



Washington State Parks and Recreation Commission

Mount St. Helen's Visitor Center: Teacher Resources 2016

Volcano vocabulary: Grades K-2 pre-visit lesson

Time Commitment: 1 class period
Location: School
Site: Classroom

The purpose of this lesson is to establish a set of prior knowledge and prepare the students to understand the terms and concepts that they will see in the displays inside of the visitor center during their visit. Students will be able to recognize important terms and overarching scientific processes. The students will be best served by having the lesson presented to them the day before their field trip to be able to better understand the information regarding the eruption of Mount St. Helens.

Goal: the student will be able to understand the theory of plate tectonics and how it can form stratovolcanoes and be able to recognize and identify key terms.

Objectives:

- 1) Students will be able to accurately describe the theory of plate tectonics.
- 2) Students will be able to identify and define key terms.
- 3) Students will be able to read informational text and find the main ideas.
- 4) Students will be able to pick out key terms from informational text.

Next generation Science Standards:

NGSS 2-ESS1-1: Use information from several sources to provide evidence that Earth events can occur quickly or slowly.

- Use text to show plate tectonic movement takes a long time to occur. For example, volcanism.

NGSS 2-ESS2-2: Develop a model to represent the shapes and kinds of land and bodies of water.

ESS2.B: Plate Tectonics and Large-Scale System Interactions Maps show where things are located. One can map the shapes and kinds of land and water in any area.

- Use text to show types of volcanoes and fault lines that are seen on planet earth.

Common Core Standards:

CCSS.ELA-Literacy.RI.K.1

With prompting and support, ask and answer questions about key details in a text.

CCSS.ELA-Literacy.RI.K.3

With prompting and support, describe the connection between two individuals, events, ideas, or pieces of information in a text.

CCSS.ELA-Literacy.RI.K.4

With prompting and support, ask and answer questions about unknown words in a text.

CCSS.ELA-Literacy.RI.1.2

Identify the main topic and retell key details of a text.

CCSS.ELA-Literacy.RI.1.3

CCSS.ELA-Literacy.RI.1.4

Ask and answer questions to help determine or clarify the meaning of words and phrases in a text.

CCSS.ELA-Literacy.RI.2.3

Describe the connection between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text.

CCSS.ELA-Literacy.RI.2.4

Determine the meaning of words and phrases in a text relevant to a grade 2 topic or subject area.

Lesson: Vocabulary and Plate Tectonics

Introduction

Begin by introducing the topic of plate tectonics and the new key words the students will be learning.

Demonstration

Plate tectonics is the theory that the earth's crust is made up of separate plates that are constantly moving on the mantle. Where plates meet there is a point where the crust can break apart, earthquakes can occur, and the crust can crumple forming mountains. This theory can be shown through a simple demonstration.

Using a few colors of play dough or craft foam you can demonstrate the various movements of tectonic plates and the layering of the earth. While introducing the idea that earth's crust is made up of many separate plates all floating on the mantle portion of the earth's core. To demonstrate movement along a fault line you can use layered play dough to show how the plate move past one another.

Activity

Read an article to the students that describes the eruption details of Mount St. Helens and discusses plate tectonics then have students use their new knowledge to create an anchor chart as a class to define terms and explain the concepts. Key terms for this unit would be: plate tectonics, earthquake, volcano, fault line, subduction zone, magma, lava, igneous rock, lateral blast, oceanic plate, continental plate, pyroclastic flow.

As students think you can help guide them in their knowledge by providing clues and directing them along the right path as you ask questions about the article and definitions with the students.

Wrap up

Have students play vocabulary bingo or a game of memory match with the term and the definition. Students can fill in their card with the terms and when they hear the definition (or vice versa) they can place a marker on the term or make a mark. First kid to get bingo gets a prize (teacher's discretion). To make a reusable card simply print off sheet (see below) and place inside a document protector sheet, or laminate. If you leave space at the bottom of the page, they can write all the terms or the definitions they are trying to remember for the game. You can make it as difficult or hard relative to students reading level or ability.

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