MP1b-Natural Hazards

Content Area: **Science**
Course(s): **Science 4**
Time Period: **Marking Period 1**
Length: **MP1**
Status: **Published**

Essential Questions

- How are natural hazards created and how can humans reduce the impact of creating natural hazards?

Big Ideas

- A variety of hazards result from natural processes.
- Humans cannot eliminate hazards but can reduce their impacts.

Science and Engineering Practices

Obtaining, Evaluating and Communicating Information:

- Read and comprehend grade-appropriate complex text and/or other reliable media to summarize and obtain scientific and technical ideas and describe how they are supported by evidence.

Science and Society

Joanne Simpson

Meteorologist/Pilot who tested ideas about weather patterns by flying through weather systems.

Enduring Understandings

Natural Hazards

4-ESS3.B A variety of hazards result from natural processes (e.g., earthquakes, tsunamis, volcanic eruptions). Humans cannot eliminate the hazards but can take steps to reduce their impacts.

Designing Solutions to Engineering Problems

4-ETS1.B Testing a solution involves investigating how well it performs under a range of likely conditions.

Focus Areas

Knowledge

- Over time, people's needs and wants change, as do their demands for new and improved technologies.
- Cause and effect relationships are routinely identified and used to explain change.

Skills

- Obtain and combine information from books and other reliable media to explain phenomena.
- Generate and compare multiple solutions to a problem based on how well they meet the criteria and constraints of the design solution.

Understanding

- Generate and compare multiple solutions to reduce the impacts of natural Earth processes on humans.

Resources

Primary Resource

Pearson Interactive Science, 2016

- Chapter 6: Earth's Resources

Secondary Resources

Pearson Leveled Readers

- *Earth's Resources*
- *Types of Rocks and Minerals*
- *Mining for Rocks and Minerals*

Supplemental Resources

- Smithsonian Institute Global Volcanism Program: www.volcano.si.edu
- U.S. Volcanoes and Current Activity Alerts: volcanoes.usgs.gov

Scientific Inquiry

Core

- Volcano Lab
- Earthquake Epicenter Lab