

Kid-Friendly Designing a Model of the Processes and Features of Plate Movement

Make a visual representation (model) of an oceanic and continental crust feature (mountains, underwater mountains, underwater volcanoes, islands).

With a partner/individually your model must include:

- The location of the feature and a brief description of what it is, how “big” it is.
- Illustrate the “scale” of the feature (if it’s a large/long feature you need to represent that on your model aka a large mountain range shouldn’t be a small picture on the paper)
- Illustrate the convection process happening under the surface to cause a convergent boundary, divergent boundary or transform boundary
- Illustrate what is made on the surface from a convergent, divergent or transform boundary
- Illustrate the time it took for the feature to be formed

Individual Work: written information must include:

1. Describe the specific *internal processes* identified as causes in *building up* Earth’s surface over time, such as volcanism, mountain building or tectonic uplift.
2. Describe the specific *surface processes* identified as causes in *wearing down* Earth’s surface over time, mainly weathering and erosion.
3. Identify interactions and feedbacks between processes (mountain-building changes weather patterns that then change the rate of erosion of mountains).
4. Describe the rate at which the features you chose change related to the time scale on which the processes operate.

NGSS Strand	Not Yet	Approaches Expectations	Meets Expectations	Advanced
HS-ESS2-1	Identifies or otherwise applies irrelevant content OR relevant content with major errors or omissions.	Identifies or otherwise applies relevant content with minor errors or omissions.	Explains or otherwise applies relevant and accurate content.	Explains and applies relevant and accurate content.
<i>DEVELOP MODEL</i>	Designs and explains a model that generates data to support explanations, predict phenomena, analyze systems, and/or solve problems. Design or explanation of the model includes major errors or omissions.	Designs and explains a model that generates data to support explanations, predict phenomena, analyze systems, and/or solve problems. Design or explanation of the model includes minor errors or omissions.	Designs and explains a model that generates data to support explanations, predict phenomena, analyze systems, and/or solve problems.	Designs, explains, and evaluates a model to generate data to support explanations, predict phenomena, analyze systems, and/or solve problems.