

Earth Systems and Resources

SUGGESTED SKILL

X Visual Representations

2.C

Explain how environmental concepts and processes represented visually relate to broader environmental issues.



AVAILABLE RESOURCES

- Classroom Resource > Understanding Topographic Maps and Their Construction
- The Exam > Student Performance Q&A 2014, Q3
- The Exam > Samples and Commentary 2014, Q3

TOPIC 4.1 Plate Tectonics

Required Course Content

ENDURING UNDERSTANDING

ERT-4

Earth's systems interact, resulting in a state of balance over time.

LEARNING OBJECTIVE

ERT-4.A

Describe the geological changes and events that occur at convergent, divergent, and transform plate boundaries.

ESSENTIAL KNOWLEDGE

ERT-4.A.1

Convergent boundaries can result in the creation of mountains, island arcs, earthquakes, and volcanoes.

ERT-4.A.2

Divergent boundaries can result in seafloor spreading, rift valleys, volcanoes, and earthquakes.

ERT-4.A.3

Transform boundaries can result in earthquakes.

ERT-4.A.4

Maps that show the global distribution of plate boundaries can be used to determine the location of volcanoes, island arcs, earthquakes, hot spots, and faults.

ERT-4.A.5

An earthquake occurs when stress overcomes a locked fault, releasing stored energy.