

Connections to Standards in Gateway

PLTW curriculum is designed to empower students to thrive in an evolving world. As a part of the design process when developing and updating our curriculum, we focus on connections to a variety of standards. PLTW Green Architecture connects to standards in the following:

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Common Core College and Career Readiness Anchor Standards

Reading

Key Ideas and Details

CCSS.ELA-LITERACY.CCRA.R.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.

AB.1 AB.2

1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10

1.11 1.12

2.1 2.2 2.3 2.4 2.5 2.6 2.7

3.1 3.2a and 3.2b 3.3 3.4

CCSS.ELA-LITERACY.CCRA.R.10

Read and comprehend complex literary and informational texts independently and proficiently.

AB.1 AB.2

1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10

1.11 1.12

2.1 2.2 2.3 2.4 2.5 2.6 2.7

3.1 3.2a and 3.2b 3.3 3.4

Writing

Text Types and Purposes

CCSS.ELA-LITERACY.CCRA.W.2

Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.

AB.1 AB.2

1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10

1.11 1.12

2.1 2.2 2.3 2.4 2.5 2.6 2.7

3.1 3.2a and 3.2b 3.3 3.4

Common Core College and Career Readiness Anchor Standards

CCSS.ELA-LITERACY.CCRA.W.4

Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

AB.1 AB.2

1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

CCSS.ELA-LITERACY.CCRA.W.7

Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.

AB.1 AB.2

1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

CCSS.ELA-LITERACY.CCRA.W.8

Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.

AB.1 AB.2

1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

Common Core College and Career Readiness Anchor Standards

CCSS.ELA-LITERACY.CCRA.W.9

Draw evidence from literary or informational texts to support analysis, reflection, and research.

AB.1 AB.2

- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

Speaking and Listening

Comprehension and Collaboration

CCSS.ELA-LITERACY.CCRA.SL.1

Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.

AB.1 AB.2

- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

CCSS.ELA-LITERACY.CCRA.SL.2

Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.

AB.1 AB.2

- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

Common Core College and Career Readiness Anchor Standards

CCSS.ELA-LITERACY.CCRA.SL.4

Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.

AB.1 AB.2

1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10

1.11 1.12

2.1 2.2 2.3 2.4 2.5 2.6 2.7

3.1 3.2a and 3.2b 3.3 3.4

CCSS.ELA-LITERACY.CCRA.SL.6

Adapt speech to a variety of contexts and communicative tasks, demonstrating command of formal English when indicated or appropriate.

AB.1 AB.2

1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10

1.11 1.12

2.1 2.2 2.3 2.4 2.5 2.6 2.7

3.1 3.2a and 3.2b 3.3 3.4

Language

Conventions of Standard English

CCSS.ELA-LITERACY.CCRA.L.1

Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

AB.1 AB.2

1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10

1.11 1.12

2.1 2.2 2.3 2.4 2.5 2.6 2.7

3.1 3.2a and 3.2b 3.3 3.4

Common Core College and Career Readiness Anchor Standards

CCSS.ELA-LITERACY.CCRA.L.2

Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

AB.1 AB.2

- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

CCSS.ELA-LITERACY.CCRA.L.4

Determine or clarify the meaning of unknown and multiple-meaning words and phrases by using context clues, analyzing meaningful word parts, and consulting general and specialized reference materials, as appropriate.

AB.1 AB.2

- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

CCSS.ELA-LITERACY.CCRA.L.5

Demonstrate understanding of word relationships and nuances in word meanings.

AB.1 AB.2

- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

Common Core College and Career Readiness Anchor Standards

CCSS.ELA-LITERACY.CCRA.L.6

Acquire and use accurately a range of general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.

AB.1 AB.2

1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10

1.11 1.12

2.1 2.2 2.3 2.4 2.5 2.6 2.7

3.1 3.2a and 3.2b 3.3 3.4

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Common Core State Standards for English Language Arts 6–8 Literacy Standards for History/Social Studies, Science, and Technical Subjects

Reading Science/Technical

Key Ideas and Details

CCSS.ELA-LITERACY.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.

- AB.1 AB.2
- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
- 2.1 2.2 2.3 2.4 2.5 2.6 2.7
- 3.1 3.2a and 3.2b 3.3 3.4

CCSS.ELA-LITERACY.RST.6-8.3

Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.

- AB.1 AB.2
- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
- 2.1 2.2 2.3 2.4 2.5 2.6 2.7
- 3.1 3.2a and 3.2b 3.3 3.4

Craft and Structure

CCSS.ELA-LITERACY.RST.6-8.4

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 grades 6–8 texts and topics.

- AB.1 AB.2
- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
- 2.1 2.2 2.3 2.4 2.5 2.6 2.7
- 3.1 3.2a and 3.2b 3.3 3.4

Common Core State Standards for English Language Arts 6–8 Literacy Standards for History/Social Studies, Science, and Technical Subjects

Range of Reading and Level of Text Complexity

CCSS.ELA-LITERACY.RST.6-8.10

By the end of grade 8, read and comprehend science/technical texts in the grades 6–8 text complexity band independently and proficiently.

AB.1 AB.2

1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

Writing in History/social Studies, Science, and Technical Subjects

Text Types and Purposes

CCSS.ELA-LITERACY.WHST.6-8.2.d

Use precise language and domain-specific vocabulary to inform about or explain the topic.

AB.1 AB.2

1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

Production and Distribution of Writing

CCSS.ELA-LITERACY.WHST.6-8.4

Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

AB.1 AB.2

1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

Common Core State Standards for English Language Arts 6–8 Literacy Standards for History/Social Studies, Science, and Technical Subjects

Research to Build and Present Knowledge

CCSS.ELA-LITERACY.WHST.6-8.9

Draw evidence from informational texts to support analysis, reflection, and research.

AB.1 AB.2

1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10

1.11 1.12

2.1 2.2 2.3 2.4 2.5 2.6 2.7

3.1 3.2a and 3.2b 3.3 3.4

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Common Core State Standards for English Language Arts 6th Grade

Reading Literature

Key Ideas and Details

CCSS.ELA-LITERACY.RL.6.1

Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.

AB.1 AB.2

1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10

1.11 1.12

2.1 2.2 2.3 2.4 2.5 2.6 2.7

3.1 3.2a and 3.2b 3.3 3.4

Reading Informational

Key Ideas and Details

CCSS.ELA-LITERACY.RI.6.1

Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.

AB.1 AB.2

1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10

1.11 1.12

2.1 2.2 2.3 2.4 2.5 2.6 2.7

3.1 3.2a and 3.2b 3.3 3.4

Craft and Structure

CCSS.ELA-LITERACY.RI.6.4

Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings.

AB.1 AB.2

1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10

1.11 1.12

2.1 2.2 2.3 2.4 2.5 2.6 2.7

3.1 3.2a and 3.2b 3.3 3.4

Common Core State Standards for English Language Arts 6th Grade

Integration of Knowledge and Ideas

CCSS.ELA-LITERACY.RI.6.7

Integrate information presented in different media or formats (e.g., visually, quantitatively) as well as in words to develop a coherent understanding of a topic or issue.

AB.1 AB.2

- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

Writing

Text Types and Purposes

CCSS.ELA-LITERACY.W.6.1.c

Use words, phrases, and clauses to clarify the relationships among claim(s) and reasons.

AB.1 AB.2

- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

CCSS.ELA-LITERACY.W.6.2

Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.

AB.1 AB.2

- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

Common Core State Standards for English Language Arts 6th Grade

CCSS.ELA-LITERACY.W.6.2.b

Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples.

AB.1 AB.2

- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

CCSS.ELA-LITERACY.W.6.2.d

Use precise language and domain-specific vocabulary to inform about or explain the topic.

AB.1 AB.2

- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

CCSS.ELA-LITERACY.W.6.3.d

Use precise words and phrases, relevant descriptive details, and sensory language to convey experiences and events.

AB.1 AB.2

- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

Common Core State Standards for English Language Arts 6th Grade

Production and Distribution of Writing

CCSS.ELA-LITERACY.W.6.4

Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3.)

AB.1 AB.2

1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10

1.11 1.12

2.1 2.2 2.3 2.4 2.5 2.6 2.7

3.1 3.2a and 3.2b 3.3 3.4

Research to Build and Present Knowledge

CCSS.ELA-LITERACY.W.6.7

Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.

AB.1 AB.2

1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10

1.11 1.12

2.1 2.2 2.3 2.4 2.5 2.6 2.7

3.1 3.2a and 3.2b 3.3 3.4

CCSS.ELA-LITERACY.W.6.9

Draw evidence from literary or informational texts to support analysis, reflection, and research.

AB.1 AB.2

1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10

1.11 1.12

2.1 2.2 2.3 2.4 2.5 2.6 2.7

3.1 3.2a and 3.2b 3.3 3.4

Common Core State Standards for English Language Arts 6th Grade

Speaking and Listening

Comprehension and Collaboration

CCSS.ELA-LITERACY.SL.6.1

Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 6 topics, texts, and issues, building on others' ideas and expressing their own clearly.

AB.1 AB.2

1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

CCSS.ELA-LITERACY.SL.6.1.a

Come to discussions prepared, having read or studied required material; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.

AB.1 AB.2

1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

CCSS.ELA-LITERACY.SL.6.1.b

Follow rules for collegial discussions, set specific goals and deadlines, and define individual roles as needed.

AB.1 AB.2

1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

Common Core State Standards for English Language Arts 6th Grade

CCSS.ELA-LITERACY.SL.6.1.c

Pose and respond to specific questions with elaboration and detail by making comments that contribute to the topic, text, or issue under discussion.

AB.1 AB.2

- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

CCSS.ELA-LITERACY.SL.6.2

Interpret information presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how it contributes to a topic, text, or issue under study.

AB.1 AB.2

- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

Presentation of Knowledge and Ideas

CCSS.ELA-LITERACY.SL.6.4

Present claims and findings, sequencing ideas logically and using pertinent descriptions, facts, and details to accentuate main ideas or themes; use appropriate eye contact, adequate volume, and clear pronunciation.

AB.1 AB.2

- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

Common Core State Standards for English Language Arts 6th Grade

CCSS.ELA-LITERACY.SL.6.5

Include multimedia components (e.g., graphics, images, music, sound) and visual displays in presentations to clarify information.

- AB.1 AB.2
- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
- 2.1 2.2 2.3 2.4 2.5 2.6 2.7
- 3.1 3.2a and 3.2b 3.3 3.4

CCSS.ELA-LITERACY.SL.6.6

Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate.

- AB.1 AB.2
- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
- 2.1 2.2 2.3 2.4 2.5 2.6 2.7
- 3.1 3.2a and 3.2b 3.3 3.4

Language

Conventions of Standard English

CCSS.ELA-LITERACY.L.6.1

Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

- AB.1 AB.2
- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
- 2.1 2.2 2.3 2.4 2.5 2.6 2.7
- 3.1 3.2a and 3.2b 3.3 3.4

Common Core State Standards for English Language Arts 6th Grade

CCSS.ELA-LITERACY.L.6.2

Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

AB.1 AB.2

- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

Knowledge of Language

CCSS.ELA-LITERACY.L.6.3

Use knowledge of language and its conventions when writing, speaking, reading, or listening.

AB.1 AB.2

- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

Vocabulary Acquisition and Use

CCSS.ELA-LITERACY.L.6.4

Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 6 reading and content, choosing flexibly from a range of strategies.

AB.1 AB.2

- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

Common Core State Standards for English Language Arts 6th Grade

CCSS.ELA-LITERACY.L.6.6

Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.

AB.1 AB.2

1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10

1.11 1.12

2.1 2.2 2.3 2.4 2.5 2.6 2.7

3.1 3.2a and 3.2b 3.3 3.4

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Common Core State Standards for English Language Arts 7th Grade

Writing

Text Types and Purposes

CCSS.ELA-LITERACY.W.7.1.b

Support claim(s) with logical reasoning and relevant evidence, using accurate, credible sources and demonstrating an understanding of the topic or text.

AB.1 AB.2

- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

CCSS.ELA-LITERACY.W.7.2

Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.

AB.1 AB.2

- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

CCSS.ELA-LITERACY.W.7.2.d

Use precise language and domain-specific vocabulary to inform about or explain the topic.

AB.1 AB.2

- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

Common Core State Standards for English Language Arts 7th Grade

CCSS.ELA-LITERACY.W.7.3.d

Use precise words and phrases, relevant descriptive details, and sensory language to capture the action and convey experiences and events.

- AB.1 AB.2
- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
- 1.11 1.12
- 2.1 2.2 2.3 2.4 2.5 2.6 2.7
- 3.1 3.2a and 3.2b 3.3 3.4

Production and Distribution of Writing

CCSS.ELA-LITERACY.W.7.4

Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 7.w.1–3)

- AB.1 AB.2
- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
- 1.11 1.12
- 2.1 2.2 2.3 2.4 2.5 2.6 2.7
- 3.1 3.2a and 3.2b 3.3 3.4

Research to Build and Present Knowledge

CCSS.ELA-LITERACY.W.7.8

Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.

- AB.1 AB.2
- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
- 1.11 1.12
- 2.1 2.2 2.3 2.4 2.5 2.6 2.7
- 3.1 3.2a and 3.2b 3.3 3.4

Common Core State Standards for English Language Arts 7th Grade

Speaking and Listening

Comprehension and Collaboration

CCSS.ELA-LITERACY.SL.7.1

Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others' ideas and expressing their own clearly.

AB.1 AB.2

1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10

1.11 1.12

2.1 2.2 2.3 2.4 2.5 2.6 2.7

3.1 3.2a and 3.2b 3.3 3.4

CCSS.ELA-LITERACY.SL.7.1.a

Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.

AB.1 AB.2

1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10

1.11 1.12

2.1 2.2 2.3 2.4 2.5 2.6 2.7

3.1 3.2a and 3.2b 3.3 3.4

CCSS.ELA-LITERACY.SL.7.1.b

Follow rules for collegial discussions, track progress toward specific goals and deadlines, and define individual roles as needed.

AB.1 AB.2

1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10

1.11 1.12

2.1 2.2 2.3 2.4 2.5 2.6 2.7

3.1 3.2a and 3.2b 3.3 3.4

Common Core State Standards for English Language Arts 7th Grade

CCSS.ELA-LITERACY.SL.7.1.c

Pose questions that elicit elaboration and respond to others' questions and comments with relevant observations and ideas that bring the discussion back on topic as needed.

AB.1 AB.2

- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

CCSS.ELA-LITERACY.SL.7.1.d

Acknowledge new information expressed by others and, when warranted, modify their own views.

AB.1 AB.2

- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

CCSS.ELA-LITERACY.SL.7.2

Analyze the main ideas and supporting details presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how the ideas clarify a topic, text, or issue under study.

AB.1 AB.2

- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

Common Core State Standards for English Language Arts 7th Grade

Presentation of Knowledge and Ideas

CCSS.ELA-LITERACY.SL.7.5

Include multimedia components and visual displays in presentations to clarify claims and findings and emphasize salient points.

AB.1 AB.2

- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
- 2.1 2.2 2.3 2.4 2.5 2.6 2.7
- 3.1 3.2a and 3.2b 3.3 3.4

CCSS.ELA-LITERACY.SL.7.6

Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate.

AB.1 AB.2

- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
- 2.1 2.2 2.3 2.4 2.5 2.6 2.7
- 3.1 3.2a and 3.2b 3.3 3.4

Language

Conventions of Standard English

CCSS.ELA-LITERACY.L.7.1

Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

AB.1 AB.2

- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
- 2.1 2.2 2.3 2.4 2.5 2.6 2.7
- 3.1 3.2a and 3.2b 3.3 3.4

Common Core State Standards for English Language Arts 7th Grade

CCSS.ELA-LITERACY.L.7.2

Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

AB.1 AB.2

- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

CCSS.ELA-LITERACY.L.7.2.b

Spell correctly.

AB.1 AB.2

- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

Knowledge of Language

CCSS.ELA-LITERACY.L.7.3

Use knowledge of language and its conventions when writing, speaking, reading, or listening.

AB.1 AB.2

- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

Common Core State Standards for English Language Arts 7th Grade

CCSS.ELA-LITERACY.L.7.3.a

Choose language that expresses ideas precisely and concisely, recognizing and eliminating wordiness and redundancy.

AB.1 AB.2

- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

Vocabulary Acquisition and Use

CCSS.ELA-LITERACY.L.7.4

Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 7 reading and content, choosing flexibly from a range of strategies.

AB.1 AB.2

- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

CCSS.ELA-LITERACY.L.7.6

Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.

AB.1 AB.2

- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

Common Core State Standards for English Language Arts 8th Grade

Writing

Text Types and Purposes

CCSS.ELA-LITERACY.W.8.2

Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.

AB.1 AB.2

- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

CCSS.ELA-LITERACY.W.8.2.b

Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples.

AB.1 AB.2

- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

CCSS.ELA-LITERACY.W.8.2.d

Use precise language and domain-specific vocabulary to inform about or explain the topic.

AB.1 AB.2

- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

Common Core State Standards for English Language Arts 8th Grade

CCSS.ELA-LITERACY.W.8.3.d

Use precise words and phrases, relevant descriptive details, and sensory language to capture the action and convey experiences and events.

- AB.1 AB.2
 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

Production and Distribution of Writing

CCSS.ELA-LITERACY.W.8.4

Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3.)

- AB.1 AB.2
 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

CCSS.ELA-LITERACY.W.8.6

Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas efficiently as well as to interact and collaborate with others.

- AB.1 AB.2
 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

Common Core State Standards for English Language Arts 8th Grade

Research to Build and Present Knowledge

CCSS.ELA-LITERACY.W.8.8

Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.

AB.1 AB.2

1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10

1.11 1.12

2.1 2.2 2.3 2.4 2.5 2.6 2.7

3.1 3.2a and 3.2b 3.3 3.4

CCSS.ELA-LITERACY.W.8.9

Draw evidence from literary or informational texts to support analysis, reflection, and research.

AB.1 AB.2

1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10

1.11 1.12

2.1 2.2 2.3 2.4 2.5 2.6 2.7

3.1 3.2a and 3.2b 3.3 3.4

Speaking and Listening

Comprehension and Collaboration

CCSS.ELA-LITERACY.SL.8.1

Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 8 topics, texts, and issues, building on others' ideas and expressing their own clearly.

AB.1 AB.2

1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10

1.11 1.12

2.1 2.2 2.3 2.4 2.5 2.6 2.7

3.1 3.2a and 3.2b 3.3 3.4

Common Core State Standards for English Language Arts 8th Grade

CCSS.ELA-LITERACY.SL.8.1.a

Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.

AB.1 AB.2

1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10

1.11 1.12

2.1 2.2 2.3 2.4 2.5 2.6 2.7

3.1 3.2a and 3.2b 3.3 3.4

CCSS.ELA-LITERACY.SL.8.1.b

Follow rules for collegial discussions and decision-making, track progress toward specific goals and deadlines, and define individual roles as needed.

AB.1 AB.2

1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10

1.11 1.12

2.1 2.2 2.3 2.4 2.5 2.6 2.7

3.1 3.2a and 3.2b 3.3 3.4

CCSS.ELA-LITERACY.SL.8.1.d

Acknowledge new information expressed by others, and, when warranted, qualify or justify their own views in light of the evidence presented.

AB.1 AB.2

1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10

1.11 1.12

2.1 2.2 2.3 2.4 2.5 2.6 2.7

3.1 3.2a and 3.2b 3.3 3.4

Common Core State Standards for English Language Arts 8th Grade

Presentation of Knowledge and Ideas

CCSS.ELA-LITERACY.SL.8.5

Integrate multimedia and visual displays into presentations to clarify information, strengthen claims and evidence, and add interest.

AB.1 AB.2

- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
- 2.1 2.2 2.3 2.4 2.5 2.6 2.7
- 3.1 3.2a and 3.2b 3.3 3.4

CCSS.ELA-LITERACY.SL.8.6

Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate.

AB.1 AB.2

- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
- 2.1 2.2 2.3 2.4 2.5 2.6 2.7
- 3.1 3.2a and 3.2b 3.3 3.4

Language

Conventions of Standard English

CCSS.ELA-LITERACY.L.8.1

Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

AB.1 AB.2

- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
- 2.1 2.2 2.3 2.4 2.5 2.6 2.7
- 3.1 3.2a and 3.2b 3.3 3.4

Common Core State Standards for English Language Arts 8th Grade

CCSS.ELA-LITERACY.L.8.2

Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

AB.1 AB.2

- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

CCSS.ELA-LITERACY.L.8.2.c

Spell correctly.

AB.1 AB.2

- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

Knowledge of Language

CCSS.ELA-LITERACY.L.8.3

Use knowledge of language and its conventions when writing, speaking, reading, or listening.

AB.1 AB.2

- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

Common Core State Standards for English Language Arts 8th Grade

Vocabulary Acquisition and Use

CCSS.ELA-LITERACY.L.8.4

Determine or clarify the meaning of unknown and multiple-meaning words or phrases based on grade 8 reading and content, choosing flexibly from a range of strategies.

AB.1 AB.2

1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10

1.11 1.12

2.1 2.2 2.3 2.4 2.5 2.6 2.7

3.1 3.2a and 3.2b 3.3 3.4

CCSS.ELA-LITERACY.L.8.5.b

Use the relationship between particular words to better understand each of the words.

AB.1 AB.2

1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10

1.11 1.12

2.1 2.2 2.3 2.4 2.5 2.6 2.7

3.1 3.2a and 3.2b 3.3 3.4

CCSS.ELA-LITERACY.L.8.6

Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.

AB.1 AB.2

1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10

1.11 1.12

2.1 2.2 2.3 2.4 2.5 2.6 2.7

3.1 3.2a and 3.2b 3.3 3.4

International Society for Technology in Education

Knowledge Constructor

3a

Students plan and employ effective research strategies to locate information and other resources for their intellectual or creative pursuits.

- AB.1 AB.2
- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
- 2.1 2.2 2.3 2.4 2.5 2.6 2.7
- 3.1 3.2a and 3.2b 3.3 3.4

3d

Students build knowledge by actively exploring real-world issues and problems, developing ideas and theories and pursuing answers and solutions.

- AB.1 AB.2
- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
- 2.1 2.2 2.3 2.4 2.5 2.6 2.7
- 3.1 3.2a and 3.2b 3.3 3.4

Innovative Designer

4a

Students know and use a deliberate design process for generating ideas, testing theories, creating innovative artifacts or solving authentic problems.

- AB.1 AB.2
- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
- 2.1 2.2 2.3 2.4 2.5 2.6 2.7
- 3.1 3.2a and 3.2b 3.3 3.4

International Society for Technology in Education

4c

Students develop, test and refine prototypes as part of a cyclical design process.

- AB.1 AB.2
- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
- 2.1 2.2 2.3 2.4 2.5 2.6 2.7
- 3.1 3.2a and 3.2b 3.3 3.4

Computational Thinker

5c

Students break problems into component parts, extract key information, and develop descriptive models to understand complex systems or facilitate problem-solving.

- AB.1 AB.2
- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
- 2.1 2.2 2.3 2.4 2.5 2.6 2.7
- 3.1 3.2a and 3.2b 3.3 3.4

Creative Communicator

6c

Students communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations.

- AB.1 AB.2
- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
- 2.1 2.2 2.3 2.4 2.5 2.6 2.7
- 3.1 3.2a and 3.2b 3.3 3.4

Global Collaborator

7c

Students contribute constructively to project teams, assuming various roles and responsibilities to work effectively toward a common goal.

AB.1 AB.2

1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12

2.1 2.2 2.3 2.4 2.5 2.6 2.7

3.1 3.2a and 3.2b 3.3 3.4

Standards for Technological and Engineering Literacy

Nature and Characteristics of Technology and Engineering

STEL-1M

Apply creative problem-solving strategies to the improvement of existing devices or processes or the development of new approaches.

- AB.1 AB.2
- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
- 2.1 2.2 2.3 2.4 2.5 2.6 2.7
- 3.1 3.2a and 3.2b 3.3 3.4

Core Concepts of Technology and Engineering

STEL-2S

Defend decisions related to a design problem.

- AB.1 AB.2
- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
- 2.1 2.2 2.3 2.4 2.5 2.6 2.7
- 3.1 3.2a and 3.2b 3.3 3.4

Design in Technology and Engineering Education

STEL-7Q

Apply the technology and engineering design process.

- AB.1 AB.2
- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
- 2.1 2.2 2.3 2.4 2.5 2.6 2.7
- 3.1 3.2a and 3.2b 3.3 3.4

Standards for Technological and Engineering Literacy

STEL-7R

Refine design solutions to address criteria and constraints.

- AB.1 AB.2
- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
- 1.11 1.12
- 2.1 2.2 2.3 2.4 2.5 2.6 2.7
- 3.1 3.2a and 3.2b 3.3 3.4

STEL-7U

Evaluate the strengths and weaknesses of different design solutions.

- AB.1 AB.2
- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
- 1.11 1.12
- 2.1 2.2 2.3 2.4 2.5 2.6 2.7
- 3.1 3.2a and 3.2b 3.3 3.4

STEL-7V

Improve essential skills necessary to successfully design.

- AB.1 AB.2
- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
- 1.11 1.12
- 2.1 2.2 2.3 2.4 2.5 2.6 2.7
- 3.1 3.2a and 3.2b 3.3 3.4

Next Generation Science Standards

Engineering Design

NGSS.MS-ETS1-1

Define the criteria and constraints of a design problem with sufficient precision to ensure a successful solution, taking into account relevant scientific principles and potential impacts on people and the natural environment that may limit possible solutions.

AB.1 AB.2

- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

NGSS.MS-ETS1-2

Evaluate competing design solutions using a systematic process to determine how well they meet the criteria and constraints of the problem.

AB.1 AB.2

- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

NGSS.MS-ETS1-3

Analyze data from tests to determine similarities and differences among several design solutions to identify the best characteristics of each that can be combined into a new solution to better meet the criteria for success.

AB.1 AB.2

- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

Next Generation Science Standards

NGSS.MS-ETS1-4

Develop a model to generate data for iterative testing and modification of a proposed object, tool, or process such that an optimal design can be achieved.

AB.1 AB.2

- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

Science and Engineering Practices

Asking Questions and Defining Problems

NGSS.P1

Asking questions and defining problems in 6-8 builds on K-5 experiences and progresses to specifying relationships between variables, and clarifying arguments and models.

AB.1 AB.2

- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

Developing and Using Models

NGSS.P2

Modeling in 6-8 builds on K-5 experiences and progresses to developing, using, and revising models to describe, test, and predict more abstract phenomena and design systems.

AB.1 AB.2

- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

Next Generation Science Standards

Analyzing and Interpreting Data

NGSS.P4

Analyzing and interpreting data.

AB.1 AB.2

- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

Using Mathematics and Computational Thinking

NGSS.P5

Use mathematical representations to describe and/or support scientific conclusions and design solutions.

AB.1 AB.2

- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

Constructing Explanations and Designing Solutions

NGSS.P6

Constructing explanations and designing solutions in 6-8 builds on K-5 experiences and progresses to include constructing explanations and designing solutions supported by multiple sources of evidence consistent with scientific ideas, principles, and theories.

AB.1 AB.2

- 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

Next Generation Science Standards

NGSS.P6

- Construct an explanation using models or representations.

AB.1 AB.2
 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

NGSS.P6

- Undertake a design project, engaging in the design cycle, to construct and/or implement a solution that meets specific design criteria and constraints.

AB.1 AB.2
 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

Obtaining, Evaluating, and Communicating Information

NGSS.P8

Obtaining, evaluating, and communicating information in 6-8 builds on K-5 experiences and progresses to evaluating the merit and validity of ideas and methods.

AB.1 AB.2
 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10
 1.11 1.12
 2.1 2.2 2.3 2.4 2.5 2.6 2.7
 3.1 3.2a and 3.2b 3.3 3.4

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