

Earthquakes

Read the text. Then answer the questions on the next page.

- 1 The ground under your feet feels still and solid. But sometimes it shakes hard enough to knock books off shelves and rattle every window. What causes an earthquake?
- 2 The outer layer of Earth is broken into huge pieces called plates. The plates fit together like a puzzle. They move very slowly, about as fast as your fingernails grow. Since they move so slowly, you cannot feel it.
- 3 The edges of the plates are rough. As two plates slide past each other, the rough edges get stuck. The plates keep pushing, so stress builds up in the rock year after year.
- 4 At last the rock cannot hold any longer. It breaks and slips all at once. This sudden slip sends out waves of energy in every direction. As a result, the ground shakes. That shaking is an earthquake.
- 5 Most earthquakes are too small to feel. A strong one, though, can crack roads and damage buildings. Therefore, people in earthquake areas build stronger buildings that can bend a little without falling. Students also practice what to do. They drop to the floor, take cover under a desk, and hold on until the shaking stops.



Earthquakes: Questions

Go back to the text to find your proof. Underline it in the color shown.

1. Why can you not feel the plates move?

red

- ☐ They are too far away.
- ☐ They move so slowly.
- ☐ They are too small.

2. What happens because the plates keep pushing?

orange

- ☐ Stress builds up in the rock.
- ☐ The plates turn around.
- ☐ The rough edges get smooth.

3. What makes the ground shake in an earthquake?

yellow

4. Finish the chart. A cause is why something happens. An effect is what happens.

CAUSE

The stuck plates keep pushing.

→

EFFECT

CAUSE

→

EFFECT

Waves of energy shake the ground.

CAUSE

Strong earthquakes can damage buildings.

→

EFFECT

5. Which word in paragraph 5 tells you that an effect is coming?

green

- ☐ buildings
- ☐ therefore
- ☐ floor

Earthquakes: Answer Key

Answers are in green. The proof is where to find each answer in the text.

1. Why can you not feel the plates move?

red

- ☐ They are too far away.
- ☒ **They move so slowly.**
- ☐ They are too small.

Proof Paragraph 2: “Since they move so slowly, you cannot feel it.”

2. What happens because the plates keep pushing?

orange

- ☒ **Stress builds up in the rock.**
- ☐ The plates turn around.
- ☐ The rough edges get smooth.

Proof Paragraph 3: “The plates keep pushing, so stress builds up in the rock year after year.”

3. What makes the ground shake in an earthquake?

yellow

The rock breaks and slips all at once, and the slip sends out waves of energy.

4. Finish the chart. A cause is why something happens. An effect is what happens.

CAUSE

The stuck plates keep pushing.



EFFECT

Stress builds up in the rock.

CAUSE

The rock breaks and slips.



EFFECT

Waves of energy shake the ground.

CAUSE

Strong earthquakes can damage buildings.



EFFECT

People build stronger buildings.

5. Which word in paragraph 5 tells you that an effect is coming?

green

- ☐ buildings
- ☒ **therefore**
- ☐ floor

Proof Paragraph 5: “Therefore, people in earthquake areas build stronger buildings”