



Volcanoes — The Earth's

Restless Power

Reading Worksheet — Level F | tahricteaches.com

A volcano is an opening in the Earth's **surface** through which molten rock, ash, and gases escape from deep below. Far beneath our feet, intense heat melts solid rock into a thick **liquid** called magma. Because magma is lighter than the rock around it, it slowly rises and collects in a chamber beneath the volcano. As more magma gathers, enormous **pressure** builds — and eventually that pressure must find a way out.

When a volcano erupts, it can **release** its energy in very different ways. Some eruptions are gentle, allowing rivers of glowing lava to flow slowly down the slopes. Others are violently explosive: trapped gas can cause the mountain to **explode** with incredible **force**, hurling rock, ash, and smoke kilometers into the sky. The most **powerful** eruptions in history have darkened skies around the world and even changed the global climate for years.

Scientists divide volcanoes into three groups. An **active** volcano is one that erupts regularly or could erupt soon. A dormant volcano is "sleeping" — quiet for now, but still capable of waking. An extinct volcano is one that will almost certainly never erupt again. Some **ancient** volcanoes have stayed silent for thousands of years, yet a few have shocked everyone by suddenly returning to life.

A single large eruption can **destroy** an entire town in minutes. In ancient times, the eruption of Mount Vesuvius buried the Roman city of Pompeii under ash and rock, preserving it for almost two thousand years. Today, more than 800 million people live close enough to an active volcano to be in real danger, so monitoring these mountains is more important than ever.

Yet volcanoes are not only destructive. Over millions of years, they have built islands, shaped continents, and created some of the richest farming soil on the planet. The gases they **release** even helped form the Earth's early atmosphere and oceans. By studying the heat, **pressure**, and chemistry beneath the **surface**, scientists hope to predict eruptions and protect the millions who live in their shadow.

A. Vocabulary

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| 1. surface ____ | a. belonging to the very distant past; extremely old |
| 2. liquid ____ | b. to burst suddenly and violently, often with a loud noise |
| 3. pressure ____ | c. having great strength, force, or effect |
| 4. release ____ | d. the outside or top layer of something |

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| 5. explode ____ | e. a substance that flows freely, like water; not a solid or a gas |
| 6. force ____ | f. the force produced when something presses or pushes against another thing |
| 7. powerful ____ | g. to let something out or set it free; to stop holding it in |
| 8. active ____ | h. a strong physical power or push that can cause movement or change |
| 9. ancient ____ | i. of a volcano, currently erupting or likely to erupt; not resting |
| 10. destroy ____ | j. to damage something so badly that it no longer exists |



B. True or False

1. A volcano is an opening in the Earth's surface through which molten rock and gases escape. ____
2. Magma is solid rock that has frozen deep under the Earth. ____
3. Magma rises because it is lighter than the rock around it. ____
4. All volcanic eruptions are gentle and slow. ____
5. The most powerful eruptions in history have changed the global climate. ____
6. An active volcano is one that will almost certainly never erupt again. ____
7. The eruption of Mount Vesuvius buried the Roman city of Pompeii. ____
8. Fewer than one million people live close to an active volcano today. ____
9. Volcanoes have helped build islands and create rich farming soil. ____



C. Fill in the Blanks

Word Bank: pressure, explode, active, destroy, release

1. As magma gathers beneath a volcano, enormous _____ builds up.
2. Trapped gas can cause a mountain to _____ with incredible force.
3. An _____ volcano is one that erupts regularly or could erupt soon.
4. A single large eruption can _____ an entire town in minutes.
5. When a volcano erupts, it can _____ its energy in very different ways.

D. Comprehension Questions

1. Explain how magma forms and why it rises toward the surface.
2. Describe two very different ways that a volcano can erupt.
3. What is the difference between an active, a dormant, and an extinct volcano?
4. What does the story of Pompeii tell us about the danger of volcanoes?
5. In what ways have volcanoes actually helped life on Earth?

E. Discussion Questions

1. Hundreds of millions of people live near active volcanoes. Why do you think they stay, and what could governments do to keep them safe?
2. If scientists could predict eruptions perfectly, how might that change the way people live near volcanoes?
3. Volcanoes both destroy and create. Do you think they have been more helpful or more harmful to life on Earth? Explain your answer.



Answer Key

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A. Vocabulary: 1-d, 2-e, 3-f, 4-g, 5-b, 6-h, 7-c, 8-i, 9-a, 10-j

B. True/False: 1-T, 2-F, 3-T, 4-F, 5-T, 6-F, 7-T, 8-F, 9-T

C. Fill Blanks: 1-pressure, 2-explode, 3-active, 4-destroy, 5-release

D. Comprehension:

1. Deep below the surface, intense heat melts solid rock into a thick liquid called magma. Because magma is lighter than the surrounding rock, it slowly rises and collects in a chamber beneath the volcano.
2. Some eruptions are gentle, with rivers of lava flowing slowly down the slopes. Others are violently explosive, when trapped gas makes the mountain explode and hurl rock, ash, and smoke kilometers into the sky.
3. An active volcano erupts regularly or could erupt soon. A dormant volcano is 'sleeping' — quiet now but able to wake. An extinct volcano will almost certainly never erupt again.
4. Vesuvius buried Pompeii under ash and rock in ancient times, showing that a large eruption can destroy an entire city very quickly and that living near a volcano can be deadly.
5. Over millions of years, volcanoes have built islands, shaped continents, created rich farming soil, and released gases that helped form the Earth's early atmosphere and oceans.