

3

Read and circle the area in the picture where the most damage would occur from the earthquake.

Earthquakes

Earthquakes occur along a fault is a break or crack in rocks where Earth's crust can move. Sometimes rocks along a fault get stuck. The plates continue their slow movement. This puts stress on the rocks. If the stress becomes strong enough, the rocks can break. Then the plates move suddenly at the fault. The sudden movement that causes Earth's crust to shake is an earthquake. The place underground where the earthquake begins is the focus.

The point on Earth's surface that is directly above the focus is the epicenter.

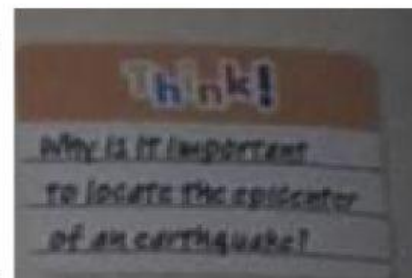
Most earthquakes are small. You might feel a slight shake. A few earthquakes are powerful enough to damage buildings, roads, and bridges. The damage is often greatest near the epicenter. Like volcanos, earthquakes sometimes cause tsunamis and landslides.



Focus
Epicenter
fault

4

Where would earthquakes that cause tsunamis probably happen? Discuss with A partner and write the answer.



5

Read and label the photos.



Landslides and Floods

Heavy rains or earthquakes may loosen material on a steep slope. Gravity then pulls the loosened material downward.

Bits of rock and soil may travel slowly downhill a little at a time. But sometimes they travel rapidly. The rapid downhill movement of a large amount of rock and soil is a landslide.

Buildings, cars, trees, and other objects are sometimes carried along with the sliding soil.

Floods also can produce rapid changes. Fast moving water in flash floods can uproot trees, carry away big rocks and change where rivers flow. Floods can also cover land with sand and mud. In the United States in 1993, huge amounts of rain caused the Mississippi and Missouri Rivers to overflow. Some areas were flooded for almost 200 days. The floods covered thousands of acres with sand and mud.

6

Read again and underline two sentences that describe how the effects of landslides and floods are similar.

7

Read. Why does drought increase the possibility of soil erosion? Discuss as a class and write the answer.

Droughts

Sometimes an area experiences a period of weather that is much drier than usual. Periods of unusually low rain or snowfall are called droughts. A severe drought can change the surface of Earth by reducing the amount of water in rivers and lakes.



Droughts can destroy farmland and kill trees and other plants. Droughts increase soil erosion, too. In the 1930s, the United States experienced a severe drought. As crops died, high winds blew away the dry soil. Winds sometimes carried great, dark clouds of dust thousands of miles away.

Drought increases the possibility of soil erosion because _____
