support most inferences made or conclusions drawn about texts of moderate complexity.
	 Summarize central ideas, topics, key events, or procedures from a text using sufficient supporting ideas and relevant details.
	 Determine intended meanings of most words, including distinguishing connotation/denotation, figurative language, and words with multiple meanings based on context, word patterns, word relationships, etymology, or use of specialized resources.
	 Apply reasoning and a sufficient range of textual evidence to justify analyses of author's presentation of moderately complex information.
	 Adequately support a basic analysis of a moderately complex text to show how some connections are made in development of ideas or events or development of topics, themes, or rhetorical features.
	 Adequately support a basic analysis of text structures and/or text features and determine an impact of text structures and/or text features on meaning or presentation.
	 Partially analyze the figurative (e.g., euphemism, oxymoron, hyperbole, paradox) or connotative meanings of words and phrases used in context and partially explain the impact of these word choices on meaning and tone.
WRITING Targets 1 and 3-10	 Apply some narrative strategies, text structures, and some transitional strategies for coherence using some relevant details and precise words and phrases in writing or revising brief narrative texts.
	 Apply some strategies when writing or revising brief informational/explanatory texts to develop a topic by organizing ideas, using appropriate language to maintain a suitable focus/tone, and including some relevant supporting evidence.
	 Write full informational/explanatory texts appropriate for purpose and audience by organizing ideas, using appropriate language to maintain a suitable focus/tone, and gathering, assessing, and integrating some relevant supporting evidence from both print and digital sources.
	 Use text features (e.g., formatting, graphics, multimedia) with some attention to audience and purpose.
	 Apply strategies when writing or revising brief argumentative texts to develop a claim by organizing and citing some supporting evidence and counterclaims, providing transitional strategies for coherence, and using language to maintain a suitable focus/tone.
	 Write full argumentative texts to develop a specific claim by integrating some relevant supporting evidence from both print and digital sources, to develop claims and counterclaims that are appropriate for audience and purpose, to provide a concluding statement, and to use language to maintain a suitable focus/tone.
	 Demonstrate attempts to use varied syntax, vocabulary (including some academic and domain-specific vocabulary and figurative language), and style appropriate to the purpose and audience when revising and composing texts.
	 Apply and edit most conventions of grade-appropriate, Standard English grammar usage and mechanics.
	 Follow directions when using tools of technology to gather information, make revisions, or produce texts.

Threshold Achievement Level Descriptors Grade 11 English Language Arts/Literacy

SPEAKING/ LISTENING Target 4	 Synthesize content from source materials and media, discriminating for relevance among a range of rhetorical presentations of information. Listen for point of view and begin to analyze perspective and motivation in a speaker's assumptions, connections, use of vocabulary, unstated premises, and rhetorical choices.
RESEARCH/ INQUIRY Targets 1-4	 Use research/inquiry methods to explore a topic. Select from and adequately analyze sources from a variety of perspectives and present findings. Adequately analyze authoritative sources of evidence with some diversity of formats to support a presentation. Search for relevant authoritative information and evaluate the uses and limitations of source material. Generate a specific debatable claim or main idea and cite some relevant evidence.
	The student who just enters Level 4 should be able to:
READING Literary Text Targets 1-7	 Identify and analyze textual evidence in texts of high complexity. Provide an effective summary and analysis of thematic development over the course of a text using an appropriate level of relevant evidence. Determine intended, precise, or nuanced meanings of words, including distinguishing connotation/denotation, figurative language, words with multiple meanings, and specialized academic language. Apply reasoning and a thorough range of textual evidence to justify inferences or judgments made about texts. Analyze the figurative and connotative meanings of words and phrases used in context and explain the complex impact(s) of those word choices on meaning and tone. Apply reasoning and a range of textual evidence to justify inferences and judgments made about texts of high complexity. Analyze the interrelationships among literary elements in texts of high complexity to show how connections are made in development of complex ideas or events. Analyze the effectiveness and impact of text structures and/or text features of texts of high complexity. Analyze the effectiveness and impact of text structures and phrases in texts of high complexity.

Threshold Achievement Level Descriptors Grade 11 English Language Arts/Literacy

READING	 Identify and analyze textual evidence in texts of high complexity.
Informational Text	 Provide full analysis of the development of central ideas over the course of a text using an appropriate level of relevant evidence.
Targets 8-14	 Determine intended, precise, or nuanced meanings of words, including distinguishing connotation/ denotation, figurative language, words with multiple meanings, and specialized academic language.
	 Apply reasoning and a full range of textual evidence to justify inferences and judgments made about texts of high complexity.
	 Analyze the figurative and connotative meanings of words and phrases used in context and explain the complex impact(s) of those word choices on meaning and tone.
	 Apply thorough reasoning and a range of textual evidence to justify analyses of author's presentation of information in texts of high complexity.
	 Analyze texts of high complexity to show how connections are made in development of complex ideas or events.
	 Analyze the effectiveness and impact of text structures and/or text features of highly complex texts.
	 Analyze figurative and connotative meanings of words and phrases in texts of high complexity.
WRITING Targets	 Apply effective writing strategies and processes when writing and revising texts for all purposes.
1 and	Use precise language.
3-10	Use relevant and persuasive evidence.
	Assess and synthesize supporting evidence.
	Select technological tools based on appropriateness.
	 Apply grade-appropriate editing and revising skills.
SPEAKING/ LISTENING	 Synthesize diverse source materials from diverse perspectives delivered orally or through audiovisual materials.
Target 4	 Systematically evaluate the ways that uses of evidence, implicit premises, and rhetorical stylistic choices enhance or undermine points of view.
RESEARCH/ INQUIRY	Employ multimodal resources to advance a persuasive and sustained exploration of a topic.
Targets 1-4	 Synthesize multiple sources of relevant, authoritative information and discriminate among them to support an analysis.
	Search for relevant information from diverse authoritative sources.
	Systematically evaluate the uses and limitations of sources.
	Generate authoritative claim.
	Evaluate and cite substantial, relevant evidence.

	The student who just enters Level 2 should be able to:
CONCEPTS AND PROCEDURES Targets A, B, C, and D: Operations and Algebraic Thinking	 Use multiplication and division within 100 to solve one-step mathematical problems involving arrays. Determine the unknown number in a multiplication equation relating three whole numbers. Apply the Commutative property of multiplication to mathematical problems with one- digit factors. Recall from memory all products of two one-digit numbers. Solve one- and two-step problems using all four operations with one- and two-digit numbers. Identify patterns in the addition table.
CONCEPTS AND PROCEDURES Target E: Number and Operations – Base Ten	Round whole numbers to the nearest 10 or 100.
CONCEPTS AND PROCEDURES Target F: Number and Operations – Fractions	Identify a fraction on a number line.
CONCEPTS AND PROCEDURES Targets G and I: Measurement and Data	 Tell and write time to the nearest minute and measure liquid volumes and masses of objects using metric units of liters, grams, and kilograms. Count unit squares to find the area of rectilinear figures.
CONCEPTS AND PROCEDURES Targets H and J: Measurement and Data	 Generate measurement data by measuring lengths using rulers marked with half-inch intervals. Solve mathematical problems involving perimeters of polygons, including finding an unknown side length given the perimeter.
CONCEPTS AND PROCEDURES Target K: Geometry	Partition shapes into parts with equal areas.
PROBLEM SOLVING & MODELING AND DATA ANALYSIS	 Select tools to solve a familiar and moderately scaffolded problem and apply them with partial accuracy. Use the necessary elements given in a problem situation to solve a problem. Apply mathematics to propose solutions by identifying important quantities and by locating missing information from relevant external resources.
COMMUNICATING REASONING	Find and identify the flaw in an argument.

	The student who just enters Level 3 should be able to:
CONCEPTS AND PROCEDURES Targets A, B, C, and D: Operations and Algebraic Thinking	 Select the appropriate operation to solve one-step problems involving equal groups and arrays. Use the properties of operations to multiply within the 10 by 10 multiplication table. Fluently multiply within 100. Solve two-step problems using addition and subtraction with numbers larger than 100 and solutions within 1,000.
CONCEPTS AND PROCEDURES Target E: Number and Operations – Base Ten	• Fluently add within 1,000, using strategies or algorithms based on place value understanding, properties of arithmetic, and/or the relationship between addition and subtraction.
CONCEPTS AND PROCEDURES Target F: Number and Operations – Fractions	Represent a fraction on a number line with partitioning.
CONCEPTS AND PROCEDURES Targets G and I: Measurement and Data	 Estimate liquid volumes and masses of objects using standard units of grams, kilograms, and liters. Find the area of a rectilinear figure by multiplying side lengths and by decomposing a rectilinear figure into non-overlapping rectangles and adding them together.
CONCEPTS AND PROCEDURES Targets H and J: Measurement and Data	 Generate measurement data by measuring length using rulers marked with quarter- inch intervals and represent the data on a line plot marked with quarter-inch intervals. Solve word problems involving perimeters of polygons.
CONCEPTS AND PROCEDURES Target K: Geometry	 Draw examples of quadrilaterals that do not belong to given subcategories by reasoning about their attributes.
PROBLEM SOLVING & MODELING AND DATA ANALYSIS	 Use appropriate tools to accurately solve problems arising in everyday life, society, and the workplace. Apply mathematics to solve problems by identifying important quantities and mapping their relationship and by stating and using logical assumptions.
COMMUNICATING REASONING	 Use stated assumptions, definitions, and previously established results and examples to identify and repair a flawed argument. Use previous information to support his or her own reasoning on a routine problem.

	The student who just enters Level 4 should be able to:
CONCEPTS AND PROCEDURES Targets A, B, C, and D: Operations and Algebraic Thinking	 Use multiplication and division within 100 to solve one-step problems involving measurement quantities of two- or three-digit whole numbers. Apply strategies in multiplication. Use relevant ideas or procedures to multiply. Explain arithmetic patterns.
CONCEPTS AND PROCEDURES Target E: Number and Operations – Base Ten	• Use multiple strategies to fluently add within 1,000.
CONCEPTS AND PROCEDURES Target F: Number and Operations – Fractions	Represent a fraction approximately on a number line with no partitioning.
CONCEPTS AND PROCEDURES Targets G and I: Measurement and Data	 Solve one-step addition problems involving all time intervals from hours to minutes. Find the area of a rectilinear figure in a word problem.
CONCEPTS AND PROCEDURES Targets H and J: Measurement and Data	N/A
CONCEPTS AND PROCEDURES Target K: Geometry	N/A
PROBLEM SOLVING & MODELING AND DATA ANALYSIS	 Analyze and interpret the context of an unfamiliar situation for problems of increasing complexity. Begin to solve problems optimally. Construct multiple plausible solutions and approaches.
COMMUNICATING REASONING	Begin to construct chains of logic about abstract concepts autonomously.

	The student who just enters Level 2 should be able to:
CONCEPTS AND PROCEDURES Target A: Operations and Algebraic Thinking	Add and subtract to solve one-step problems involving an unknown number.
CONCEPTS AND PROCEDURES Targets B and C: Operations and Algebraic Thinking	 Determine whether a given whole number in the range of 1–100 is a multiple of a given one-digit number. Generate a shape pattern that follows a given rule.
CONCEPTS AND PROCEDURES Targets D and E: Number and Operations – Base Ten	 Look for and use repeated reasoning to generalize place value understanding in order to read and write multi-digit whole numbers less than or equal to 100,000 using base- ten numerals and number names. Use place value understanding to add and subtract two- and three-digit whole numbers using a standard algorithm.
CONCEPTS AND PROCEDURES Targets F, G, and H: Number and Operations – Fractions	 Recognize equivalent fractions using visual models. Use visual fraction models to represent a problem. Express a fraction with denominator 10 as an equivalent fraction with denominator 100.
CONCEPTS AND PROCEDURES Targets I, J, and K: Measurement and Data	 Apply the perimeter formula to rectangles in mathematical problems. Use data from a given line plot using fractions 1/2, 1/4, and 1/8 to solve one-step problems. Recognize whole-number degrees on a protractor.
CONCEPTS AND PROCEDURES Target L: Geometry	 Identify points, lines, line segments, and rays.
PROBLEM SOLVING & MODELING AND DATA ANALYSIS	 Select tools to solve a familiar and moderately scaffolded problem and apply them with partial accuracy. Use the necessary elements given in a problem situation to solve a problem. Apply mathematics to propose solutions by identifying important quantities and by locating missing information from relevant external resources.
COMMUNICATING REASONING	Find and identify the flaw in an argument.

The student who just enters Level 3 should be able to:		
CONCEPTS AND PROCEDURES Target A: Operations and Algebraic Thinking	Multiply and divide to solve one-step problems involving equal groups or arrays.	
CONCEPTS AND PROCEDURES Targets B and C: Operations and Algebraic Thinking	 Find factor pairs for whole numbers in the range of 1–100. Identify apparent features of a pattern in a problem with scaffolding. 	
CONCEPTS AND PROCEDURES Targets D and E: Number and Operations – Base Ten	 Read and write multi-digit whole numbers less than or equal to 1,000,000 using base- ten numerals, number names, and expanded form. Multiply four-digit whole numbers by a one-digit number. 	
CONCEPTS AND PROCEDURES Targets F, G, and H: Number and Operations – Fractions	 Generate equivalent fractions using visual models. Identify and generate equivalent forms of a fraction with like denominators. Add two fractions with respective denominators 10 and 100. 	
CONCEPTS AND PROCEDURES Targets I, J, and K: Measurement and Data CONCEPTS AND	 Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale. Interpret data from a line plot to solve problems involving addition of fractions with like denominators by using information presented in line plots. Construct angles between 0 and 180 degrees in whole-number degrees using a protractor. Draw lines of symmetry for two-dimensional figures. 	
PROCEDURES Target L: Geometry		
PROBLEM SOLVING & MODELING AND DATA ANALYSIS	 Use appropriate tools to accurately solve problems arising in everyday life, society, and the workplace. Apply mathematics to solve problems by identifying important quantities and mapping their relationship and by stating and using logical assumptions. 	
COMMUNICATING REASONING	 Use stated assumptions, definitions, and previously established results and examples to identify and repair a flawed argument. Use previous information to support his or her own reasoning on a routine problem. 	

The student who just enters Level 4 should be able to:		
CONCEPTS AND PROCEDURES	 Assess the reasonableness of answers using mental computation and estimation strategies, including rounding. 	
Operations and Algebraic Thinking		
CONCEPTS AND PROCEDURES Targets B and C: Operations and Algebraic Thinking	N/A	
CONCEPTS AND PROCEDURES Targets D and E: Number and Operations – Base Ten	N/A	
CONCEPTS AND PROCEDURES Targets F, G, and H: Number and Operations – Fractions	 Compare two fractions with different numerators and different denominators using <, >, and =. Compare two decimals to the hundredths using <, >, and = or a number line and justify the conclusions by using visual models. 	
CONCEPTS AND PROCEDURES Targets I, J, and K: Measurement and Data	 Apply the perimeter formula to rectangles in real-world problems. Solve addition problems to find unknown angles on a diagram in mathematical problems. 	
CONCEPTS AND PROCEDURES Target L: Geometry	N/A	
PROBLEM SOLVING & MODELING AND DATA ANALYSIS	 Analyze and interpret the context of an unfamiliar situation for problems of increasing complexity. Begin to solve problems optimally. Construct multiple plausible solutions and approaches. 	
COMMUNICATING REASONING	Begin to construct chains of logic about abstract concepts autonomously.	

The student who just enters Level 2 should be able to:	
CONCEPTS AND PROCEDURES Targets A and B: Operations and Algebraic Thinking	 Write numerical expressions having one set of parentheses, brackets, or braces. Graph whole number ordered pairs from two whole number numerical patterns on a coordinate plane.
CONCEPTS AND PROCEDURES Targets C and D: Number and Operations – Base Ten	 Understand that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right. Demonstrate accuracy in multiplying multi-digit whole numbers and in finding whole number quotients of whole numbers with up to four-digit dividends and two-digit divisors.
CONCEPTS AND PROCEDURES Targets E and F: Number and Operations – Fractions	 Add two fractions and/or mixed numbers with unlike denominators (denominators less than or equal to 6) in mathematical problems. Use benchmark fractions to estimate and assess the reasonableness of answers (denominators less than or equal to 6). Multiply a whole number by a mixed number. Know the effect that a fraction greater than or less than 1 has on a whole number when multiplied. Use visual models when multiplying two fractions between 0 and 1. Perform division of a whole number by any unit fraction. Understand that division of whole numbers can result in fractions.
CONCEPTS AND PROCEDURES Targets G and H: Measurement and Data	 Convert a whole number measurement to a decimal or fractional valued measurement within the same system (e.g., 30 in =ft). Make a line plot and display data sets in whole and half units.
CONCEPTS AND PROCEDURES Target I: Measurement and Data	 Understand the concept that the volume of a rectangular prism packed with unit cubes is related to the edge lengths.
CONCEPTS AND PROCEDURES Targets J and K: Geometry	 Graph whole number coordinate pairs on a coordinate plane with whole number increments of 2, 5, and 10. Classify two-dimensional figures into categories by their attributes or properties.
PROBLEM SOLVING & MODELING AND DATA ANALYSIS	 Select tools to solve a familiar and moderately scaffolded problem and apply them with partial accuracy. Use the necessary elements given in a problem situation to solve a problem. Apply mathematics to propose solutions by identifying important quantities and by locating missing information from relevant external resources. Find and identify the flow in an argument.
REASONING	• Find and identify the flaw in an argument.

	The student who just enters Level 3 should be able to:
CONCEPTS AND PROCEDURES Targets A and B: Operations and Algebraic Thinking	 Write and interpret expressions with two different operations. Compare two related numerical patterns within sequences and tables.
CONCEPTS AND PROCEDURES Targets C and D: Number and Operations – Base Ten	 Use whole number exponents to denote powers of 10; round decimals to the thousandths; and read, write, and compare decimals to the thousandths using base-ten numerals, number names, and expanded form, using >, =, and < to record the results of the comparison. Fluently multiply multi-digit whole numbers and find whole number quotients of whole numbers with up to four-digit dividends and two-digit divisors. Perform the four operations on decimals to the hundredths. Relate a strategy to a written method and explain the reasoning used.
CONCEPTS AND PROCEDURES Targets E and F: Number and Operations – Fractions	 Subtract fractions and mixed numbers with unlike denominators in word problems. Use benchmark fractions and number sense of fractions to estimate and assess the reasonableness of answers. Multiply a mixed number by a mixed number. Use visual models when multiplying two fractions, including when one fraction is larger than 1. Interpret division of a whole number by any unit fraction.
CONCEPTS AND PROCEDURES Targets G and H: Measurement and Data	 Convert from a smaller unit of measurement to a larger one, resulting in one decimal place (metric system) or a small denominator fraction (standard system). Make a line plot to display data sets in fractions of a unit (1/2, 1/4, 1/8). Solve one-step problems using information from line plots that require addition, subtraction, and multiplication of fractions.
CONCEPTS AND PROCEDURES Target I: Measurement and Data	 Use V = Iwh and V = Bh to find the volume of rectangular prisms.
CONCEPTS AND PROCEDURES Targets J and K: Geometry	 Graph coordinate pairs where one term is a whole number and one is a fraction with a denominator of 2 or 4 on a coordinate plane with whole number axis increments. Classify two-dimensional figures into subcategories by their attributes or properties.
PROBLEM SOLVING & MODELING AND DATA ANALYSIS	 Use appropriate tools to accurately solve problems arising in everyday life, society, and the workplace. Apply mathematics to solve problems by identifying important quantities and mapping their relationship and by stating and using logical assumptions.
COMMUNICATING REASONING	 Use stated assumptions, definitions, and previously established results and examples to identify and repair a flawed argument. Use previous information to support his or her own reasoning on a routine problem.

The student who just enters Level 4 should be able to:	
CONCEPTS AND PROCEDURES Targets A and B: Operations and Algebraic Thinking	 Compare two related numerical patterns and explain the relationship within sequences of ordered pairs that are rational numbers.
CONCEPTS AND PROCEDURES Targets C and D: Number and Operations – Base Ten	 Combine multiplying by powers of 10, comparing, and rounding to highlight essential understandings
CONCEPTS AND PROCEDURES Targets E and F: Number and Operations – Fractions	• Use or create visual models when multiplying two fractions that are larger than 1.
CONCEPTS AND PROCEDURES Targets G and H: Measurement and Data	N/A
CONCEPTS AND PROCEDURES Target I: Measurement and Data	• Find the volume of a right rectangular prism after doubling the edge length of a side with a whole number measurement and compare it to the original.
CONCEPTS AND PROCEDURES Targets J and K: Geometry	 Graph coordinate pairs where one term is a whole number and one is a fraction on a coordinate plane with fractional axis increments of 1/2, 1/4, or 1/10.
PROBLEM SOLVING & MODELING AND DATA ANALYSIS	 Analyze and interpret the context of an unfamiliar situation for problems of increasing complexity. Begin to solve problems optimally. Construct multiple plausible solutions and approaches.
COMMUNICATING REASONING	Begin to construct chains of logic about abstract concepts autonomously.

	The student who just enters Level 2 should be able to:
CONCEPTS AND PROCEDURES Target A: Ratios and Proportional Relationships	• Find unit rates given two whole number quantities where one evenly divides the other.
CONCEPTS AND PROCEDURES Targets B and C: The Number System	 Divide a whole number by a fraction between 0 and 1 and be able to connect to a visual model. Add and subtract multi-digit decimals. Find common factors of two numbers less than or equal to 40. Find multiples of two numbers less than or equal to 12.
CONCEPTS AND PROCEDURES Target D: The Number System	 Order fractions and integers. Place integer pairs on a coordinate plane with axis increments of 2, 5, or 10.
CONCEPTS AND PROCEDURES Targets E, F, and G: Expressions and Equations	 Evaluate expressions with and without variables and without exponents. Write one- and two-step algebraic expressions introducing a variable. Solve one-variable equations and inequalities of the form x + p =/≤/≥/ q or px =/≤/≥/ q, where p and q are nonnegative rational numbers. Given a table of values for a linear relationship (y = kx or y = x ± c), create the equation.
CONCEPTS AND PROCEDURES Target H: Geometry	 Find areas of special quadrilaterals and triangles. Draw polygons in the four-quadrant plane.
CONCEPTS AND PROCEDURES Targets I and J: Statistics and Probability	 Understand that questions that lead to variable responses are statistical questions and vice versa. Identify a reasonable measure of central tendency for a given set of numerical data. Find mean and median.
PROBLEM SOLVING & MODELING AND DATA ANALYSIS	 Select tools to solve a familiar and moderately scaffolded problem and apply them with partial accuracy. Use the necessary elements given in a problem situation to solve a problem. Apply mathematics to propose solutions by identifying important quantities and by locating missing information from relevant external resources.
COMMUNICATING REASONING	Find and identify the flaw in an argument.

	The student who just enters Level 3 should be able to:
CONCEPTS AND PROCEDURES Target A: Ratios and Proportional Relationships	 Solve unit rate problems. Solve percent problems by finding the whole, given a part and the percent. Describe a ratio relationship between any two number quantities and understand the concept of unit rate in problems (denominators less than or equal to 12).
CONCEPTS AND PROCEDURES Targets B and C: The Number System CONCEPTS AND PROCEDURES Target D: The Number System	 Apply and extend previous understandings of multiplication and division to divide a mixed number by a fraction and be able to connect to a visual model. Multiply and divide multi-digit decimal numbers. Find the greatest common factor of two numbers less than or equal to 100 and the least common multiple of two numbers less than or equal to 12. Place points with rational coordinates on a coordinate plane and combine absolute value and ordering, with or without models (-3 < -5).
CONCEPTS AND PROCEDURES Targets E, F, and G: Expressions and Equations	 Write and evaluate numerical expressions without exponents and expressions from formulas in real-world problems. Identify equivalent expressions. Write one-variable equations and inequalities of the form x + p =/≤/≥/ q or px=/≤/≥/ q, where p and q are nonnegative rational numbers. Graph solutions to equations and inequalities on the number line. Create the graph, table, and equation for a linear relationship (y = kx or y = x ±c) and make connections between the representations.
CONCEPTS AND PROCEDURES Target H: Geometry	 Find areas of quadrilaterals and other polygons that can be decomposed into three or fewer triangles. Find the volume of right rectangular prisms with fractional or mixed number side lengths.
CONCEPTS AND PROCEDURES Targets I and J: Statistics and Probability	 Identify a reasonable center and spread for a given context and understand how this relates to the overall shape of the data distribution. Understand that a measure of center summarizes all of its values with a single number. Summarize or display data in box plots. Find the interquartile range. Use range and measures of center to describe the shape of the data distribution as it relates to a familiar context. Pose statistical questions.
PROBLEM SOLVING & MODELING AND DATA ANALYSIS	 Use appropriate tools to accurately solve problems arising in everyday life, society, and the workplace. Apply mathematics to solve problems by identifying important quantities and mapping their relationship and by stating and using logical assumptions.
REASONING	 Use stated assumptions, definitions, and previously established results and examples to identify and repair a flawed argument. Use previous information to support his or her own reasoning on a routine problem.

	The student who just enters Level 4 should be able to:
CONCEPTS AND PROCEDURES Target A: Ratios and Proportional Relationships	 Solve unfamiliar or multi-step problems by finding the whole, given a part and the percent. Understand and explain ratio relationships between any two number quantities. Identify relationships between models or representations.
CONCEPTS AND PROCEDURES Targets B and C: The Number System	 Use visual models in settings where smaller fractions are divided by larger fractions. Understand and apply the fact that a fraction multiplied or divided by 1 in the form of a/a is equivalent to the original fraction.
CONCEPTS AND PROCEDURES Target D: The Number System	N/A
CONCEPTS AND PROCEDURES Targets E, F, and G: Expressions and Equations	 Using the properties of operations, show why two expressions are equivalent. Solve equations and inequalities of the form x + p =/≤/≥/> q or px =/≤/≥/ q, where p and q are rational numbers. Create the graph, table, and equation for nonlinear polynomial relationships, making connections between the representations.
CONCEPTS AND PROCEDURES Target H: Geometry	 Solve problems by finding surface areas of triangular or rectangular prisms and triangular or rectangular pyramids.
CONCEPTS AND PROCEDURES Targets I and J: Statistics and Probability	 Predict effects on mean and median given a change in data points. Complete a data set with given measures (e.g., mean, median, mode, interquartile range).
PROBLEM SOLVING & MODELING AND DATA ANALYSIS	 Analyze and interpret the context of an unfamiliar situation for problems of increasing complexity. Begin to solve problems optimally. Construct multiple plausible solutions and approaches.
COMMUNICATING REASONING	Begin to construct chains of logic about abstract concepts autonomously.

	The student who just enters Level 2 should be able to:	
CONCEPTS AND PROCEDURES Target A: Ratios and Proportional Relationships	 Identify proportional relationships presented in equation formats and find unit rates involving whole numbers. 	
CONCEPTS AND PROCEDURES Target B: The Number System	Convert between familiar fractions and decimals.	
CONCEPTS AND PROCEDURES Targets C and D: Expressions and Equations	 Apply properties of operations to expand linear expressions with integer coefficients. Solve multi-step problems with decimal numbers. Solve equations in the form of <i>px</i> + <i>q</i> = <i>r</i>, where <i>p</i>, <i>q</i>, and <i>r</i> are decimal numbers. 	
CONCEPTS AND PROCEDURES Targets E and F: Geometry	 Describe geometric shapes with given conditions. Use vertical angles expressed as numerical measurements to solve problems. Calculate the area of a circle when the formula is provided and the area of quadrilaterals. 	
CONCEPTS AND PROCEDURES Targets G, H, and I: Statistics and Probability	 Determine whether or not a sample is random. Find the range of a set of data about a given population. Approximate the probability of a chance event by collecting data. 	
PROBLEM SOLVING & MODELING AND DATA ANALYSIS	 Select tools to solve a familiar and moderately scaffolded problem and apply them with partial accuracy. Use the necessary elements given in a problem situation to solve a problem. Apply mathematics to propose solutions by identifying important quantities and by locating missing information from relevant external resources. Find and identify the flaw in an argument. 	
REASONING		

The student who just enters Level 3 should be able to:	
CONCEPTS AND PROCEDURES Target A: Ratios and Proportional Relationships	 Represent proportional relationships in graphs and tables and solve one-step rate- related problems.
CONCEPTS AND PROCEDURES Target B: The Number System	 Solve mathematical problems using addition, subtraction, and multiplication on rational numbers. Understand that (-1)(-1) = 1. Convert common fractions and fractions with denominators that are a factor of a power of 10 to decimals.
CONCEPTS AND PROCEDURES Targets C and D: Expressions and Equations	 Add, subtract, and factor linear expressions with decimal coefficients. Graph the solution set to a given inequality in the form of x > p or x < p, where p is a rational number. Understand that rewriting an expression can shed light on how quantities are related in a familiar problem-solving context with a moderate degree of scaffolding. Use variables to reason with quantities in real-world and mathematical situations with a high degree of scaffolding.
CONCEPTS AND PROCEDURES Targets E and F: Geometry	 Create a scale drawing of a given figure when a scale factor is given. Determine the surface area of a right prism. Use vertical angles expressed as variables to solve two-step problems.
CONCEPTS AND PROCEDURES Targets G, H, and I: Statistics and Probability	 Use random sampling to draw inferences about a population in familiar contexts. Informally assess the degree of visual overlap of two numerical data distributions. Calculate the theoretical probability of a compound event.
PROBLEM SOLVING & MODELING AND DATA ANALYSIS	 Use appropriate tools to accurately solve problems arising in everyday life, society, and the workplace. Apply mathematics to solve problems by identifying important quantities and mapping their relationship and by stating and using logical assumptions.
COMMUNICATING REASONING	 Use stated assumptions, definitions, and previously established results and examples to identify and repair a flawed argument. Use previous information to support his or her own reasoning on a routine problem.

	The student who just enters Level 4 should be able to:
CONCEPTS AND PROCEDURES Target A: Ratios and Proportional Relationships	Solve real-world problems involving proportional relationships that require one step with measurement conversions.
CONCEPTS AND PROCEDURES Target B: The Number System	 Solve real-world problems with integers and proper fractions, using addition, multiplication, subtraction, and division.
CONCEPTS AND PROCEDURES Targets C and D: Expressions and Equations	Construct inequalities with two variables to solve problems.
CONCEPTS AND PROCEDURES Targets E and F: Geometry	Describe the two-dimensional figures that result from slicing spheres and cones.
CONCEPTS AND PROCEDURES Targets G, H, and I: Statistics and Probability	 Generate multiple samples (or simulated samples) of the same size. Determine which measures of variability should be used to draw informal comparative inferences about two populations. Construct a simulation experiment and generate frequencies for compound events.
PROBLEM SOLVING & MODELING AND DATA ANALYSIS	 Analyze and interpret the context of an unfamiliar situation for problems of increasing complexity. Begin to solve problems optimally. Construct multiple plausible solutions and approaches. Begin to construct chains of logic about abstract concepts autonomously.
REASONING	

	The student who just enters Level 2 should be able to:
CONCEPTS AND PROCEDURES Target A: The Number System	Identify numbers as rational or irrational.
CONCEPTS AND PROCEDURES Targets B, C, and D: Expressions and Equations	 Find the cube of one-digit numbers and the cube root of perfect cubes (less than 1,000). Use appropriate tools (e.g., calculator, pencil and paper) to translate large numbers from scientific to standard notation. Identify the <i>y</i>-intercept and calculate the slope of a line from an equation or graph. Graph a system of linear equations and identify the solution as the point of intersection.
CONCEPTS AND PROCEDURES Targets E and F: Functions	 Identify whether an input/output pair satisfies a function. Compare properties of two linear functions represented in the same way (algebraically, graphically, or in a table). Construct a table to represent a linear relationship between two quantities. Qualitatively describe a graph of a linear function.
CONCEPTS AND PROCEDURES Targets G and H: Geometry	Construct reflections across an axis and translations of figures in a coordinate plane.
CONCEPTS AND PROCEDURES Target I: Geometry	 Identify the appropriate formula for the volume of a cylinder and connect the key dimensions to the appropriate location in the formula.
CONCEPTS AND PROCEDURES Target J: Statistics and Probability	Identify what a linear pattern looks like from a given scatter plot.
PROBLEM SOLVING & MODELING AND DATA ANALYSIS	 Select tools to solve a familiar and moderately scaffolded problem and apply them with partial accuracy. Use the necessary elements given in a problem situation to solve a problem. Apply mathematics to propose solutions by identifying important quantities and by locating missing information from relevant external resources. Find and identify the flaw in an argument.
REASONING	

	The student who just enters Level 3 should be able to:
CONCEPTS AND PROCEDURES Target A: The Number System	 Convert from fractions to repeating decimals. Use rational approximations of familiar irrational numbers to make numerical comparisons.
CONCEPTS AND PROCEDURES Targets B, C, and D: Expressions and Equations	 Solve simple quadratic monomial equations and represent the solution as a square root. Work with and perform operations with scientific notation of large numbers. Identify unit rate of change in linear relationships (i.e., slope is the rate of change). Solve linear equations with rational number coefficients, including equations whose solutions require expanding expressions using the distributive property and collecting like terms and equations with infinitely many solutions or no solution. Solve a system of linear equations with integer coefficients using an algebraic strategy.
CONCEPTS AND PROCEDURES Targets E and F: Functions	 Classify functions as linear or nonlinear on the basis of the algebraic representation. Determine the rate of change and the initial value of a function. Know linear equations of the form y = mx + b are functions. Compare properties of two linear functions represented in different ways (algebraically, graphically, or in a table).
CONCEPTS AND PROCEDURES Targets G and H: Geometry	 Predict the location of point P after a transformation. Know that sequences of translations, rotations, and reflections on a figure always result in a congruent figure. Construct rotations of figures in a coordinate plane.
PROCEDURES Target I: Geometry	world problems.
CONCEPTS AND PROCEDURES Target J: Statistics and Probability	Describe outliers for a given scatter plot.
PROBLEM SOLVING & MODELING AND DATA ANALYSIS	 Use appropriate tools to accurately solve problems arising in everyday life, society, and the workplace. Apply mathematics to solve problems by identifying important quantities and mapping their relationship and by stating and using logical assumptions.
COMMUNICATING REASONING	 Use stated assumptions, definitions, and previously established results and examples to identify and repair a flawed argument. Use previous information to support his or her own reasoning on a routine problem.

	The student who just enters Level 4 should be able to:
CONCEPTS AND PROCEDURES Target A: The Number System	• Approximate irrational numbers between two integers to a specified level of precision.
CONCEPTS AND PROCEDURES Targets B, C, and D: Expressions and Equations	Write a system of two linear equations with two variables to represent a context.
CONCEPTS AND PROCEDURES Targets E and F: Functions	• Interpret the rate of change and initial value of a linear function in terms of its graph.
CONCEPTS AND PROCEDURES Targets G and H: Geometry	 Describe the impact of two transformations, including a dilation, on a figure. Identify or draw the relevant right triangle in a three-dimensional figure, given coordinates or a diagram.
CONCEPTS AND PROCEDURES Target I: Geometry	Solve unfamiliar or multi-step problems involving volumes of cylinders.
CONCEPTS AND PROCEDURES Target J: Statistics and Probability	 Use the trend line or line of best fit to make predictions in real-world situations.
PROBLEM SOLVING & MODELING AND DATA ANALYSIS	 Analyze and interpret the context of an unfamiliar situation for problems of increasing complexity. Begin to solve problems optimally. Construct multiple plausible solutions and approaches.
COMMUNICATING REASONING	Begin to construct chains of logic about abstract concepts autonomously.

The student who just enters Level 2 should be able to:		
CONCEPTS AND PROCEDURES Target C Quantities	<u>Choose and interpret the correct units in a formula given in a familiar context, including</u> making measurement conversions between simple units.	
CONCEPTS AND PROCEDURES Targets D. G. and J Algebra	 Use linear equations in one and two variables and inequalities in one variable to model a familiar situation and to solve a familiar problem. Explain solution steps for solving linear equations. Use properties of exponents to expand a single variable (coefficient of 1) repeated up to two times with a nonnegative integer exponent into an equivalent form and vice versa, e.g., x2x3 = xxxxx = x2+3. Solve one-step linear equations and inequalities in one variable and understand the solution steps as a process of reasoning. Represent linear equations in one and two variables graphically on a coordinate plane. Recognize equivalent forms of linear. Graph and estimate the solution of systems of linear equations. 	
CONCEPTS AND PROCEDURES Targets K. L. M. and N: Functions	 Understand the concept of a function in order to distinguish a relation as a function. Identify properties of two linear or two exponential functions. Understand equivalent forms of linear and functions. Build an explicit function to describe or model a relationship between two quantities. Add, subtract, and multiply linear functions. 	
CONCEPTS AND PROCEDURES Target P: Statistics and Probability	Describe the differences in shape, center, and spread of two or more different data sets representing familiar contexts.	

PROBLEM SOLVING Targets A, B, C, and D & MODELING AND DATA ANALYSIS Targets A, B, C, D, E, F, and G	 Select tools to solve a familiar and moderately scaffolded problem and apply them with partial accuracy. Use the necessary elements given in a problem situation to solve a problem. Apply mathematics to propose solutions by identifying important quantities and by locating missing information from relevant external resources.
COMMUNICATING REASONING Targets A, B, C, D, E, F, G	• Find and identify the flaw in an argument.
The student who just	t enters Level 3 should be able to:
CONCEPTS AND PROCEDURES Target C: Quantities	 <u>Reason quantitatively to choose and interpret the units in a formula given in an unfamiliar context, including making compound measurement conversions.</u> <u>Define appropriate quantities or measurements in familiar contexts with some scaffolding to construct a model.</u> <u>Choose the scale and origin of a graph or data display.</u>
CONCEPTS AND PROCEDURES Targets D, G, and J, Algebra	 Create and use linear inequalities in two variables to model a situation and to solve a problem. Use properties of exponents to write equivalent forms of exponential functions with one or more variables with integer coefficients with nonnegative integer exponents. involving operations of addition, subtraction, and multiplication without requiring distribution of an exponent across parentheses. Solve a quadratic equation with integer roots in standard form. Represent exponential functions graphically and estimate the solution of systems of equations displayed graphically. Understand that the plotted line, curve, or region represents the solution set to an equation or inequality. Add and subtract linear equations.
CONCEPTS AND PROCEDURES Targets K. L. M. and N: Functions	 Identify the domain and range of linear and exponential functions presented in any form. Use function notation to evaluate a function for numerical or monomial inputs. Appropriately graph and interpret key features of linear exponential functions in familiar or scaffolded contexts and specify the average rate of change of a function on a given domain from its equation or approximate the average rate of change of a function from its graph. Graph linear and exponential functions by hand and by using technology.

	 Analyze and compare properties of a linear function to properties of another function of any type. Build a recursive function to describe or model a relationship between two quantities. Divide linear functions.
CONCEPTS AND PROCEDURES Target P: Statistics and Probability	• Select the appropriate choice of spread as interquartile range or standard deviation based on the selection of the measure of center.
PROBLEM SOLVING Targets A, B, C, and D MODELING AND DATA ANALYSIS Targets A, B, C, D, E, F, and G	 Use appropriate tools to accurately solve problems arising in everyday life, society, and the workplace. Apply mathematics to solve problems by identifying important quantities and mapping their relationship and by stating and using logical assumptions.
COMMUNICATING REASONING Targets A, B, C, D, E, F, G	 Use stated assumptions, definitions, and previously established results and examples to identify and repair a flawed argument. Use previous information to support his or her own reasoning on a routine problem.
The student who just	st enters Level 4 should be able to:
CONCEPTS AND PROCEDURES Target C: Quantities	Define appropriate quantities or measurements in unfamiliar contexts with some scaffolding to construct a model.
CONCEPTS AND PROCEDURES Targets D. G. and J: Algebra	 Solve a formula for any variable in the formula. Provide an example that would lead to an extraneous solution when solving linear equations.

CONCEPTS AND PROCEDURES Targets K, L, M, and N:	 Find the input of a function when given the function in function notation and the output, or find the output when given the input. Describe complex features such as holes, symmetries, and end behavior of the graph of a function.
CONCEPTS AND PROCEDURES Target P: Statistics and Probability	 Interpret data to explain why a data value is an outlier.
PROBLEM SOLVING Targets A, B, C, and D & MODELING AND DATA ANALYSIS Targets A, B, C, D, E, F, and G	 <u>Analyze and interpret the context of an unfamiliar situation for problems of increasing complexity.</u> <u>Begin to solve problems optimally.</u> <u>Construct multiple plausible solutions and approaches</u>
COMMUNICATING REASONING Targets A, B, C, D, E, F, G	Begin to construct chains of logic about abstract concepts autonomously.

The student who just	st enters Level 2 should be able to:
CONCEPTS AND PROCEDURES	• Extend the properties of integer exponents to multiply expressions with rational exponents that have common denominators.
Targets A and B:	Perform operations on rational numbers and familiar irrational numbers.
<u>Number and</u> <u>Quantity</u>	<u>Understand that rational numbers are closed under addition and multiplication.</u>
CONCEPTS AND PROCEDURES Targets D, E, F, G, I Algebra	 Solve a simple radical equation. Use properties of exponents to expand a single variable (coefficient of 1) repeated up to two times with a nonnegative integer exponent into an equivalent form and vice versa, e.g., x²x³ = xxxxx = x²⁺³. Represent quadratic equations with integer coefficients in one and two variables graphically on a coordinate plane. Write a quadratic expression with integer-leading coefficients in an equivalent form by factoring. Add multi-variable polynomials that simplify to quadratics
CONCEPTS AND PROCEDURES	 Interpret quadratic functions in context, and given the key features of a graph, the student should be able to identify the appropriate graph.
<u>Targets</u>	Graph quadratic functions by hand or by using technology.
L, M, and N:	Identify properties of two linear or two quadratic functions.
Functions	Understand equivalent forms of linear and quadratic functions.
	Build an explicit function to describe or model a relationship between two quantities.
CONCEPTS AND PROCEDURES	 Use the Pythagorean Theorem in unfamiliar problems to solve for the missing side in a right triangle with some scaffolding.
Target O:	
Similarity, Right Triangles, and Trigonometry	

PROBLEM SOLVING Targets A, B, C, and D & MODELING AND DATA ANALYSIS Targets A, B, C, D, E, F, and G	 Select tools to solve a familiar and moderately scaffolded problem and apply them with partial accuracy. Use the necessary elements given in a problem situation to solve a problem. Apply mathematics to propose solutions by identifying important quantities and by locating missing information from relevant external resources.
COMMUNICATING REASONING Targets A, B, C, D, E, F, G	• Find and identify the flaw in an argument.
The student who ius	st enters Level 3 should be able to:
CONCEPTS AND PROCEDURES Targets A and B: Number and Quantity	 Apply all laws of exponents on expressions with exponents that have common denominators. Rewrite expressions with rational exponents of the form (<i>m</i>/<i>n</i>) to radical form and vice versa. Use repeated reasoning to recognize that the sums and products of a rational number and a nonzero irrational number are irrational.
CONCEPTS AND PROCEDURES Targets D, E, F, G, and I, Algebra	 Create and use quadratic inequalities in two variables to model a situation and to solve a problem. Explain solution steps as a process of reasoning. Solve a quadratic equation with integer roots in standard form. Represent polynomial and exponential functions graphically and estimate the solution of systems of equations displayed graphically. Understand that the plotted line, curve represents the solution set to an equation. Add and subtract multi-variable quadratics and understand that quadratics are closed under subtraction.
CONCEPTS AND PROCEDURES Targets L, M, and N: Functions	 Appropriately graph and interpret key features of linear, quadratic, and exponential functions in familiar or scaffolded contexts and specify the average rate of change of a function on a given domain from its equation or approximate the average rate of change of a function from its graph. Graph linear, quadratic, logarithmic, and exponential functions by hand and by using technology.

	 Analyze and compare properties of a linear function to properties of another function of any type. Build a recursive function to describe or model a relationship between two quantities. Divide linear functions.
CONCEPTS AND PROCEDURES Target O: Similarity, Right Triangles, and Trigonometry	Use trigonometric ratios and the sine and cosine of complementary angles to find missing angles or sides of a given right triangle with minimal scaffolding.
PROBLEM SOLVING Targets A. B. C. and D & MODELING AND DATA ANALYSIS Targets A. B. C. D. E. F. and G	 Use appropriate tools to accurately solve problems arising in everyday life, society, and the workplace. Apply mathematics to solve problems by identifying important quantities and mapping their relationship and by stating and using logical assumptions.
COMMUNICATING REASONING Targets A. B. C. D. E. F. G	 <u>Use stated assumptions, definitions, and previously established results and examples to identify and repair a flawed argument.</u> <u>Use previous information to support his or her own reasoning on a routine problem.</u>
The student who just	st enters Level 4 should be able to:
CONCEPTS AND PROCEDURES Targets A and B: Number and Quantity	Explain the relationship between properties of integer exponents and properties of rational exponents.
CONCEPTS AND PROCEDURES Targets D, E, F, G, and I, Algebra	 <u>Choose an appropriate equivalent form of an expression in order to reveal a property of interest when solving problems.</u> <u>Solve a formula for any variable in the formula.</u> <u>Provide an example that would lead to an extraneous solution when solving, quadratic equations.</u> <u>Use a variety of methods such as factoring, completing the square, quadratic formula, etc., to solve equations and to find minimum and maximum values of quadratic equations.</u>

CONCEPTS AND PROCEDURES Targets L, M, and N:	 <u>Describe complex features such as holes, symmetries, and end behavior of the graph of a function.</u> <u>Graph functions both by hand and by using technology.</u>
<u>Target 0:</u> Similarity, Right Triangles, and Trigonometry	Solve right triangle problems with multiple stages and in compound figures without scaffolding.
PROBLEM SOLVING Targets A, B, C, and D & MODELING AND DATA ANALYSIS Targets A, B, C, D, E, F, and G	 Analyze and interpret the context of an unfamiliar situation for problems of increasing complexity. Begin to solve problems optimally. Construct multiple plausible solutions and approaches
COMMUNICATING REASONING Targets A. B. C. D. E. F. G	Begin to construct chains of logic about abstract concepts autonomously.

	The student who just enters Level 2 should be able to:
CONCEPTS AND PROCEDURES Targets A and B: Number and Quantity	 Extend the properties of integer exponents to multiply expressions with rational exponents that have common denominators. Perform operations on rational numbers and familiar irrational numbers. Understand that rational numbers are closed under addition and multiplication.
CONCEPTS AND PROCEDURES Target C: Quantities	Choose and interpret the correct units in a formula given in a familiar context, including making measurement conversions between simple units.
CONCEPTS AND PROCEDURES Targets D, E, F, G, H, I, and J: Algebra	 Use linear equations in one and two variables and inequalities in one variable to model a familiar situation and to solve a familiar problem. Explain solution steps for solving linear equations and solve a simple radical equation. Use properties of exponents to expand a single variable (coefficient of 1) repeated up to two times with a nonnegative integer exponent into an equivalent form and vice versa, e.g., x²x³ = xxxxx = x²⁺³. Solve one-step linear equations and inequalities in one variable and understand the solution steps as a process of reasoning. Represent linear equations and quadratic equations with integer coefficients in one and two variables graphically on a coordinate plane. Recognize equivalent forms of linear expressions and write a quadratic expression with integer-leading coefficients in an equivalent form by factoring. Add multi-variable polynomials made up of monomials of degree 2 or less. Graph and estimate the solution of systems of linear equations.
CONCEPTS AND PROCEDURES Targets K, L, M, and N: Functions	 Understand the concept of a function in order to distinguish a relation as a function or not a function. Interpret quadratic functions in context, and given the key features of a graph, the student should be able to identify the appropriate graph. Graph quadratic functions by hand or by using technology. Identify properties of two linear or two quadratic functions. Understand equivalent forms of linear and quadratic functions. Build an explicit function to describe or model a relationship between two quantities. Add, subtract, and multiply linear functions.
CONCEPTS AND PROCEDURES Target O: Similarity, Right Triangles, and Trigonometry	 Use the Pythagorean Theorem in unfamiliar problems to solve for the missing side in a right triangle with some scaffolding.
CONCEPTS AND PROCEDURES Target P: Statistics and Probability	 Describe the differences in shape, center, and spread of two or more different data sets representing familiar contexts.

 Select tools to solve a familiar and moderately scaffolded problem and apply them with partial accuracy. Use the necessary elements given in a problem situation to solve a problem. Apply mathematics to propose solutions by identifying important quantities and by locating missing information from relevant external resources.
• Find and identify the flaw in an argument.
The student who just enters Level 3 should be able to:
 Apply all laws of exponents on expressions with exponents that have common denominators. Rewrite expressions with rational exponents of the form (<i>m</i>/<i>n</i>) to radical form and vice versa. Use repeated reasoning to recognize that the sums and products of a rational number and a nonzero irrational number are irrational.
 Reason quantitatively to choose and interpret the units in a formula given in an unfamiliar context, including making compound measurement conversions. Define appropriate quantities or measurements in familiar contexts with some scaffolding to construct a model. Choose the scale and origin of a graph or data display.
 Create and use quadratic inequalities in two variables to model a situation and to solve a problem. Write a quadratic expression in one variable with rational coefficients in an equivalent form by factoring, identify its zeroes, and explain the solution steps as a process of reasoning. Use properties of exponents to write equivalent forms of exponential functions with one or more variables with integer coefficients with nonnegative integer exponents involving operations of addition, subtraction, and multiplication without requiring distribution of an exponent across parentheses. Solve a quadratic equation with integer roots in standard form. Represent polynomial and exponential functions graphically and estimate the solution of systems of equations displayed graphically. Understand that the plotted line, curve, or region represents the solution set to an equation or inequality. Add and subtract multi-variable polynomials of any degree and understand that polynomials are closed under subtraction.

CONCEPTS AND PROCEDURES	 Identify the domain and range of linear, quadratic, and exponential functions presented in any form.
Targets K, L, M, and N: Functions	Use function notation to evaluate a function for numerical or monomial inputs.
	 Appropriately graph and interpret key features of linear, quadratic, and exponential functions in familiar or scaffolded contexts and specify the average rate of change of a function on a given domain from its equation or approximate the average rate of change of a function from its graph.
	 Graph linear, quadratic, logarithmic, and exponential functions by hand and by using technology.
	 Analyze and compare properties of a linear function to properties of another function of any type.
	 Build a recursive function to describe or model a relationship between two quantities.
CONCEPTS AND PROCEDURES Target 0: Similarity, Right Triangles, and Trigonometry	 Use trigonometric ratios and the sine and cosine of complementary angles to find missing angles or sides of a given right triangle with minimal scaffolding.
CONCEPTS AND PROCEDURES Target P: Statistics and Probability	 Select the appropriate choice of spread as interquartile range or standard deviation based on the selection of the measure of center.
PROBLEM SOLVING &	 Use appropriate tools to accurately solve problems arising in everyday life, society, and the workplace.
MODELING AND DATA ANALYSIS	 Apply mathematics to solve problems by identifying important quantities and mapping their relationship and by stating and using logical assumptions.
COMMUNICATING REASONING	 Use stated assumptions, definitions, and previously established results and examples to identify and repair a flawed argument.
	• Use previous information to support his or her own reasoning on a routine problem.
	The student who just enters Level 4 should be able to:
CONCEPTS AND PROCEDURES Targets A and B: Number and Quantity	Explain the relationship between properties of integer exponents and properties of rational exponents.
CONCEPTS AND PROCEDURES Target C: Quantities	• Define appropriate quantities or measurements in unfamiliar contexts with some scaffolding to construct a model.

CONCEPTS AND PROCEDURES Targets D, E, F, G, H, I, and J: Algebra	 Choose an appropriate equivalent form of an expression in order to reveal a property of interest when solving problems.
	Solve a formula for any variable in the formula.
	• Provide an example that would lead to an extraneous solution when solving linear, quadratic, radical, and rational equations.
	 Use a variety of methods such as factoring, completing the square, quadratic formula, etc., to solve equations and to find minimum and maximum values of quadratic equations.
CONCEPTS AND PROCEDURES	• Find the input of a function when given the function in function notation and the output, or find the output when given the input.
Targets K, L, M, and N:	 Describe complex features such as holes, symmetries, and end behavior of the graph of a function.
Functions	Graph functions both by hand and by using technology.
Target O: Similarity, Right Triangles, and Trigonometry	 Solve right triangle problems with multiple stages and in compound figures without scaffolding.
CONCEPTS AND PROCEDURES Target P: Statistics and Probability	Interpret data to explain why a data value is an outlier.
PROBLEM SOLVING & MODELING AND DATA ANALYSIS	 Analyze and interpret the context of an unfamiliar situation for problems of increasing complexity. Begin to solve problems optimally. Construct multiple plausible solutions and approaches
COMMUNICATING REASONING	Begin to construct chains of logic about abstract concepts autonomously.

Advanced – Chemistry		
Chemistry stude understanding o chemistry conce	ents performing at this level demonstrate a thorough conceptual of science content and the application of skills and processes related to epts.	
	Students at this level are able to do the following:	
	 Analyze the periodic table to predict physical and chemical properties. Analyze the historical developments that resulted in the modern version of the periodic table. Create and evaluate graphs of data. Analyze the key concepts of the kinetic molecular theory. Analyze and compare the common theories defining acids and bases. Compare and contrast physical and chemical properties and changes and appropriate computations. Perform and analyze computations using scientific notation, the metric system and dimensional analysis. Compute and evaluate measurement uncertainty to include precision, accuracy and the rules for significant digits. Perform and analyze calculations related to the conversion of grams to moles to particles, atoms, molecules and volume. Analyze and solve reaction stoichiometry problems. Calculate and compare concentrations of solutions in various ways including molarity. Analyze how the presence of solute particles affects the properties of a solution and be able to do calculations involving colligative properties. Calculate and analyze quantitative relationships involved in acid/base chemistry including pH. 	
	 acid/base chemistry including pH. Demonstrate and apply understanding of the scientific method. Justify the selection and use of appropriate scientific equipment, 	
	 Correctly write symbols, formulas and names for elements, ions and compounds. 	
	 Analyze how electrons are involved in the formation of chemical bonds using the octet rule and Lewis dot diagrams. Compare the polarity of chemical bonds using electronegativity. Predict and analyze physical properties of compounds based upon the attractive forces between atoms and molecules. 	
	 Classify and explain the placement of all matter into appropriate categories. Analyze the relationship and reactions of acids, bases, and salts. Analyze the role of dissociation and ionization in producing strong, weak, and nonelectrolytes. Analyze the kinetic molecular theory and apply it to phases of matter. 	
	 Analyze and calculate the changes in heat energy that occur during 	

Science End-of-Course Achievement Level Descriptors Chemistry Advanced

	chemical reactions and phase changes.
•	Apply the conservation of matter by balancing chemical equations.
•	Analyze the difference between exothermic and endothermic
	chemical reactions during chemical or physical changes.
•	Analyze the classic historical experiments that were used to identify
	the components of an atom and its structure.
•	Determine the number of protons, neutrons and electrons for an
	atom, ion, or isotope.
•	Analyze the relationship between the structure of atoms and light
	absorption and emission.
•	Determine and compare and analyze electron arrangements of
	elements using electron configurations and orbital energy diagrams.
•	Analyze the law of conservation of mass and the law of definite
	proportions.
•	Analyze chemical equations for common types of chemical reactions
	and predict the products.
.	Analyze the factors that influence the rates of chemical reactions
	Analyze the role of chemistry in anabling technological advances
•	Analyze the role of chemistry in enabling technological advances.
•	Analyze the role of chemistry in energy and environmental issues.

Proficient Chemistry		
Chemistry studer of science conter	nts performing at this level demonstrate a general conceptual understanding nt and the application of skills and processes related to chemistry concepts.	
	Students at this level are able to do the following:	
	 Use the periodic table to do the following. Use the periodic table to predict physical and chemical properties. Describe the historical development of the periodic table. Create and interpret graphs of data. Explain and interpret the key concepts of the kinetic molecular theory. Distinguish the common theories defining acids and bases. Identify, compare and contrast physical and chemical properties and changes and appropriate computations. Perform computations using scientific notation, the metric system and dimensional analysis. Compute measurement uncertainty to include precision, accuracy and the rules for significant digits. Perform calculations related to the conversion of grams to moles to particles, atoms, molecules and volume. Analyze and solve reaction stoichiometry problems. Express concentrations of solutions in various ways including molarity. Interpret how the presence of solute particles can affect the properties of a solution and be able to do calculations involving colligative properties. Analyze quantitative relationships involved in acid/base chemistry including pH. Demonstrate an understanding of the scientific method. Select and use appropriate scientific equipment, materials and techniques. Correctly write symbols, formulas and names for common elements, ions and compounds. Explain and understand how electrons are involved in the formation of chemical bonds using the octet rule and Lewis dot diagrams. Predict the polarity of chemical bonds using electronegativity. Predict the polarity of chemical bonds using electronegativity. Predict the polarity of chemical bonds using electronegativity. Predict the classify all matter into appropriate categories. Explain the relationship and reactions of acids, bases, and salts. Explain the role of dissociation and ionization in producing str	
	 Explain and calculate the changes in heat energy that occur during chemical reactions and phase changes. Demonstrate the conservation of matter by balancing chemical equations. 	
Science End-of-Course Achievement Level Descriptors Chemistry Proficient

•	Differentiate between exothermic and endothermic chemical reactions during chemical or physical changes.
•	Interpret the classic historical experiments that were used to identify the components of an atom and its structure.
•	Deduce the number of protons, neutrons and electrons for an atom or ion.
•	Describe the relationship between the structure of atoms and light absorption and emission.
•	Determine and illustrate electron arrangements of elements using electron configurations and orbital energy diagrams.
•	Illustrate the law of conservation of mass and the law of definite proportions.
•	Classify, write and balance chemical equations for common types of chemical reactions and predict the products.
•	Describe the factors that influence the rates of chemical reactions.
•	Assess the role of chemistry in enabling technological advances.
•	Evaluate the role of chemistry in energy and environmental issues.

Science End-of-Course Achievement Level Descriptors Chemistry Basic

Science End-of-Course Achievement Level Descriptors Chemistry Basic

	chemical equations.
•	Recognize the difference between exothermic and endothermic
	chemical reactions during chemical or physical changes.
•	Recognize the classic historical experiments that were used to
	identify the components of an atom and its structure.
•	Recognize the number of protons, neutrons and electrons for an atom
	or ion.
•	Recognize the relationship between the structure of atoms and light
	absorption and emission.
•	Identify electron arrangements of elements using electron
	configurations and orbital energy diagrams.
•	Identify the law of conservation of mass and the law of definite
	proportions.
•	Recognize chemical equations for common types of chemical
	reactions and identify the products.
•	Identify the factors that influence the rates of chemical reactions.
•	Identify the role of chemistry in enabling technological advances.
•	Identify the role of chemistry in energy and environmental issues.

Science End-of-Course Achievement Level Descriptors Biology Advanced

Advanced – Biology

Biology students performing at this level demonstrate a thorough conceptual understanding of science content and the application of skills and processes related to biological concepts.		
Students at this performance level are able to do the following:		
 Students at this performance level are able to do the following: Analyze and apply the scientific meaning of system, order, and organization to a given system. Use observations and data as evidence on which to base complex scientific explanations. Evaluate and analyze changes that can occur in and among systems. Calculate and make conversions using the metric system. Analyze questions and concepts that guide scientific investigations. Apply technology and mathematics to investigations. Analyze and compare alternative explanations and models. Analyze the differences among observations, hypotheses, and theories. Evaluate technical writing, graphs, charts, and diagrams. Apply the theory of evolution to explain how species change over time. Evaluate how evolution is the consequence of interactions among the potential of a species to increase its numbers, genetic variability, a finite supply of resources, and the selection by the environment of those offspring better able to survive and reproduce. Evaluate how antter tends toward more disorganized states (entropy). 		
 Analyze how organisms use the continuous input of energy and matter to maintain their chemical and physical organization. Explain how the energy for life is primarily derived from the Sun through photosynthesis. Analyze cellular respiration and the synthesis of macromolecules and compare the different processes. 		
 Compare now matter cycles and energy flows through the different levels of organization of living systems (cells, organs, organisms, communities) and their environment. Compare the particular structures that underlie the cellular functions. Analyze chemical reactions that occur in cells. Analyze how cells use DNA to store and use information for cell functions. Analyze how selective expression of genes can produce specialized 		
 cells from a single cell. Analyze complex environmental issues such as water and air quality, hazardous waste, forest health, and agricultural production. Predict how science advances technology and how technology advances science. 		

Science End-of-Course Achievement Level Descriptors Biology Advanced

•	Analyze how science and technology are pursued for different
•	purposes. Compare the difference between renewable and nonrenewable resources.

Science End-of-Course Achievement Level Descriptors Biology Proficient

Proficient – Biology		
Biology students performing at this level demonstrate a general conceptual understanding of science content and the application of skills and processes related to biological concepts.		
	Students at this performance level are able to do the following:	
	 Students at this performance level are able to do the following: Explain the scientific meaning of system, order, and organization. Apply the concepts of order and organization to a given system. Use observations and data as evidence on which to base scientific explanations. Measure changes that can occur in and among systems. Analyze changes that can occur in and among systems. Measure and calculate using the metric system. Identify questions and concepts that guide scientific investigations. Use appropriate technology and mathematics to make investigations. Analyze alternative explanations and models. Explain the differences among observations, hypotheses, and theories. Analyze technical writing, graphs, charts, and diagrams. Use the theory of evolution to explain how species change over time. Explain how evolution is the consequence of interactions among the potential of a species to increase its numbers, genetic variability, a finite supply of resources, and the selection by the environment of those offspring better able to survive and reproduce. Explain how matter tends toward more disorganized states (entropy). Explain how organisms use the continuous input of energy and matter to maintain their chemical and physical organization. Show how the energy for life is primarily derived from the Sun through photosynthesis. Describe cellular respiration and the synthesis of macromolecules. Show how matter cycles and energy flows through the different levels of organization of living systems (cells, organs, organisms, communities) and their environment. Identify the particular structures that underlie the cellular functions. 	
	 Explain cell functions involving chemical reactions. Explain how cells use DNA to store and use information for cell functions. 	
	 Explain how selective expression of genes can produce specialized cells from a single cell. 	
	 Analyze simple environmental issues such as water and air quality, hazardous waste, forest health, and agricultural production. 	
	• Explain how science advances technology and how technology advances science.	
	 Explain how science and technology are pursued for different purposes. 	
	• Describe the difference between renewable and nonrenewable resources.	

Science End-of-Course Achievement Level Descriptors Biology Basic

Basic – Biology	
Biology students science content a	performing at this level demonstrate a partial conceptual understanding of and the application of skills and processes related to biological concepts.
	Students at this performance level are able to do the following:
	 Identify the scientific meaning of system, order, and organization. Recognize the concepts of order and organization and how they are related to a given system.
	 Identify observations and data as evidence on which to base scientific explanations.
	 Identify changes that can occur in and among systems. Measure using the metric system.
	 Identify appropriate technology and mathematics to make investigations.
	 Identify alternative explanations and models. Recognize the differences among observations, hypotheses, and theories.
	 Uses technical writing, graphs, charts, and diagrams. Identify the theory of evolution.
	• Recognize how evolution is the consequence of interactions among the potential of a species to increase its numbers, genetic variability, a finite supply of resources, and the selection by the environment of those offspring better able to survive and reproduce.
	Recognize that matter tends toward more disorganized states (entropy).
	 Recognize that organisms use the continuous input of energy and matter to maintain their chemical and physical organization. Recognize that the energy for life is primarily derived from the sun through photosynthesis.
	 Recognize the process of cellular respiration. Recognize that matter cycles and energy flows through the different levels of organization of living systems (cells, organs, organisms, communities) and their environment.
	 Identify main cellular structures. Identify cell functions involving chemical reactions. Recognize that cells use DNA to store and use information for cell functions.
	• Recognize that the selective expression of genes can produce specialized cells from a single cell.
	 Identify environmental issues such as water and air quality, hazardous waste, forest health, and agricultural production. Becognize that science advances technology and that technology
	 Recognize that science and technology are pursued for different

Science End-of-Course Achievement Level Descriptors Biology Basic

	 purposes. Identify the difference between renewable and nonrenewable resources.
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