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Plate tectonics simulator

Posted by [sat](#) on Tue, 2014-04-08 17:42

This online resource simulates plate tectonics.

The resource is a simulation of tectonic plate movement that allows students to change the variables involved in the process and observe the impact of each change.

This is a great opportunity to explore the controls and variables of the tectonic process with students in the context of this content descriptor. The simulation would also provide a good introductory lesson to the topic as students explore how plates move on the surface of the Earth, change the variables of temperature, composition, and the thickness of the plates and discover how to create new mountains, volcanoes and oceans.

Lesson objectives:

Describe the differences between oceanic and continental crust, including their respective properties of density, composition, temperature and thickness.

Predict how changes in composition and temperature change crust density and buoyancy.

Draw a time series for different types of plate boundaries and their motions, indicating the related surface features.

Deduce the type of plate boundary given images or descriptions of surface features.

Explain which types of plate boundaries create crust, and which destroy crust

There are also downloadable PDF teacher support notes available.

Australian Curriculum v9 Codes: AC9S8U03 (Year 8)

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Tectonic plates

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