Alignment to the Common Core

English Language Arts Literacy & Writing Standards for Science & Technical Subjects
Grades 6-8
Introduction

Britannica Digital Learning has prepared this alignment to illustrate how Pathways: Science, its online supplemental curriculum resource for middle school, supports the Common Core State Standards-ELA Literacy and Writing Standards for Science and Technical Subjects. Using common misconceptions as the context for building science knowledge and understanding, Pathways: Science assists educators in making strong cross-curricular connections to help students meet curriculum standards and engage them in meaningful learning opportunities in reading, research, vocabulary development, critical thinking, and writing.

Each page of this document presents the following information:

**CCSS – ELA Literacy Standards for Science and Technical Subjects in Grades 6-8**

<table>
<thead>
<tr>
<th>Standards Number</th>
<th>Standards Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>RST.6-8.4</td>
<td>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.</td>
</tr>
<tr>
<td>RST.6-8.7</td>
<td>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.</td>
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**RST.6-8.4** If students do not know the meaning of a word, the double-click dictionary works throughout the resources within the Investigate section of Pathways: Science, allowing students access to definitions of words in context. Pathways: Science also exposes students to mathematical formulas in scientific contexts where appropriate.

**RST.6-8.7** Pathways: Science provides students with opportunities to gain information from various formats, including text, video, diagrams, illustrations, etc. Having access to multiple presentations of similar information allows students to form a more thorough understanding of the concept at hand.

For additional information about how Pathways: Science supports and aligns to the CCSS-ELA Literacy and Writing Standards for Science and Technical Subjects, please contact:

Phone: (800) 621-3900  |  E-mail: contact@eb.com  |  Web: info.eb.com/science
### CCSS – ELA Literacy Standards for Science and Technical Subjects in Grades 6-8

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<td>RST.6-8.1</td>
<td>Cite specific textual evidence to support analysis of science and technical texts.</td>
</tr>
<tr>
<td>RST.6-8.2</td>
<td>Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions.</td>
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(RST.6-8.1) In the **Investigate** stage, students are asked to cite specific textual evidence that supports or contradicts their original prediction (Predict stage).

(RST.6-8.2) Within this same section, students determine central ideas and conclusions within the text and present their findings through their notes, distinct from their prior knowledge or predictions.
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(RST.6-8.4) If students do not know the meaning of a word, the double-click dictionary works throughout the resources within the **Investigate** section of **Pathways: Science**, allowing students access to definitions of words in context. **Pathways: Science** also exposes students to mathematical formulas in scientific contexts where appropriate.

(RST.6-8.4) Students are able to determine the meaning of key terms, symbols, and vocabulary as they are used in context in various charts, graphs, and illustrations found in the **Pathways: Science** lessons.

(RST.6-8.7) **Pathways: Science** provides students with opportunities to gain information from various formats, including text, video, diagrams, illustrations, etc. Having access to multiple presentations of similar information allows students to form a more thorough understanding of the concept at hand.
(RST.6-8.9) All lessons in *Pathways: Science* include information found in multiple formats (text, illustrations, video, graphs, etc.). While there is not language explicitly asking students to *compare and contrast information*, a natural outcome of gaining information from a variety of formats is that they integrate information found therein and thus compare and contrast information. Teachers can facilitate comparison of different resources types within *Pathways: Science*, as well as comparison with experiments and simulations students may be working on in class around the same topic.
**RST.6-8.10** Students read science texts with reading support tools, including read-aloud, double-click dictionary, and additional resource formats designed to both support and deepen reading comprehension. In addition, Investigate text resources are at multiple levels of difficulty (easy, medium, hard as noted in the teacher notes for each lesson) allowing students to access materials at the level best suited for their needs.
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<td>WHST.6-8.1</td>
<td>Write arguments focused on discipline-specific content.</td>
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<td>WHST.6-8.2</td>
<td>Write informative/explanatory texts, including the narration of historical events, scientific procedures/experiments, or technical processes.</td>
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*(WHST.6-8.1 and 6-8.2)* Pathways provides students with multiple opportunities to write content-specific arguments. In the *Conclude* section, students respond to why their original prediction was correct or incorrect. The specific wording in the question asks students to base their argument on reasons and evidence found in the text, which is the foundation for a solid argument.
PHST.6-8.4  Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

(5HST.6-8.4) All Pathways: Science lessons give students an opportunity to produce content-specific writing, appropriate to task, purpose, and audience.
Each Pathways: Science lesson is a short research project where students draw on several sources and formats of information. Additionally, in the Conclude stage, students ask themselves if their notes support or contradict their original conclusion.

This standard is partially addressed in Pathways: Science. Students gather relevant information from a series of topical, carefully curated digital resources found within Pathways: Science, they quote or paraphrase the data and conclusions provided in the Investigate stage, and they avoid plagiarism by using their own words and not copying and pasting. While Pathways: Science does not require students to use search terms or specifically cite the resources they are using, students still must assess the credibility and accuracy of the information under review, as well as use their quoted/paraphrased notes to support their own final conclusions.
### Standards Number
WHST.6-8.9

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

### Britannica PATHWAYS: SCIENCE

#### Motions of the Planets

- **What information supports your idea? What information might contradict your idea?**
  - The article says that Earth travels around the sun in an orbit. This contradicts my original prediction.

- **Earth also rotates, or spins around its center. As it spins, it turns different sides towards, then away from the Sun. Earth completes one rotation in 24 hours. This contradicts my original prediction.**

#### Relative Motion of Stars

**Apparent Motions of Stars**

- Stars appear to rise in the east, move across the sky, and set in the west.
- As the Earth rotates, the constellations seem to move across the sky.

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*(WHST.6-8.9) Students gather evidence from informational texts (in a variety of formats) that support analysis, reflection, and research.*
WHST.6-8.10 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.

**Your idea:**

2. in lakes and streams

**Why did you pick this idea?**

Most of Earth's usable fresh water is located in lakes and streams. Lakes and streams are fresh water. Oceans are salt water.

**Why?**

(Based on your evidence, list the reasons why your idea is either correct or incorrect.)

I thought that most of the fresh water on Earth was found in lakes and streams. They contain fresh water and the ocean contains salt water. I learned that there is a lot more fresh water stored underground.
CONSISTENT THREE-STEP PROCESS PROMOTES CRITICAL THINKING AND SCIENCE KNOWLEDGE

1. Confronted with an engaging question, students use their prior knowledge to formulate an explanation for an event or an idea about a concept.

Predict

Did you know that a hot-air balloon can travel faster than 200 miles per hour? The hot-air balloon is the oldest invention in which humans can fly. Why does the air in a balloon expand as its temperature increases?

As the air gets warmer each particle gets bigger. Bigger molecules take up more space.

Investigate

Using articles, images, and video, students dig for evidence to support or contradict their predictions.

Conclude

Students evaluate the evidence they found and compare it to their original ideas to uncover misconceptions and discover correct scientific explanations.