

Summer Week 5 Geography

Lesson 1

Can I identify what an earthquake is and
how it can impact life?

Fast Five (answers on next page):

- 1) Is the USA bigger or smaller than the UK?
- 2) Name one animal that lives in the USA.
- 3) What is a natural disaster?
- 4) Name one type of natural disaster the USA can experience.
- 5) Where are hurricanes most common in the USA?

Fast Five Answers:

- 1) Is the USA bigger or smaller than the UK? **Bigger.**
- 2) Name one animal that lives in the USA. **Bison, moose, bear, wolf, etc.**
- 3) What is a natural disaster? **A natural disaster is a sudden natural event such as a flood, earthquake, volcanic eruption or hurricane that causes a big loss of life and a great amount of injuries.**
- 4) Name one type of natural disaster the USA can experience. **Hurricane, tornado, earthquake, volcanic eruption.**
- 5) Where are hurricanes most common in the USA? **Florida, Texas, North Carolina or Louisiana.**

Today we are focusing on earthquakes.

Earthquakes are not as common in the USA as tornadoes and hurricanes. However, they have been the cause of a few natural disasters in America, especially in California along the San Andreas Fault Line.



How do earthquakes happen?

Earthquakes happen when the tectonic plates (a bit like jigsaw pieces) that make up the Earth's surface bump together or rub against each other.

This contact causes the earth's surface to shake and move, which is what we know as an earthquake.

Earthquakes are actually happening all the time, but most of them are so small we don't even realise at all.



What are earthquakes?

Watch this short video to learn more about earthquakes and why they occur:

<https://safeYouTube.net/w/lmUB>

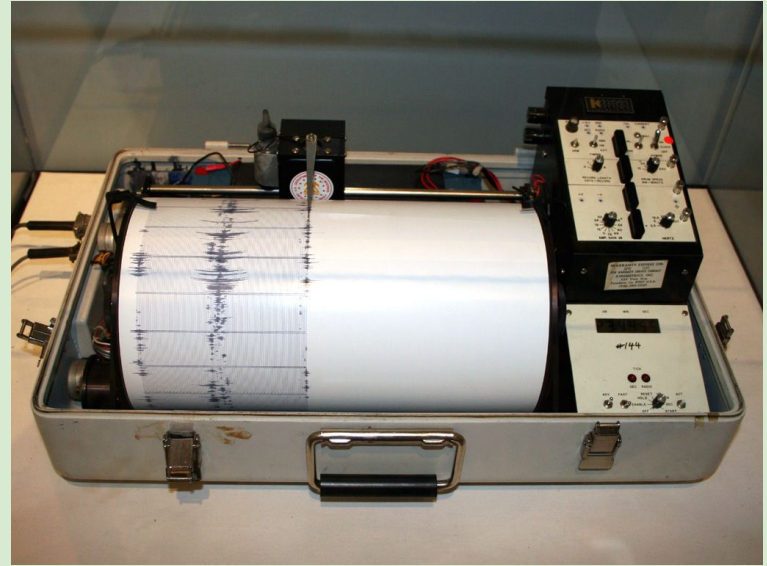
If you want to see more of where earthquakes are happening all the time, check out this interactive map:

<https://earthquake.usgs.gov/earthquakes/map/>

Seismograph

The instrument used to measure how big an earthquake was is called a seismograph.

Scientists and geographers also use these to predict how much damage there might be to an area in future earthquakes.



The Richter Scale

A seismograph is used to measure the strength of an earthquake, and the scale used to show how strong it was is called the Richter Scale.

The Richter scale starts at 1 (the lowest strength) and goes up to 10 (the highest strength).

If the scale of an earthquake is anything above 2.5, you will feel it.

So what happens when an earthquake hits?

If an earthquake is strong enough, it may cause damage to buildings and roads, and possibly life. Damage can include:

- Buildings can be damaged or fall down.
- Bridges and roads can collapse.
- Gas and water pipes can explode.
- If an earthquake happens under the sea, it may cause a large wave, called a tsunami. This can travel to land and damage coastal areas.

Your activity:

Red: Label the diagram of an earthquake using the words given. Then fill in the gaps in the paragraph about the impact of earthquakes.

Yellow: Label the diagram of an earthquake using the words given. Then use the prompt questions to help you write a paragraph about the impact of earthquakes.

Green: Label the diagram of an earthquake using the information you have learnt. Re-watch the video if you need to. Then write a paragraph about the impact of earthquakes - use the prompt questions on the yellow activity if you get stuck.