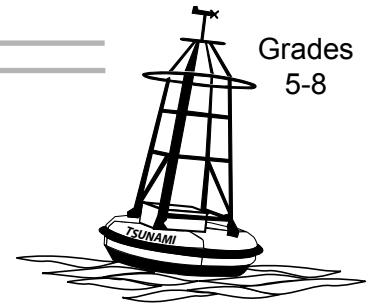


Volcano Scavenger Hunt

Grades
5-8



Overview:

Students identify key information about volcanoes by navigating through multimedia.

Targeted Alaska Grade Level Expectations:

Science

[5-8] SA1.1 The student demonstrates an understanding of the processes of science by asking questions, predicting, observing, describing, measuring, classifying, making generalizations, inferring, and communicating.

[6] SD2.3 The student demonstrates an understanding of the forces that shape Earth by describing how the surface can change rapidly as a result of geological activities (i.e., earthquakes, tsunamis, volcanoes, floods, landslides, avalanches).

Objectives:

The student will research information on volcanoes by interacting with a multimedia file regarding volcanoes.

Materials:

- MULTIMEDIA FILES: “Where Volcanoes Form,” “Volcanoes—Shield,” “Volcanoes—Composite,” “Volcanoes—Tephra (Ash, Cinder, Bombs & Blocks),” “Volcanoes—Recording Earthquakes,” “Volcanoes—Measuring Slope,” “Volcanoes—Gas (H₂O, CO₂ and SO₂),” and “Volcano Tsunami Triggers” on the ATEP Website: <http://www.aktsunami.org/multimedia>.
- STUDENT WORKSHEET: “Volcano Scavenger Hunt”

Science Basics:

This multimedia file covers basic information about volcanoes including: where volcanoes form in relation to plates and their boundaries; types of volcanoes; volcanic emissions including tephra and gas; monitoring of volcanic activity; and volcanic tsunami triggers.

Activity Procedure:

Distribute STUDENT WORKSHEET: “Volcano Scavenger Hunt.” Ask students to complete the worksheet by navigating through the multimedia file on the computer.

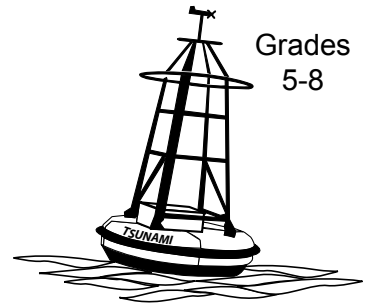
Answers:

- | | | | |
|------|-------|-------|---|
| 1. D | 6. B | 11. A | 16. (1) earthquakes accompanying eruptions, |
| 2. F | 7. K | 12. F | (2) pyroclastic flows encountering water, |
| 3. L | 8. H | 13. C | (3) submarine explosions, |
| 4. J | 9. J | 14. E | (4) calderas collapsing and |
| 5. G | 10. I | 15. I | (5) volcanic landslides (slope failure) |

Name: _____

Student Worksheet

Volcanoes Scavenger Hunt



Directions: View MULTIMEDIA FILE: "Volcanoes" from the ATEP Website: <http://www.aktsunami.org/multimedia>. Match the words in the right column to the description on the left column. Some words are used more than once.

1. _____ Medium-sized tephra
2. _____ A volcano with rugged steep sides.
3. _____ Vents in Earth's crust through which lava, gas and ash are forced out.
4. _____ A volcano that forms on the ocean floor at spreading centers and hotspots.
5. _____ A gas released from volcanoes, also known as water vapor.
6. _____ The largest forms of tephra
7. _____ A gas released from volcanoes, also known as Sulfur Dioxide.
8. _____ The name for a narrow plume of magma that rises from Earth's mantle to the surface.
9. _____ A broad, low volcano with gentle sloping sides.
10. _____ When this inflates, the slope on the sides of the volcano increases.
11. _____ The smallest tephra
12. _____ A volcano that forms at convergent plate boundaries.
13. _____ Large, streamlined, tear-shaped forms of tephra
14. _____ A gas released from volcanoes, also known as Carbon Dioxide.
15. _____ When this inflates, it cracks Earth creating small earthquakes.

- A. ash
- B. blocks
- C. bombs
- D. cinder
- E. CO₂
- F. composite volcano
- G. H₂O
- H. hotspot
- I. magma chamber
- J. shield volcano
- K. SO₂
- L. volcano

16. List 5 forms of volcanic activity known to produce tsunamis.

1. _____
2. _____
3. _____
4. _____
5. _____