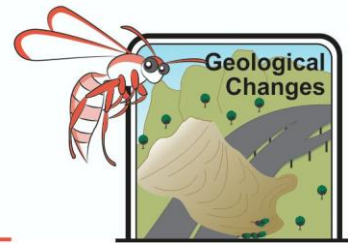


Earthquakes – Teacher Notes



Sudden geological events can change the surface of the Earth.

Students may be encouraged to use their worksheets (open book) while answering these questions.



Earthquakes occur when tectonic plates come together. Please label the diagrams as a zone of convergence, zone of divergence or transform zone. The arrows indicate the movement of tectonic plates.

Zone of convergence	Zone of divergence	Transform zone

At one of these boundaries the Earth's crust thickens and crumples. Which one of the zones is this and how does this movement change the surface of the Earth?

Zone of divergence. This sagging forms ocean basins such as the Pacific Ocean.

At one of these boundaries the Earth's crust thickens and crumples. Which one of the zones is this and how does this movement affect the surface of the Earth? **Zone of convergence.** The crumples form mountains such as the Himalayas and the Andes.

At one of these boundaries two plates grate past each other. Which one of the zones is this and what devastating effect happens here. **Transform zone.** Terrible earthquakes are caused by friction between the plates as they grate past each other. This occurs in places such as Christchurch and San Francisco.

What is the name of the instrument that measures earthquakes? **A seismometer.**

What effects could a major earthquake have on loose sediments piled on the edge of the undersea continental shelf? **Shaking would cause a landslide of the sediments. Plunging down the slope they could rapidly change the sea floor and initiate a tsunami.**

Wordsleuth provided for those who finish quickly.