

Science Learning Progression

McDougal Littell Science, *The Changing Earth*

Grade: 8

Prerequisite skill:

4-5 ES2 Earth materials are formed by various natural processes and can be used in different ways.

To *compare* the major layers of the Earth

6-8 ES2E

1.1 p. 9

To do this I can sketch and label

- The relative positions
- The approximate thicknesses
- The consistencies
- The temperatures of each major layer of the Earth

Formative Assessment: Exit Slip

~Blank circle to label
~Word bank for differentiation

To *analyze* the evidence for *continental drift*.

6-8 ES2F

To do this I can

- Choose the most convincing evidence
- Describe the evidence
- Give reasons for my choice

Formative Assessment: Quick write journal entry

~Use prompt for "Check Your Reading," p. 15

To *describe* what happens when *continental plates diverge*.

6-8 ES2F

1.3 p. 22

To do this I can

- Identify the places where continental plates diverge
- Give examples of what happens at each place.

Formative Assessment: Scaffold

~ Students complete a teacher developed template.

To recognize what happens when *continental plates converge*.

6-8 ES2F

1.4 p. 30

To do this I can

- Identify the different types of convergence on a map
- Write the names of the places I find
- Explain the results of each different type of convergence I found on the map

Formative Assessment: Map Search

~Provide groups with world maps.
~Students search maps for examples of the three types of continental convergence. And write their findings.

To describe what might happen to *continental plates* at a *transform boundary*.

6-8 ES2F

To do this I can

- Explain how two continental plates move at a transform boundary.
- Describe what happens as the plates move.

Formative Assessment: Scaffold

Students complete a blank power point template.

(Later the completed template becomes a rough draft for creating a personal PowerPoint)

6-8 ES2E & F
Energy from within the planet moves huge plates on the Earth's surface causing changes in landforms.

Later big ideas that build on this big idea include:

9-12 ES2 Energy from the Earth's interior drives the rock cycle and crustal plates.