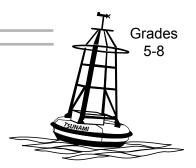
Overview:

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:

- VIDEO 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"
- 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.	В	11. A
2.	F	7.	К	12. F
3.	L	8.	Н	13. C
4.	J	9.	J	14. E
5.	G	10.	I	15. I

- 16. (1) earthquakes accompanying eruptions,
 - (2) pyroclastic flows encountering water,
 - (3) submarine explosions,
 - (4) calderas collapsing and
 - (5) volcanic landslides (slope failure)

Name:

Student Worksheet Volcanoes Scavenger Hunt

Directions: View VIDEO FILE: "Volcanoes" from the ATEP

multimedia and video playlist (also linked with this lesson). Match the words in the right column to the de-scription on the left column. Some words are used more than once.

1 Medium-sized t	tephra
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- 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.
- 16. List 5 forms of volcanic activity known to produce tsunamis.



A. ash

- B. blocks
- C. bombs
- D. cinder
- E. CO₂
- F. composite volcano
- $G. H_2O$
- H. hotspot
- I. magma chamber
- J. shield volcano
- K. SO_2
- L. volcano