COMMON CORE CONNECTIONS

The Science of Science Fiction

Grade: 7 Language
CCSS.ELA-Literacy.L.7.3,3a,4,4a,4b,4c,4d,5,5a,6

3 Use knowledge of language and its conventions when writing, speaking, reading, or listening.
3a Choose language that expresses ideas precisely and concisely, recognizing and eliminating wordiness and redundancy.
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.
4a Use context (e.g., the overall meaning of a sentence or paragraph; a wordÕsposition or function in a sentence) as a clue to the meaning of a word or phrase.
4b Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., belligerent, bellicose, rebel).
4c Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech.
4d Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).
5 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.
5a Interpret figures of speech (e.g., literary, biblical, and mythological allusions) in context.
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.

Grade: 6-8 Science & Technical Subjects
CCSS.ELA-Literacy.RST.6-8.1,2,3,4,5,6,7,8,9,10

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 multi-step procedure when carrying out experiments, taking measurements, or performing technical tasks.
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 6Ð8 texts and topics.
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 authorÕspurpose in providing an explanation, describing a procedure, or discussing an experiment in a text.
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.
10 By the end of grade 8, read and comprehend science/technical texts in the grades 6Ð8 text complexity band independently and proficiently.

COMMON CORE CONNECTIONS

The Science of Science Fiction

Grade: 7 Speaking & Listening
CCSS.ELA-Literacy.SL.7.1,1a,1c,1d,2,3,4,5,6

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 Õideas and expressing their own clearly.
1a 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.
1c Pose questions that elicit elaboration and respond to others Õquestions and comments with relevant observations and ideas that bring the discussion back on topic as needed.
1d Acknowledge new information expressed by others and, when warranted, modify their own views.
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.
3 Delineate a speaker Õsargument and specific claims, evaluating the soundness of the reasoning and the relevance and sufficiency of the evidence.
4 Present claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions, facts, details, and examples; use appropriate eye contact, adequate volume, and clear pronunciation.
5 Include multimedia components and visual displays in presentations to clarify claims and findings and emphasize salient points.
6 Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate. (See grade 7 Language standards 1 and 3 here for specific expectations.)

Grade: 6-8 Writing HST
CCSS.ELA-Literacy.WHST.6-8.1,2,4,5,6,7,8,9,10

1 Write arguments focused on discipline-specific content.
2 Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes.
4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
5 With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed.
6 Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas clearly and efficiently.
7 Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.
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.
9 Draw evidence from informational texts to support analysis reflection, and research.
10 Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.