

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
