

What is plate tectonics?

Geography – Y4 – Lesson 5

Geographical Knowledge and Concepts

Physical Geography
Physical Processes

Resources

- PPT
- Differentiated worksheets
- Challenge worksheets
- Jigsaw activity

Teaching Input

- **How do earthquakes and volcanic eruptions happen?** – Go through the key questions and the geographical knowledge and concepts used to answer those questions.
- **Key vocabulary for this lesson** – Go through the key vocabulary and their definitions. Have any of the children heard these words before? Did they already know their meanings?
- **What is plate tectonics?** – Go through the information on the slide, showing the diagram of the structure of the Earth. Introduce Silvana. Choose a child to be Silvana and let them read what she says about plate tectonics. Explain the Earth's structure and that we will be focusing on the Earth's crust.
- **The Earth's crust** – Go through the information on the slide and discuss why some layers are folded or fractured. Introduce Lance. Choose a child to be Lance and let them read his questions about the Earth's crust. Children are to discuss this question with their learning partners, in groups or as a class. Take feedback from the class.
- **The idea of tectonics** – Read through the information on the slide, introducing Alfred Wegener. Read out what he says about tectonics and introduce his tectonic theory. Do the children agree with Wegener's tectonic theory?
- **Stop and jot 1** – Children must complete the jigsaw task on their stop and jot 1 worksheets.
- **Continental Drift** – Read through the information and show how scientists have come to believe in Wegener's tectonic theory.
- **Are the plates still moving?** – Read through the information on the slide. Introduce Britany. Look at the video Britany provides so the children can visualise how the plates are moving and how this affects the geography of landscapes.
- **How do tectonic plates move?** – Explain when the plates move, it creates different geological phenomena. The following slide describes the different types of plate boundaries and how they move. Use the images to help visualise.
- **Where in the world are the plate lines?** – Children to study the world map with the plates on. They are to discuss the questions on the slide with their learning partners, in groups or as a class. Take feedback from the class before Silvana answers the questions on the following slide.
- **Where in the world am I?** – Show the children the zoomed-in area on the map of the region Campania. Children are to discuss Clayton's questions on the slide with their learning partners, in groups or as a class. Take feedback from the class before the answers are revealed.
- **Tectonic plates near Italy** – Explain that Italy is sandwiched between the main huge African plate and the large Eurasian Plate. Read what Silvana says about tectonic plates near Italy. Children are to discuss her question with learning partners, in groups or as a class. Take feedback from the class.
- **The region of Campania, Italy** – Share the information and focus on the physical geographical activity experienced by the region, i.e., earthquakes, volcanoes etc.
- **Activity 1** – Children are to label the tectonic plates on the activity 1 worksheets – differentiated in three ways.
- **Challenge** – On which tectonic plates are these countries located? Children are to answer this question on their challenge worksheets.

LA

Recall the names of the tectonic plates.

MA

Identify and locate the tectonic plates.
Demonstrate understanding of physical processes created by plates.

HA

Identify and locate the tectonic plates.
Demonstrate understanding of physical processes created by plates.

Challenge

Children to use an atlas to discover which tectonic plate these countries are located on.

Self-assessment

I can identify the tectonic plates around the world. I understand that moving plates cause geographical phenomena.

Key Vocabulary

plate tectonics – sections of the Earth's crust

continents – any of the world's main continuous expanses of land (Europe, Asia, Africa, North and South America, Oceania, Antarctica)

continental drift – the drifting movement of continents due to plates of moving rock

map – a diagram showing where places are located and their features

region – a named area within a country

atlas – a collection of maps in book form

Assessment Questions

What is a tectonic plate?
What is continental drift? How do the plates move?
What happens when the plates move?