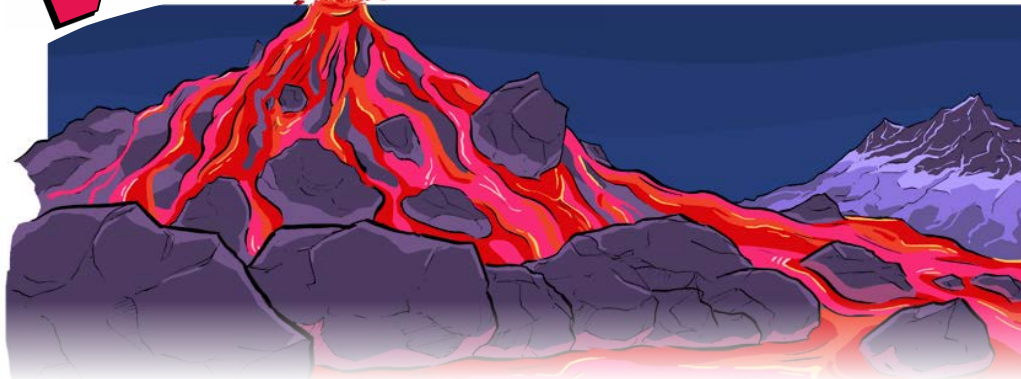


# Volcanoes



A volcano is a mountain that opens downward to a pool of molten, or melted, rock below the surface of the Earth. Unlike most mountains, which are pushed up from below, volcanoes are vents through which molten rock escapes to the Earth's surface. When pressure from gases within the molten rock becomes too great, an eruption occurs. Eruptions can be quiet or explosive. There may be lava flows, flattened landscapes, poisonous gases, and flying rock and ash that can sometimes travel hundreds of miles downwind. Because of their intense heat, lava flows are great fire hazards. Lava flows destroy everything in their path but most move slowly enough that people can move out of the way.

## Am I at risk?

Active volcanoes in the U.S. are found mainly in Hawaii, Alaska and the Pacific Northwest (Oregon and Washington). The danger area around a volcano covers approximately a 20-mile area around the volcano in all directions. However some danger may exist 100 miles or more from a volcano.

## Did you know?

### Volcanic ash...

- is made up of tiny jagged rock and glass
- is gritty, sometimes corrosive, abrasive, and conducts electricity when wet
- can block sunlight and sometimes be accompanied by lightning
- can accumulate like heavy snowfall but doesn't melt or dissolve in water
- can clog and jam machinery (including aircraft)

That's why it's important to keep and wear a dust mask and eye protection if you are in a volcanic ashfall area!



For more facts and info on volcanoes visit  
<http://www.ready.gov/kids/know-the-facts/volcanoes>  
<http://volcanoes.usgs.gov/>

## FACT CHECK

1. About \_\_\_\_\_ % of the world's active volcanoes are located in the U.S.
2. The U.S. is one of the most volcanically rich countries in the world with \_\_\_\_\_ active and dormant volcanoes.  
 a. 26    b. 40    c. 169    d. 303
3. Volcanic eruptions can be accompanied by what other natural disasters? \_\_\_\_\_  
 \_\_\_\_\_
4. True or False? Frosty, Pagan, South Sister, Cleveland, and Haleakala are all names of real U.S. volcanoes.

(1) 11%  
 (2) c. 169. For a list of U.S. volcanoes, visit: <http://volcanoes.usgs.gov/about/volcanoes/volcanoist.php>  
 (3) Earthquakes, flash floods, landslides, mudflows, acid rain  
 (4) True!

ANSWERS

# Volcanoes

# Be Prepared

## BEFORE

- ✓ Build an emergency kit.
- ✓ Make a family communications plan.

## DURING

- ✓ Follow evacuation orders from emergency officials.
- ✓ Look out for mudflows. Look upstream before you cross any bridges to make sure a mudflow is not coming. If it is, do not cross the bridge. The mudflow could destroy it.

## AFTER

- ✓ Listen to safety officials.
- ✓ Text, don't talk. Unless there's a life-threatening situation, if you have a cell phone, send a text so that you don't tie up phone lines needed by emergency workers. Plus, texting may work even if cell service is down.

## WORDS TO KNOW

**Lava** Molten rock that comes from a volcanic explosion and the rock that results after it has hardened and cooled

**Molten** Made liquid by heat, melted

**Eruption** A sudden, violent outburst, like an explosion

**Lava Flow** A slow moving river of molten, or liquid, rock that pours from a volcanic eruption

**Pyroclastic Flow** A thick, fast-moving, and hot avalanche of gas, solid, and liquid volcanic debris that can move up to 50-100 miles per hour

**Lava Rock** Volcanic lava that has hardened after it has cooled



For more facts and info on volcanoes visit  
<http://volcanoes.usgs.gov/>