TOPIC & GRADE LEVEL: The Changing Earth

## Key Learning(s):

There are many changes to Earth that occurred over time by different geological forces and processes. These forces and processes that are related shape Earth's past, present, and future.

## Unit Essential Question(s):

How do constructive and destructive natural processes change Earth over time?

Concept

Theory of Continental Drift

Concept

Theory of Plate Tectonics

Concept

Volcanoes and Plate Tectonics

Lesson Essential Questions:

How did Alfred Wegener's theory explain the future movement of the continents?

What evidence supports the theory of continental drift?

Lesson Essential Questions:

What causes the tectonic plates to be in constant motion?

How do the tectonic plates interact?

How do tectonic plates form mountains?

Lesson Essential Questions:

How are volcanoes formed?

How are volcanoes classified?

How are volcanoes examples of rapid surface changes?

How can volcanic eruptions be predicted?

What are some long-term effects of volcanic eruptions?

Vocabulary: continental drift tectonic plates Pangaea plate boundaries Vocabulary:

lithosphere asthenosphere convection convection current divergent

transform-fault folding mountain fault-block mountain dome mountain Vocabulary: volcano
Ring of Fire magma
lava cinder cone
shield cone composite cone
extinct dormant

tiltmeter seismometer

intermittent active