The Earth Moves Under My Feet!

Lesson 4

5-6 Days

Feb 5-12:04 PM

Objective

Demonstrate, using a model and oral presentation,how the movement of the Earth's tectonic plates causes changes in the surface of the Earth.

Key Question

How does the movement of the Earth's tectonic plates cause changes in the surface of the Earth?

Feb 5-1:15 PM

Materials Needed

For each student:

- Handout: *Product Descriptor*
- 7 student pages

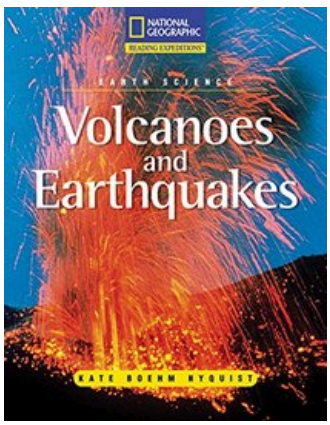
Teacher/Student provide:

- Miscellaneous materials for making models
- construction paper
- chart paper/markers

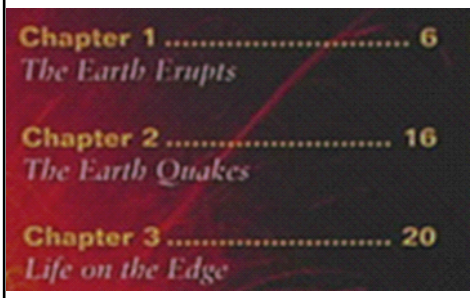
For the class:

- clay
- cardboard
- Book: *Volcanoes and Earthquakes*

Feb 9-8:21 AM



- Choose a chapter you want to write about.
- Write the title of that chapter in your main idea box on page 10.
- As I read that chapter write some supporting details. You must be specific with the details you write.



Read the assigned selection in the book Volcanoes and Earthquakes and write the main idea and supporting details on the chart. Be prepared to present your main idea and supporting details to the class.

Feb 9-8:42 AM

Page 11 - This page is to be done on your own, not with your partner.

Write a summary paragraph of your assigned reading selection. Hint: Use your main idea chart as a reference for your paragraph.

How do I write one?

1. Restate the strongest points of your reading that support your main idea.
2. Conclude your summary by restating the main idea in different words.
3. Give your personal opinion or explanation of the content of the reading selection.

Example:

Overall, the changes that occurred in hockey have helped to improve the game. Hockey is faster and more exciting as a result of changes in the past 120 years. For these reasons, modern hockey is a better game than hockey in the 1890s.

Feb 9-9:04 AM

You will now have the opportunity to demonstrate what you have learned about plate tectonics and the movement of the plates.

Each student will build a model of one of the events that result in the motion of the Earth's tectonic plates, *mountain building, earthquakes, volcanoes, and deep sea trenches. (This is not an activity to build and explode a volcano. You are going to model the events that result in the* ***formation of mountains, earthquakes, volcanoes, and deep sea trenches)***

Look at the *Project Descriptor* handout. We will go through all the requirements for your project. Share this information with your parents, you may have to work on some of it at home. If you need additional materials than I have, you will have to hunt them down.

(Hand out Project Descriptor)

Feb 9-11:59 AM

Product Descriptor

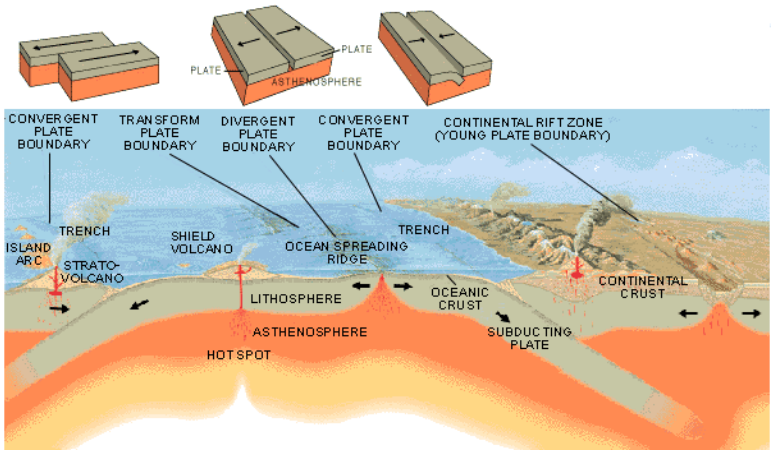
Student models must include:	Yes	No
1. an accurate representation of an event caused by the movement of Earth's tectonic plates (mountain building, earthquake, volcano, deep sea trench.		
2. identification of plates as continental or oceanic.		
3. representation of direction of plate motion.		
4. identification of plate boundary as divergent, convergent, or transform.		
5. accurate representation of the changes that occur on the surface of the Earth due to the movement of the tectonic plates.		
6. creative use of materials to construct a model of the geological events.		
7. colorful representation of the geological event.		
Student presentations must include:		
1. a description of the changes that occur on the surface of the Earth due to movement of the tectonic plates.		
2. a description of the plate motion (divergent, convergent, or transform).		
3. a description of the plates that are moving (oceanic or continental).		
4. an accurate description of how slowly the plates move.		
5. visual presentations: • Power Point presentation (with link to an Internet demonstration). • Or: Charts/Posters with URL of Internet demonstration.		

Feb 19-7:37 AM

Feb 19-7:22 AM

Before we begin our project we will draw and label diagrams of the different plate boundaries and their movements.

These drawings are to help you in forming an image of what the model might look like; what materials might be used; serve as a reference in building a model; and reinforce understanding of the different movement of the plates, their boundaries, and the changes to the surface of the Earth.



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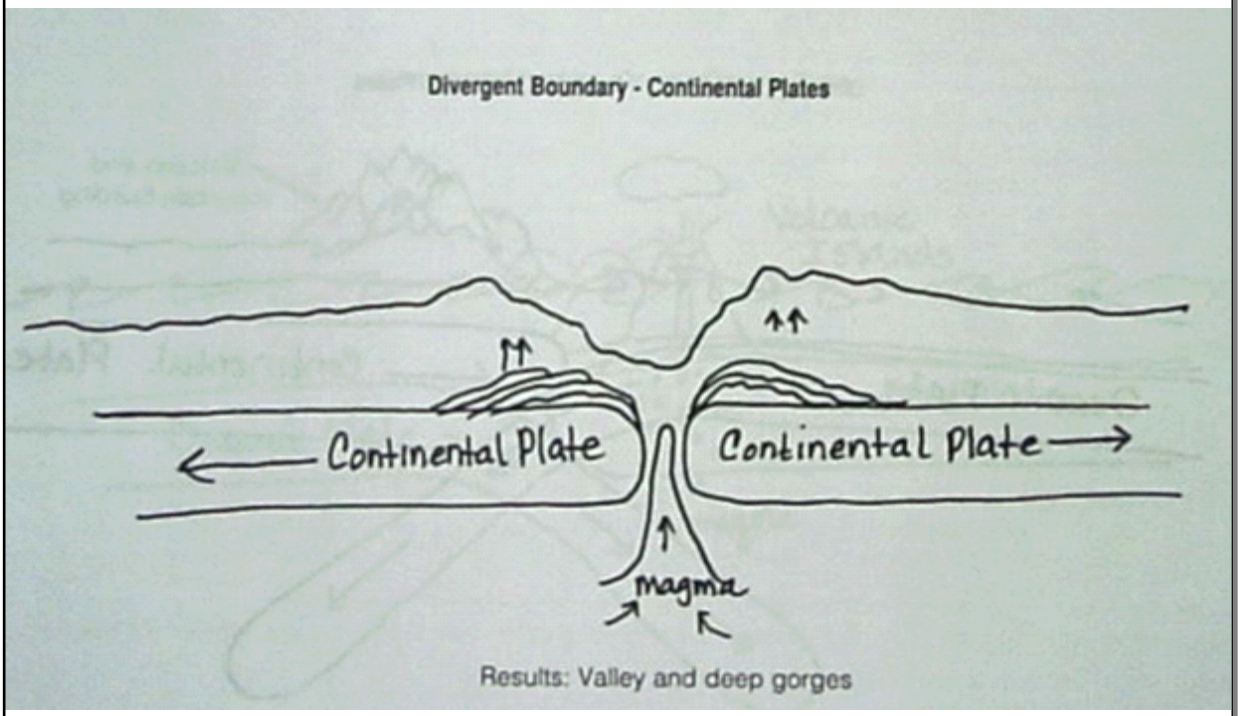

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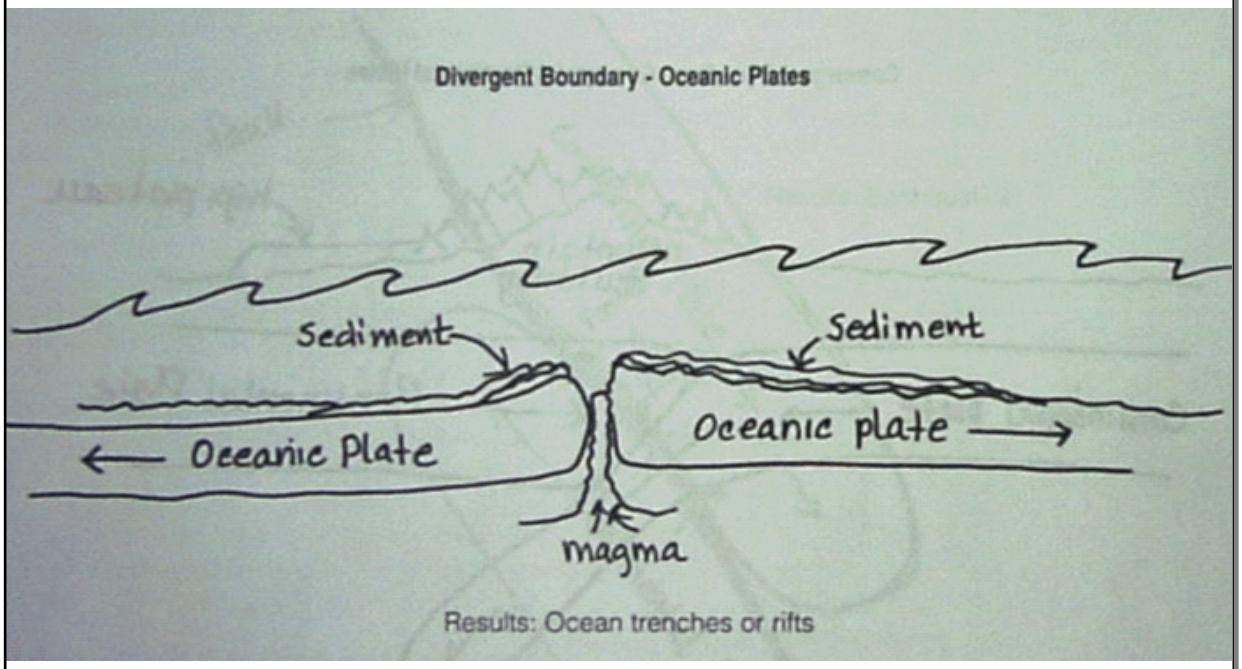

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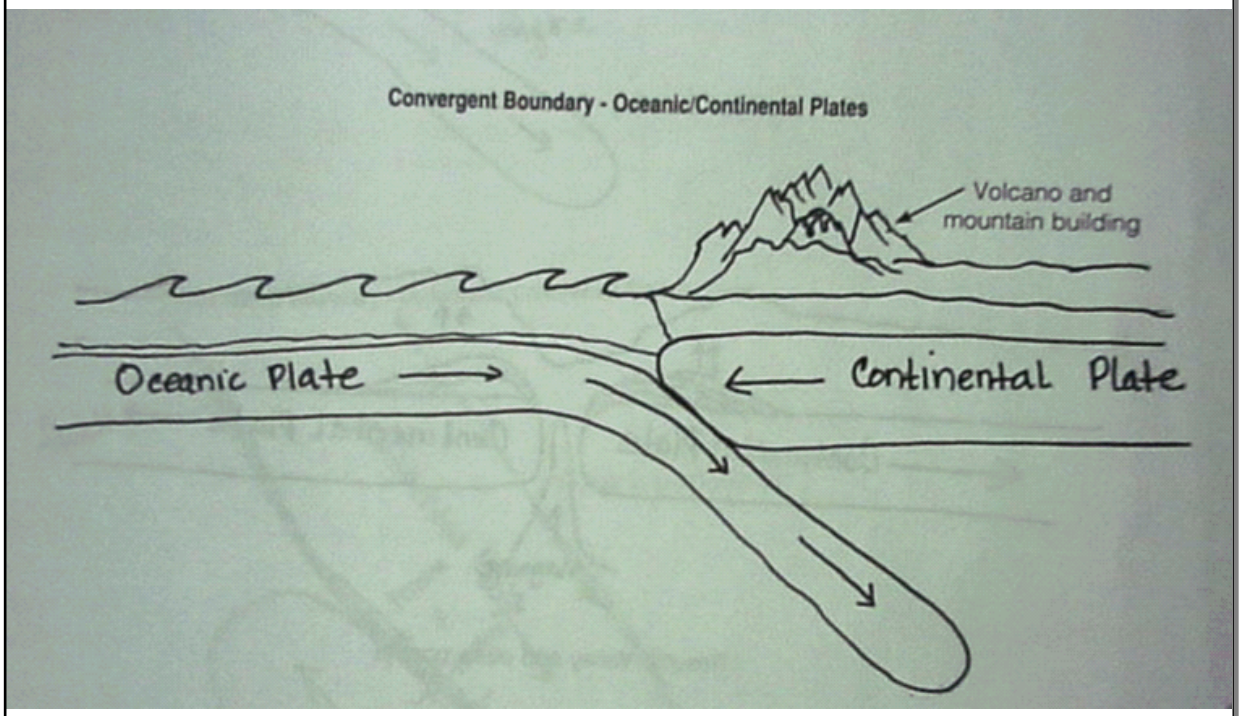

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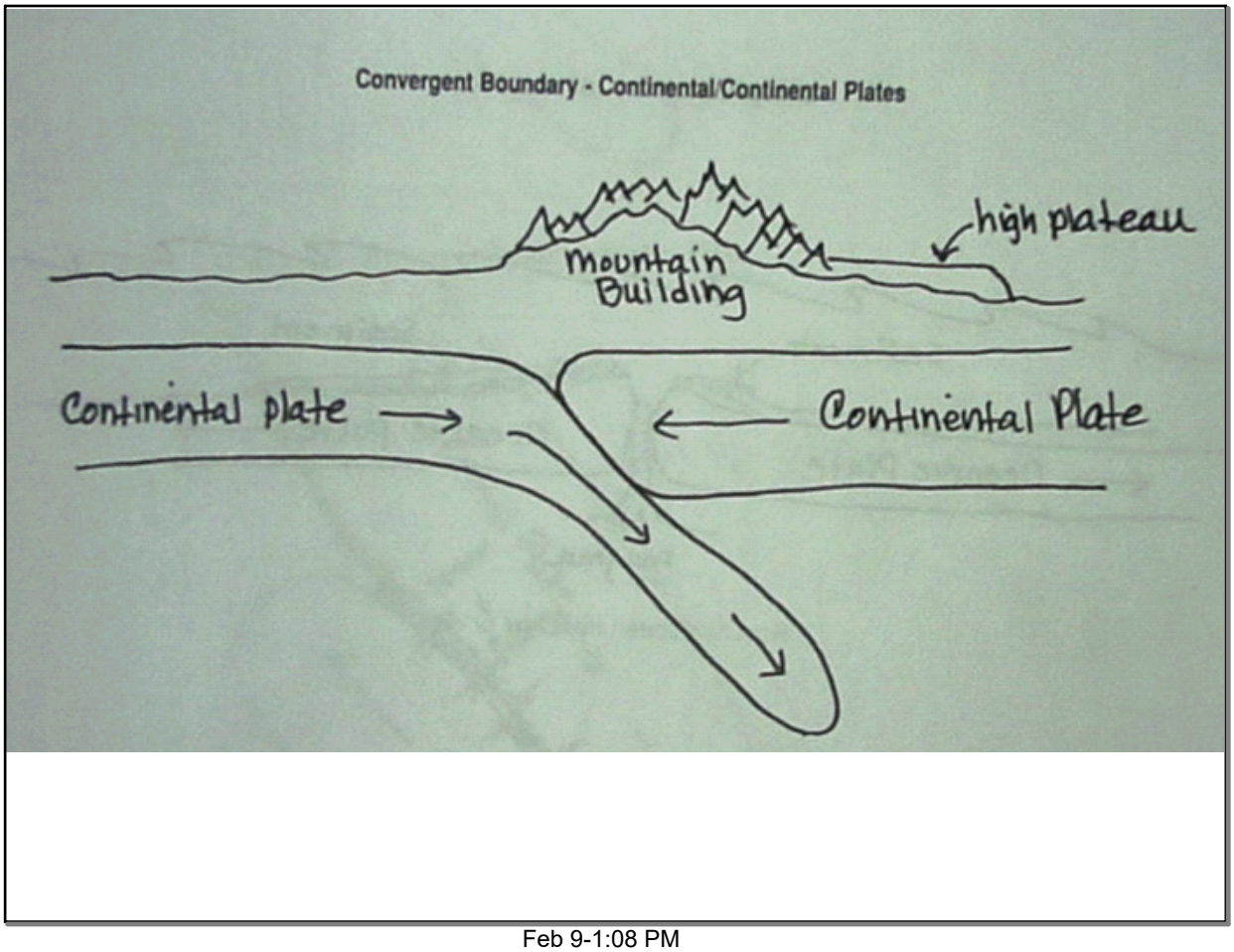

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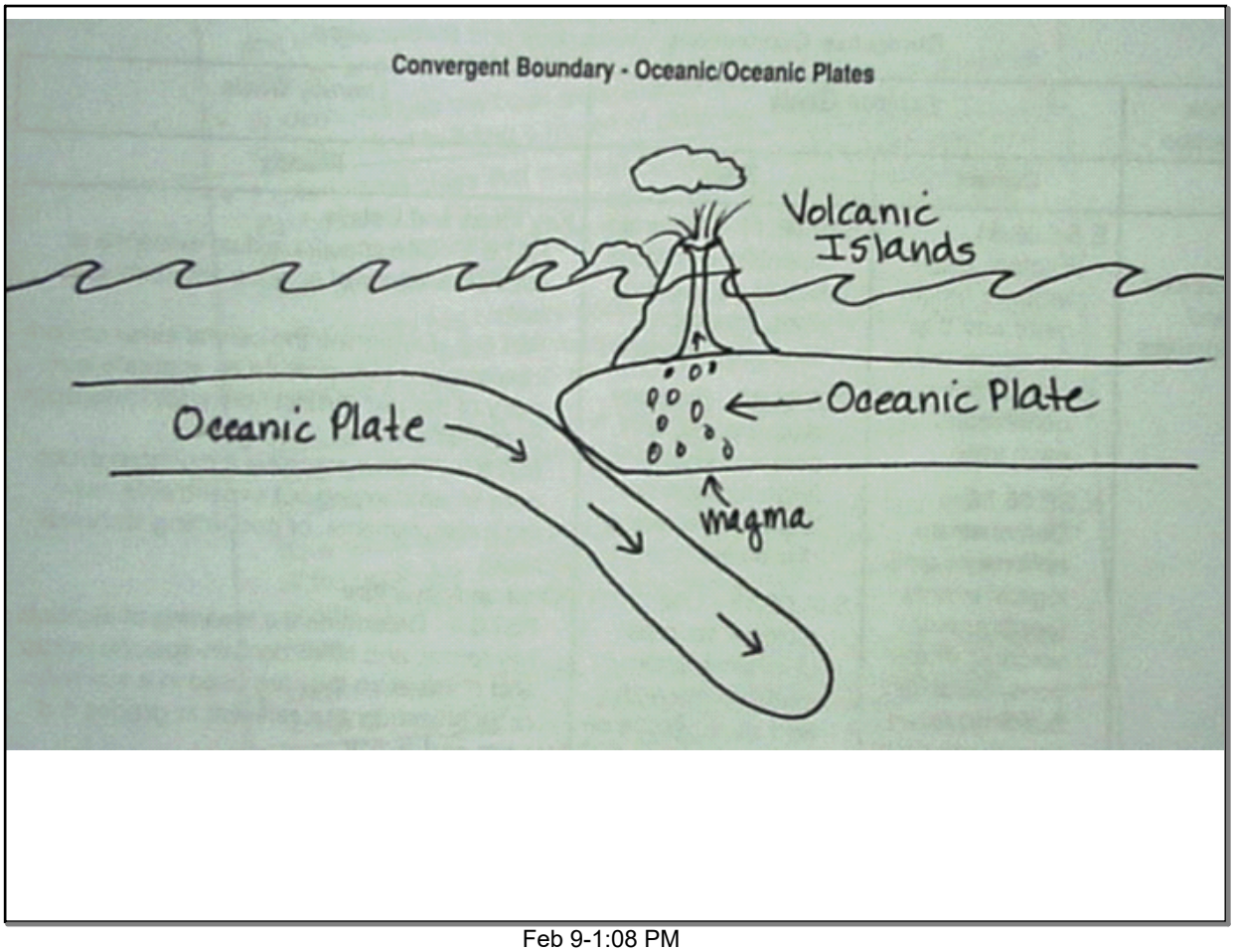

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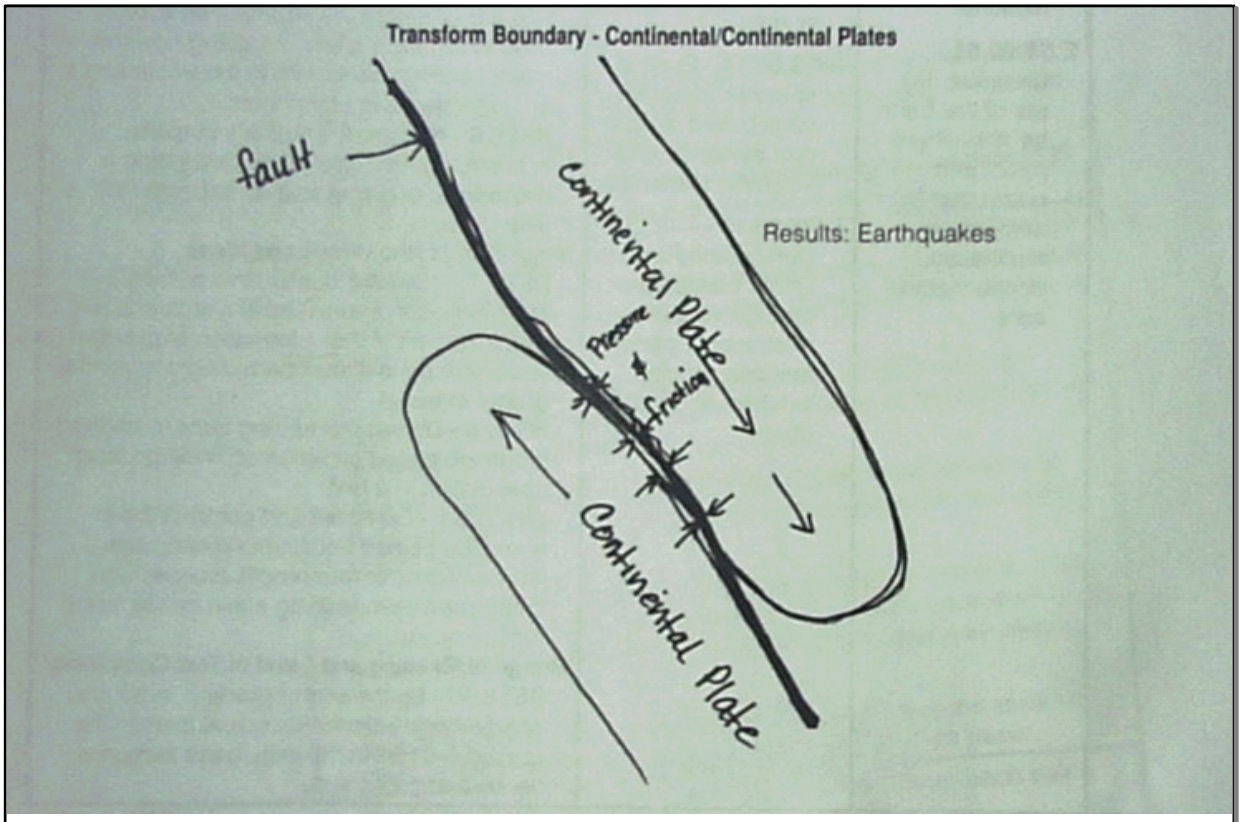

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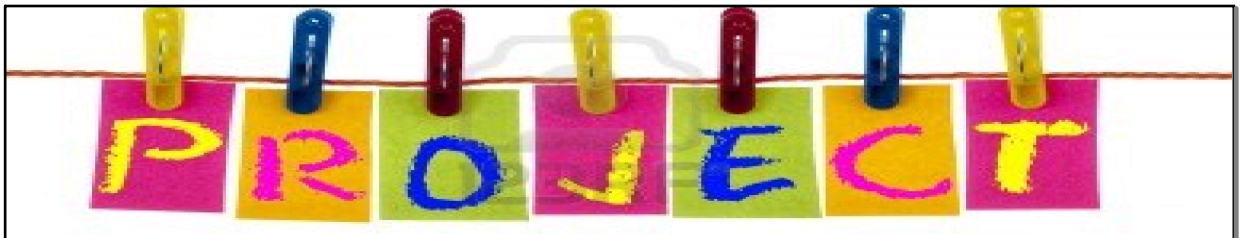


Now it's time to pick what example you would like to use for your model/presentation!!

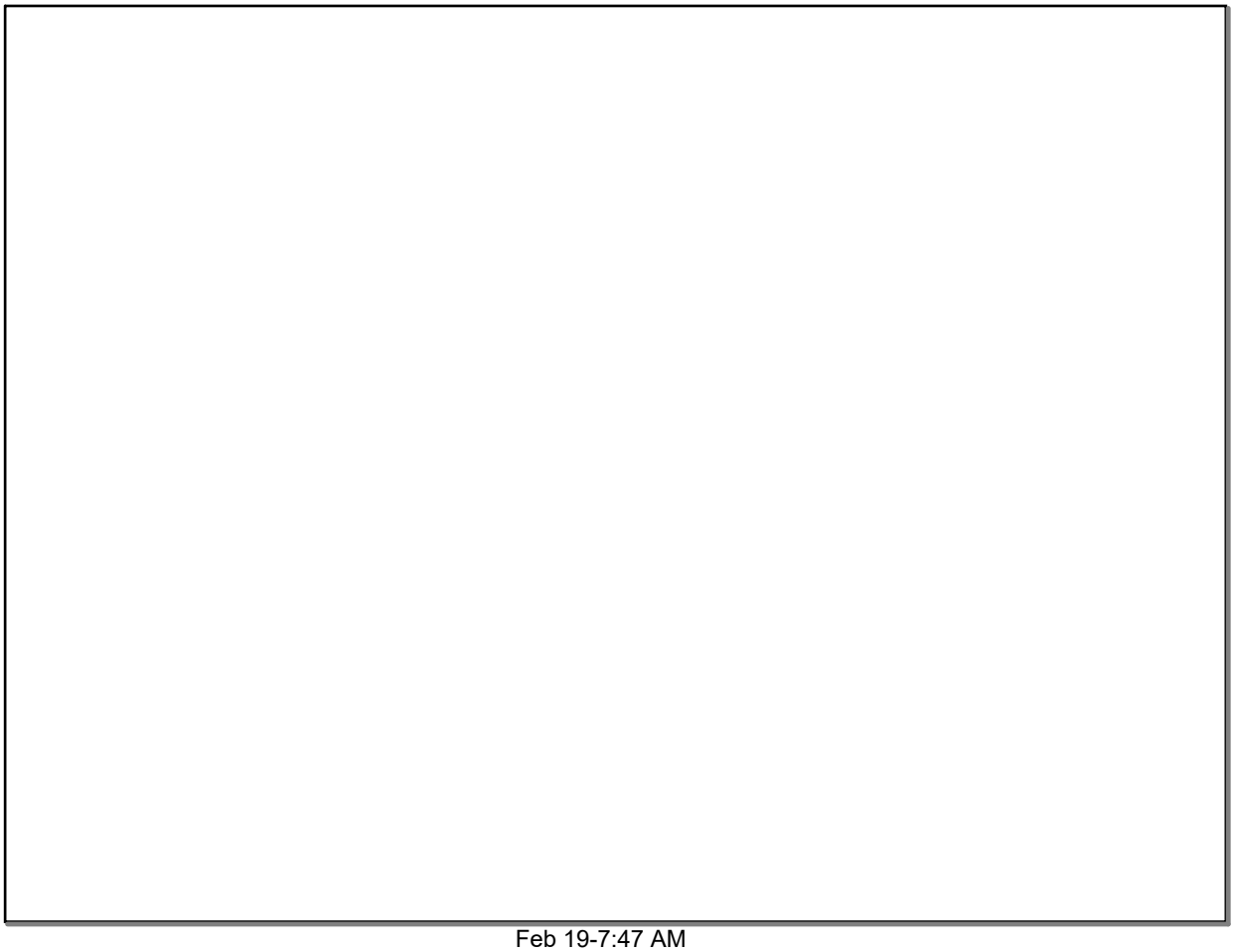
Feb 9-1:16 PM

Now that you know what you are going to do your project on. Time to plan!

1. *Topic: (Describe the plate boundaries and resulting change in the surface of the Earth you are going to present.)* *Type of boundary, types of plates, and result.*
2. *List the materials you will use to make a model of the boundaries and surface changes.*
3. *Describe the steps you will take to make the model.*
4. *Describe how you will present your model. (power point presentation, posters, charts)*

Feb 9-2:04 PM

Feb 11-7:27 AM



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