



Volcano Watch

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Chapter One

What Is a Volcano?



There is a mountain in the state of Washington. It is called Mount Saint Helens. Something happened there about 30 years ago. It started when a cloud puffed out of the mountain. What was going on?

The cloud was filled with **ash** – the leftover dust from a fire. Then, rocks fell off the mountain. They rolled down the side and crashed below.

Mount Saint Helens



Near Mount Saint Helens, people got scared. Some people got hurt by the ash and rocks. Some people even died. But most people stayed safe.

Why did this happen? Mount Saint Helens is a **volcano**. A volcano is a mountain where things from under the ground erupt. That means they explode upward.



There is a lot of **pressure** under the ground. You can make pressure with your own hands.

Here are the steps.

Step 1: First, press your hands together lightly.

Step 2: Second, press your hands together firmly.

That's what pressure feels like.

Step 3: Next, imagine that somebody puts a beach ball between your hands and pulls out the stopper.

Step 4: Last, imagine that you press harder with your hands. What do you think will happen to the air inside the beach ball?

The pressure inside the earth is very strong. Sometimes it pushes things out of the ground. Volcanoes are where that happens.



There are rocks deep inside the earth. They come out of volcanoes. Ash and steam also come out. Sometimes fire does, too.

Other things come out of volcanoes. Ice comes out of volcanoes in some cold places. Mud comes out of volcanoes in some warm places.



Chapter Two

What Do Volcanoes Look Like?



Not all volcanoes look the same. Some are big. Some are small. But most have the same kind of shape. Picture an ice cream cone. What does it look like upside-down? Most volcanoes look something like that. They are mountains with a cone shape.





Some volcanoes are covered with grass and trees. Other volcanoes are covered with snow and ice. Some are only covered with rocks.



Chapter Three

How Do Volcanoes Form?



It takes a long time for volcanoes to form. It starts when a volcano first erupts. That's when things from under the ground explode. This is what happened with Mount Saint Helens.

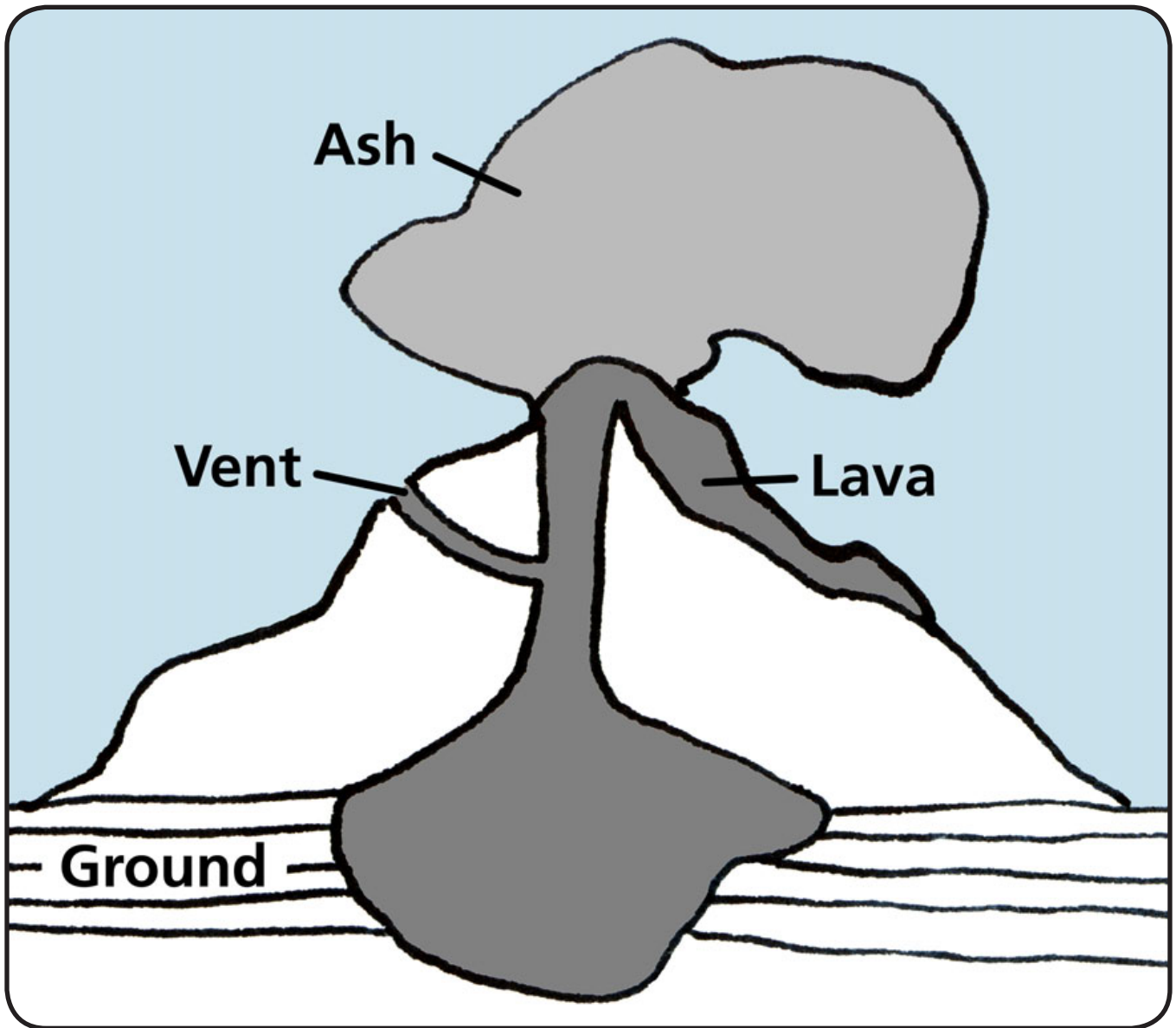
Picture a can of soda.
What happens when you
shake it and then open it?
Soda shoots out of the top.
It happens because
shaking causes pressure.
The soda spills everywhere.
It makes a big mess.

That's kind of what happens
when a volcano erupts.
Things spill out all over.



Ash often comes out when a volcano erupts. Rocks do, too. The rocks are very hot. They can burn. A hot liquid also flows out. It is called **lava**. Lava is red and orange. It looks like fire. Finally, they form into a mountain. That's how a volcano gets its shape.

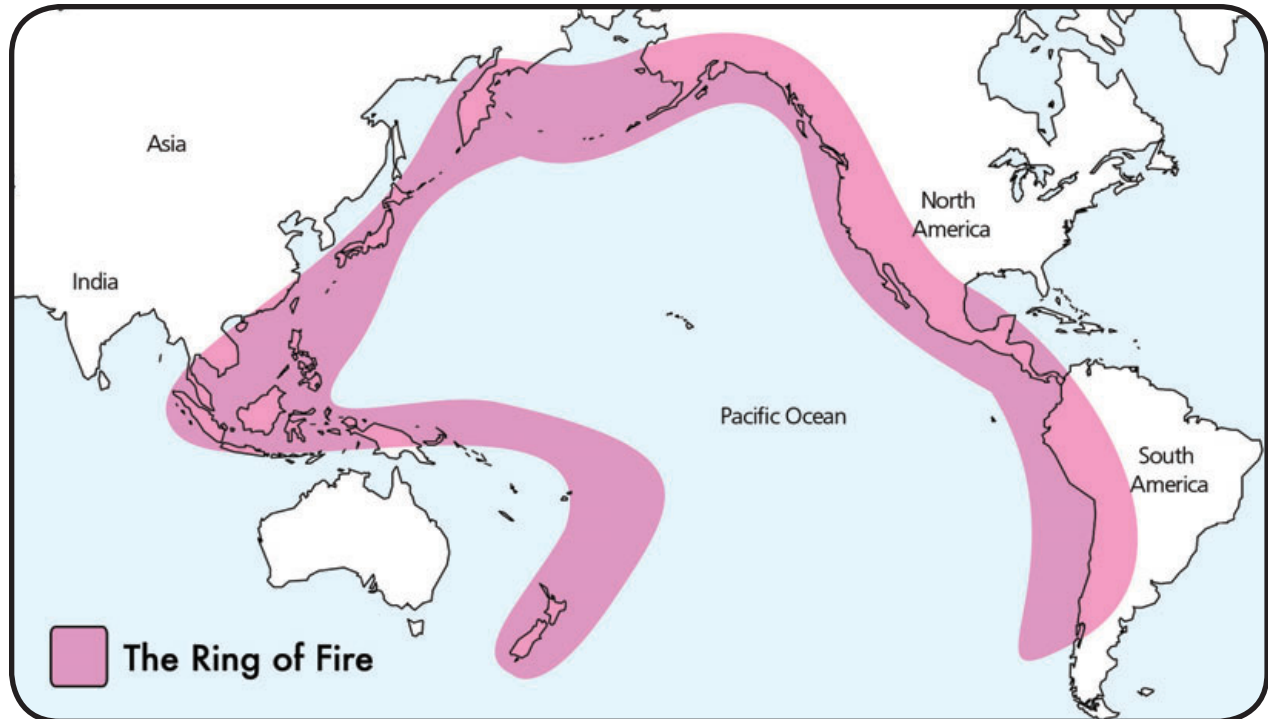




Many volcanoes form on land. But there are a lot more under the water. These volcanoes are deep in the ocean. We cannot see them. So, we don't always know when they erupt.

Chapter Four

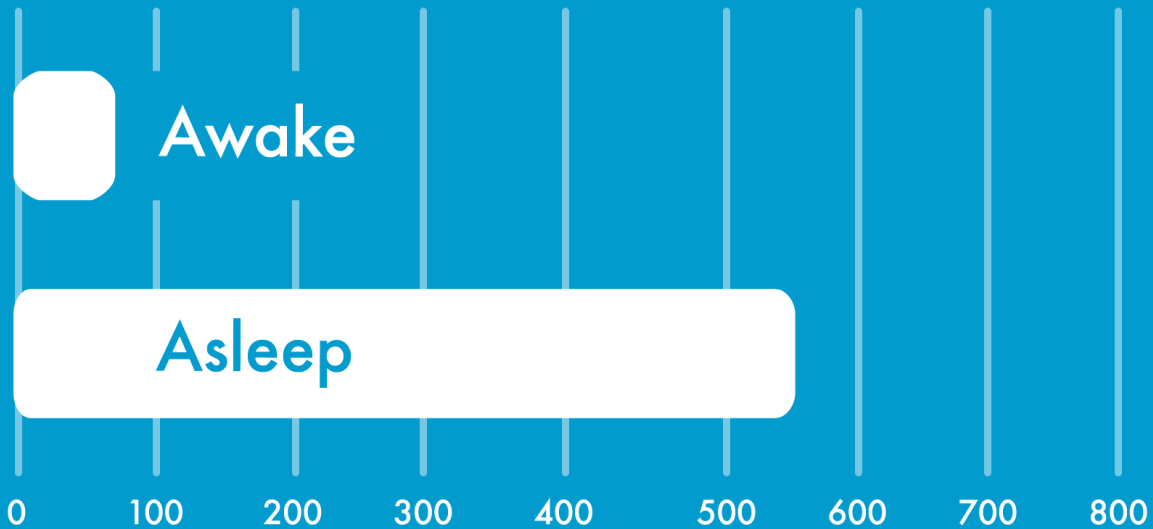
Where Are Volcanoes Found?



There are more than 500 volcanoes on land. Many are near the Pacific Ocean. They form a circle around it. This area is called the Ring of Fire. Can you guess why?

There are about 50 volcanoes in the United States. Some of these volcanoes are in Alaska. Others are in Washington and Oregon. The world's largest volcano is in Hawaii.

How Many Volcanoes Are Asleep?



Not all volcanoes erupt. Many have become quiet. First, these volcanoes erupt once. Then, they might erupt again. Finally, they cannot erupt anymore.

People say these volcanoes are asleep. They have not erupted for many years. It is safe for people to live near a volcano that is asleep.

Chapter Five

What Can We Learn About Volcanoes?



Scientists want to learn more about volcanoes. So, they look for clues. First, they study the ground. Then, they try to find out about the pressure below the earth. They want to know when a volcano might erupt.

Research from scientists can help people stay safe. Scientists can warn people who are in danger. That way, people can get away from the volcano. They will not get hurt.

Learning about volcanoes can be fun, too. There is nothing else like them on Earth!



Glossary

ash: the gray and black dust left over after a fire

lava: a hot liquid that comes out of a volcano

pressure: a constant push against something

volcano: a place where things from inside the earth come out



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