**Unit 3 – Learning Goals for History of the Earth**

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| **Big Picture**: Students should understand the role of energy in the various processes that shaped the Earth in the past and continue to shape the Earth today. | | | |
| **Content Goals** | | **Skills Goals** | |
| Students will be able to:   * Identify properties of metamorphic, igneous, and sedimentary rock * Identify rocks based on their properties * Describe the various processes in the rock cycle that transform rocks * Order rock layers based on Law of Superposition and Index Fossils * Explain how rocks or events can be dated using absolute and relative dating * Associate geologic eras and periods with events in Earth’s history * Explain how energy changes (heating, cooling) drive plate movement * Explain how the core of Earth generates energy required for plate tectonics * Explain how scientists use fossil evidence, position of rock layers, and other geologic features to interpret Earth’s history | | Students will be able to:   * Use factor-label method to convert from one unit of measure to another * Use information provided in charts and graphs to analyze patterns in data * Identify the topic, state the main idea, and identify the key supporting statements in a scientific article * Make a graph using all of the components of the EDR | |
| **Assessment**: How will mastery of content and skills be assessed?   * Article evaluation will show whether students can identify topic and summarize main idea * Answer questions regarding data collected in the laboratory * Quizzes and tests will show if students have mastered the content goals | | | |
| **Content Vocabulary:**  Metamorphic rock  Sedimentary rock  Igneous rock  Magma  Lava  Intrusive  Extrusive | Weathering  Erosion  Deposition  Index fossil  Law of Superposition  Outcrop  Disconformity/uncomformity  Relative Age  Absolute Age | | Fission  Plate tectonics  Convergent boundary Divergent boundary  Transform fault |

 

