

Maryland Common Core State Curriculum Framework  
Reading Standards for Literacy in Science and Technical Subjects  
Grades 6-8

Cluster: Key Ideas and Details

CCR Anchor Standard #1: Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.

Grades 6-8

**RST 6.8.1** Cite specific textual evidence to support analysis of science and technical texts, attending to the precise details of explanations or descriptions.

Essential Skills and Knowledge

- Demonstrate the behaviors of a strategic reader when reading a science or technical text.
  - Select and apply appropriate before reading strategies to a text.
    - ✓ previewing the text.
    - ✓ setting a purpose for reading.
    - ✓ making predictions about the text.
    - ✓ drawing connections between prior knowledge or experience and the text.
  - Select and apply during reading strategies to monitor comprehension.
    - ✓ rereading.
    - ✓ paraphrasing.
    - ✓ summarizing.
    - ✓ connecting related ideas within the text.
    - ✓ verifying or modifying predictions.
    - ✓ visualizing.
    - ✓ connecting text ideas with prior knowledge or experience.
  - Demonstrate comprehension of a text with after reading strategies.
    - ✓ explaining the main ideas.
    - ✓ identifying what is directly stated in the text.
    - ✓ drawing inferences.
    - ✓ drawing conclusions.
    - ✓ verifying or adjusting predictions.
    - ✓ making new predictions.
    - ✓ paraphrasing and summarizing. (See MD SLM 6-8 4A2.b)
    - ✓ making connections between the text and oneself.
- Determine, select, and state the strongest piece(s) among multiple pieces of evidence that confirms the meaning of a science or technical text.
- Participate actively and appropriately in discussions about informational texts. (See CCSS SL.8.8 and SL.8.3)
- Demonstrate command of the conventions of Standard English grammar and usage when writing or speaking. (CCSS L.8.1)
- Demonstrate command of the conventions of Standard English grammar and usage when writing or speaking. (CCSS L.8.1)

CCR Anchor Standard #2 Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.

**Grades 6-8**

**RST.6-8.2.** Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions.

Essential Skills and Knowledge

- Examine and determine significant pieces of information developed throughout a science or technical text that contributes to the central idea.
- Synthesize significant information developed through the text to formulate one or more central ideas. (See CCSS SL.8.4)
- Paraphrase or compose a summary that includes the central idea and explain its development throughout the text.
- Use a variety of transition words to convey relationships between and among ideas. (See CCSS W.8.2c)

CCR Anchor Standard #3 Analyze how and why individuals, events, or ideas develop and interact over the course of a text.

**Grades 6-8**

**RST.6-8.3** Follow precisely a multistep procedure when carrying out experiments, taking measurements or performing technical tasks.

Essential Skills and Knowledge

- Preview text.
  - Review title for key words from a science or technical procedure to support the purpose.
  - Skim text for unfamiliar words and name of tools, materials or necessary equipment
  - Determine the general organizational pattern (e.g., transition words and phrases indicating chronological, order sequence, description).
  - Identify text features, headings, and graphic/features.
  
- Read and demonstrate comprehension by:
  - identifying what is directly stated in the text
  - making connections between the text and prior science/technical procedural experiences
  - Reread text, and demonstrate comprehension of text by:
    - ✓ visualizing the procedure
    - ✓ paraphrasing and summarizing (See MD SLM 6-8 4A2.b)
  
- Implement the procedure (i.e., order of events, tools to use, and safety precautions).

## Cluster: Craft and Structure

CCR Anchor Standard #4 Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.

Grades 6-8
<b>RST.6-8.4</b> Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grade 6-8 texts and topics.
Essential Skills and Knowledge <ul style="list-style-type: none"><li>• Use grade-level appropriate academic or domain-specific words and phrases to show comprehension about a science or technical text. (See CCSS L.8.6)</li><li>• Use evidence from a science or technical text to determine the meaning of a symbol, word, phrase, or other discipline specific vocabulary.</li><li>• Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., ecosystem, photosynthesis, asexual). (CCSS L.8.4b)</li><li>• Examine word choice, relationships between words, and references to other texts as an aid to comprehension.</li><li>• Use and consult reference materials to clarify meaning and correct usage of vocabulary and to aid in vocabulary acquisition.</li><li>• Use new vocabulary in speaking and writing to gain and extend content knowledge and clarify expressions.</li></ul>

CCR Anchor Standard #5: Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and the whole.

**Grades 6-8**

**RST.6-8.5.** Analyze the structure an author uses to organize a text, including how the major sections contribute to the whole and to an understanding of the topic.

Essential Skills and Knowledge

- Identify and analyze the text structure used to organize science or technical text (e.g., sequentially/chronologically, main ideas and supporting details, cause and effect, compare and contrast, problem and solution).
- Apply an understanding of text features in a science or technical text (e.g., print features, graphic aids, informational aids, online features, etc.) to facilitate an understanding of the text.
- Determine the author's purpose for the identified text.
- Determine the relationship among certain major sections within the text as a whole.
- Draw conclusions about how the relationship among the major sections adds to the growth of an idea within the whole text.
- Evaluate the effectiveness of the structure in presenting the information

CCR Anchor Standard #6: Assess how point of view or purpose shapes the content and style of a text.

**Grades 9-10**

**RST.6-8.6.** Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text.

Essential Skills and Knowledge

- Evaluate how structure (format, text features) and key ideas are used to support the author's purpose.
- Analyze the relationships between and among ideas throughout the text.
- Synthesize relevant evidence to identify the author's purpose:
  - providing an explanation
  - describing a procedure
  - discussing an experiment

## Cluster: Integration of Knowledge and Ideas

CCR Anchor Standard #7: Integrate and evaluate content presented in diverse formats and media, including visually and quantitatively, as well as in words.

Grades 6-8
<b>RST.6-8.7.</b> Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table).
Essential Skills and Knowledge <ul style="list-style-type: none"><li>• Identify the key ideas and details in a science or technical text expressed in words with similar information expressed visually.</li><li>• Compare and contrast quantitative information expressed in words with similar information expressed visually.</li><li>• Organize the information from the different formats to develop a logical understanding of a topic or an issue.</li><li>• Synthesize information to represent a logical understanding of a topic or issue.</li></ul>

CCR Anchor Standard #8: Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence.

**Grades 6-8**

**RST.6-8.8** Distinguish among facts, reasoned judgment based on research findings, and speculation in a text.

Essential Skills and Knowledge

- Use knowledge of words, phrases, and clauses to clarify the relationship among claims and supporting evidence.
- Use evidence from other informational texts to support analysis.
- Assess the validity and accuracy of evidence. (See CCSS W.8.8)
- Identify unsupported claims (speculation) versus supported claims (reasoned judgment) in the text.



CCR Anchor Standard #9: Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take.

**Grades 6-8**

**RST.6-8.9** Compare and contrast science and technical information gained from experiments, simulations, video or multimedia sources with that gained from reading a text on the same topic.

Essential Skills and Knowledge

- Identify the main points and supporting evidence gained from experiments, simulations, videos, or multimedia sources on the same topic.
- Compare and contrast quantitative and technical information expressed in words in a text with similar information expressed visually (experiment, simulations, video, or multimedia).
- Organize and synthesize the information presented in the formats to develop a logical understanding of a topic or an issue.

## Cluster: Range of Reading and Level of Text Complexity

CCR Anchor Standard #10: Read and comprehend complex literary and informational texts independently and proficiently.

Grades 6-8
<b>RST.6-8.10</b> By the end of grade 8, read and comprehend science/technical texts in the grades 6–8 text complexity band independently and proficiently.
Essential Skills and Knowledge <ul style="list-style-type: none"><li>• Adjust strategies as necessary for reading a self-selected and assigned range of grade-appropriate science and technical texts while self-monitoring for comprehension.</li><li>• Comprehend science and technical text of steadily increasing complexity with scaffolding, as necessary.</li><li>• Set personal goals and conference regularly with adults to improve reading.</li><li>• See MD SLM.6-8. 6.0.</li></ul>