

**Earth Science 8 The Restless Earth Project – Mrs. Duddles**

**Objective:** Students will understand that the movement of tectonic plates accounts for important features of Earth’s surface and major geologic events including mountain building, volcanoes, and earthquakes. Students will have a choice to collaborate to create presentations that shows a model of Earth or the different types of volcanoes and their formation.

**Earth Model Project**

Presentations and models must include the following information:

- Continents (show mountains, major elevations present, and label all significant landforms). Include a brief discussion/illustration of how the continents have changed over time due to movement of tectonic plates.
- Oceans (show and label all)
- Mid-ocean ridges (show and label locations); brief discussion/illustration of what happens at mid-ocean ridges
- Tectonic plates (mark and label all major plates). Include a brief discussion of the Theory of Plate Tectonics
- Ring of Fire (show and label; discuss significance)
- Brief discussion on mountains (types and how they are formed)
- Include a cut-out section to show and label the layers of the Earth; compositional and physical. (Include information such as temperatures, names of the layers, thickness, composition, etc.)

**Volcano Model Project**

Presentations and models must include the following information:

- Types of volcanoes (shield volcano, cinder cone, and composite volcano), and how they are formed
- Show hot spots
- Viscosity and composition of magma
- Type of eruptions, and materials produced
- Discuss/show locations where volcanoes form (the Ring of Fire, hot spots, plate boundaries where they form)
- Show and label examples of each type of volcanoes and indicate if they are active or dormant
- Discuss the aftermath of volcanic eruptions (for example, use information from recent eruptions to show the effects of volcanic eruptions on Earth’s different spheres)

*Students may choose the media of their choice for presentations (Prezi, PowerPoint, 3-D model, poster, scripted skit, a combination of media, etc.). Must include an MLA formatted Works Cited page.*

**Grading Rubric**

**Date Due:**     **Tuesday June 4**    

\_\_\_\_\_ Creativity, quality of story-telling, and visual content/appeal (7.5 points)

\_\_\_\_\_ Accuracy and detailed information (5 points)

\_\_\_\_\_ Neatness and correct spelling & grammar (5 points)

\_\_\_\_\_ Presentation demonstrates practice, preparation, effort, and group collaboration (7.5 points)

\_\_\_\_\_ **Total** (25 points)

**Teacher Comments**

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