

Reading Standards for Literacy in Science and Technical Subjects 6–12

RST

Grades 6–8 students:

Grades 9–10 students:

Grades 11–12 students:

Key Ideas and Details

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| <ol style="list-style-type: none"> 1. Cite specific textual evidence to support analysis of science and technical texts. 2. Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions. 3. Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. | <ol style="list-style-type: none"> 1. Cite specific textual evidence to support analysis of science and technical texts, attending to the precise details of explanations or descriptions. 2. Determine the central ideas or conclusions of a text; trace the text's explanation or depiction of a complex process, phenomenon, or concept; provide an accurate summary of the text. 3. Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks, attending to special cases or exceptions defined in the text. | <ol style="list-style-type: none"> 1. Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account. 2. Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms. 3. Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text. |
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Craft and Structure

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| <ol style="list-style-type: none"> 4. 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 <i>grades 6–8 texts and topics</i>. 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. 6. Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text. | <ol style="list-style-type: none"> 4. 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 <i>grades 9–10 texts and topics</i>. 5. Analyze the structure of the relationships among concepts in a text, including relationships among key terms (e.g., <i>force</i>, <i>friction</i>, <i>reaction force</i>, <i>energy</i>). 6. Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, defining the question the author seeks to address. | <ol style="list-style-type: none"> 4. 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 <i>grades 11–12 texts and topics</i>. 5. Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas. 6. Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved. |
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Integration of Knowledge and Ideas

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| <ol style="list-style-type: none"> 7. 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). 8. Distinguish among facts, reasoned judgment based on research findings, and speculation in a text. 9. Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic. | <ol style="list-style-type: none"> 7. Translate quantitative or technical information expressed in words in a text into visual form (e.g., a table or chart) and translate information expressed visually or mathematically (e.g., in an equation) into words. 8. Assess the extent to which the reasoning and evidence in a text support the author's claim or a recommendation for solving a scientific or technical problem. 9. Compare and contrast findings presented in a text to those from other sources (including their own experiments), noting when the findings support or contradict previous explanations or accounts. | <ol style="list-style-type: none"> 7. Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem. 8. Evaluate the hypotheses, data, analysis, and conclusions in a science or technical text, verifying the data when possible and corroborating or challenging conclusions with other sources of information. 9. Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible. |
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Range of Reading and Level of Text Complexity

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| <ol style="list-style-type: none"> 10. By the end of grade 8, read and comprehend science/technical texts in the grades 6–8 text complexity band independently and proficiently. | <ol style="list-style-type: none"> 10. By the end of grade 10, read and comprehend science/technical texts in the grades 9–10 text complexity band independently and proficiently. | <ol style="list-style-type: none"> 10. By the end of grade 12, read and comprehend science/technical texts in the grades 11–CCR text complexity band independently and proficiently. |
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