Names \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Hr. \_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_

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Lesson 9

Developing Models Assessment

Below is the rubric that will be used to grade this assessment. Please attach to description of model.

15-17 points 18-21 points 22-25 points

|  |  |  |  |
| --- | --- | --- | --- |
| Develop Models | 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. |

ASSESSMENT: You and your partner will design and build a model synthesizing what you have learned about plate boundaries.

Helpful Hints:

* You may use any materials you wish to complete your model.
* Remember, this model CAN have moving parts which is an important feature of the theory of plate tectonics. Think in depth how you can represent movement on your physical model.
* You should use all of your available resources as evidence when building the most ACCURATE physical model you can. (cross-section diagrams from 9.1 and 9.2, p. 60 & 64, etc.)
* Researching other cross sections on your own time on computer might be useful.

You must include:

1. Physically constructed model which successfully shows the type of plate interaction or location on Earth and what ideas are associated with that location.

2. A key/legend must accompany your model.

3. Use the checklist on Activity 0.3 as a guide to prepare a written description that is complete and accurate. It should describe what the model shows, advantages, and limitations of the model (not of the materials used), and of the underlying mechanism for movement (convection).

4. You must prepare a short presentation that:

-introduces your plate boundary type/location to the class

-shows your model

- describes what your model depicts

- describes how this is similar to and different from the real world.

**TEACHER USE ONLY**

***Model includes***:

\_\_ Type and characteristics of plates

\_\_Direction of plate movement

\_\_Features associated with that location/boundary

\_\_Events associated with that location/boundary

\_\_Underlying mechanism for plate movement

***Description includes:***

\_\_ Advantages of the model

\_\_Limitations of the model

\_\_Description of what the model shows

\_\_Key/legend

***Presentation included:***

\_\_\_ Physical model

\_\_\_ Introduction of plate boundary type/location

\_\_\_Description of what model depicts

\_\_\_ Description of how the model is similar to the real world

\_\_\_Description of how the model is different than the real world.