

PLATE TECTONICS CONCEPT MAP

Your assignment is to create an informative and attractive Concept Map graphic organizer describing the theory of Plate Tectonics.

Designed to organize information, the concept map will be allowed during an in-class test as reference.

The purpose of the assignment is to show your expert knowledge of Plate Tectonics and should specifically include the following topics.

Your concept map must include:

- What happens when you go deeper into the Earth?
 - Does **temperature** and **pressure** change?
- Evidence that the Earth is a **sphere**
- Earth's Composition (detailing the **Crust, Mantle, Outer Core, and Inner Core**)
 - Diagram of the Earth and the 4 layers
- Who was **Alfred Wegener**?
- **Continental Drift**, evidence for it, and why it wasn't accepted right away
- **Sea Floor Spreading**, evidence for it.
 - Diagram of convection
- **Theory of Plate Tectonics**
 - Map of the Earth showing the **tectonic plates**
- Plate Boundaries
 - **Convergent** (oceanic-oceanic, oceanic-continent, continent-continent)
 - **Divergent** (under the ocean, on land)
 - **Transform**
 - Features associated with each plate boundary (*mountains, rift valleys, ridges, trenches, island arcs, subduction zones, earthquakes, volcanoes*).

Your job is to educate and inform others of how Plate Tectonics works and the features this process cause.

It is also a way of demonstrating your understanding of Plate Tectonics to Mr. Bond.

Concept Map due date: _____

In-Class Test date: _____

Evaluation

You will be evaluated using the two rubrics on the back of this sheet.

Rubrics:

Rubric for Science Communication:

Achievement Level	Descriptor
5-6	The student uses sufficient scientific language regarding Plate Tectonics correctly. The student communicates scientific information with respect to the structure of the Earth and plate boundaries effectively .
3-4	The student uses some scientific language regarding Plate Tectonics correctly. The student communicates scientific information with respect to the structure of the Earth and plate boundaries with some effectiveness .
1-2	The student uses a limited range of scientific language regarding Plate Tectonics correctly . The student communicates scientific information with respect to the structure of the Earth and plate boundaries with limited effectiveness .
0	The student does not reach a standard described by any of the descriptors above.

Rubric for Concept Map

Achievement Level	Descriptor
5-6	The student designs the concept map so that ideas always and accurately shift from <u>large concept</u> to <u>smaller concept</u> . Central idea stands out; images and colour are used effectively to clarify ideas. Connecting lines always have words linking the ideas. Includes all diagrams and images needed. Concept map shows excellent effort.
3-4	The student designs the concept map so that ideas usually shift from large idea to smaller idea. Central idea mostly stands out; images and colour are used effectively to clarify ideas. Connecting lines always have words linking the ideas. Includes most diagrams and images needed. Concept map shows strong effort.
1-2	The student designs the concept map so that ideas sometimes shift from large idea to smaller idea. Some confusion. Central idea does not stand out; images and colour attempt to clarify ideas. Connecting lines rarely have words linking the ideas. Includes few diagrams and needed images. Concept map shows some effort.
0	The student does not reach a standard described by any of the descriptors above.

Your Mark:

1. Science Communication =	
2. Concept Map =	
FINAL MARK	