

GEOLOGY 12
UNIT 1
Plate Tectonics

Learning Guide 2

Plate Tectonics

LEARNING GUIDE OUTCOMES

On completion of Learning Guides 2 you will be able to:

- outline evidence for plate motion and continental drift
- explain what is meant by seafloor spreading and outline evidence to support it.
- describe convergent, divergent and transform types of plate boundaries.
- suggest possible causes for the movement of plates.
- Describe the origin of magma formed during plate tectonic processes.
- Describe the geologic activities that occur at plate boundaries.

EVALUATION

- | | |
|------------------------|------|
| 1. Journal | Comp |
| 2. Sea Floor Spreading | 100% |

RESOURCES

1. Text: **Physical Geology & the Environment**

LEARNING ACTIVITIES

Activity 1

Journal

1. Refer to your text **Physical Geology & the Environment** Ch. 2 Plate Tectonics. Read pages 21 – 64.
2. In your journal, define the following terms: *plate tectonics, continental drift, seafloor spreading, convection, plate, lithosphere, asthenosphere, divergent plate boundary, convergent plate boundary, transform plate boundary, magnetic reversals, mid-ocean ridges, rift valley, ocean trench, island arc, orogeny.*
3. In your journal, give pieces of evidence for continental drift.

4. In your journal, with the aid of a diagram, describe what happens at divergent plate boundaries, at transform boundaries, and the three types of converging plate boundaries (ocean-ocean, ocean-continent, and continent-continent).
5. In your journal, describe how mountain ranges form.
6. In your journal, describe what occurs at a hot spot.
7. Complete testing your knowledge questions #1, 3, 5, 6, 7, 8, 9, 16, 17, 18, 21, 22, 24, 25, 26, 27, 28, 29.

Activity 2

Sea Floor Spreading

1. Complete the assignment on Sea Floor Spreading.

End of LG #2