

The Common Core English Language Arts Standards (CCELA)

CHAPTER 6, LESSON 12: NATURAL RESOURCES AND SYNTHETIC MATERIALS

Reading Standards for Literacy in Science and Technical Subjects 6-8

LITERACY.RST.6-8.3

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

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.

LITERACY.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.

LITERACY.RST.6-8.2

Provide an accurate summary of the text distinct from prior knowledge or opinions.

LITERACY.RST.6-8.7

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).

Using the activity sheet, students follow a procedure to mix substances to create a synthetic product with different characteristics. Students then pick a synthetic product to research. They use internet and library resources to collect information about their product and the natural resources used to make it. Students also research the chemical processes used to transform the natural resources into the final product and the impacts on society in making the product.

Writing Standards for Literacy in Science and Technical Subjects 6-8

LITERACY.WHST.6-8.1

Write arguments focused on discipline-specific content

a. Support claim(s) with logical reasoning and relevant accurate data and evidence that demonstrate an understanding of the topic or text using credible sources.

LITERACY.WHST.6.8.8

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.

Students describe their findings in an article, brochure, poster, or other written format/presentation that the teacher assigns. Students should focus on describing the natural resources and the chemical processes that go into making their synthetic product and the chemical processes that used to make it. Students then describe the societal impacts of making the synthetic product compared to making a more natural product with a similar function. This is where students will need to evaluate possible bias in the articles they choose.