

Earth Science

3D Model

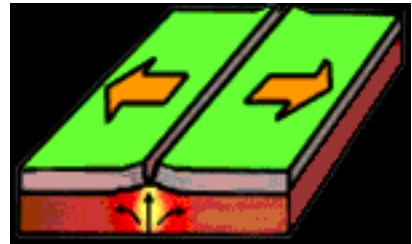
***Project:** Create a 3D model of one of the following choices. Make sure you carefully read the directions and use the rubric as a guide for how it will be graded. Be Creative and Have Fun!!!!!!

3 choices: Pick one

1. Model of Earth



2. Model of a Plate Boundary



3. Model of a Volcano



Due: Thurs April 28th

Mrs. Keller's Earth Science Class

Choice 1: 3D Model of the Earth Project Directions

Project Due Date: April 28th

Objective:

- You will create a 3D model of the earth, labeling the various layers of the Earth's composition.

Requirements:

- You will need to have a cutout portion in the side of your sphere to show the interior layers of the Earth.
- The model must be securely attached to a base.
- Include a title, your name, block number, and date due.

Materials:

- You may use a variety of materials. BE CREATIVE!!!
- Example materials for the sphere might be:
 - Styrofoam spheres purchased from a craft store
 - Food items, such as fruit
 - Clay
 - Paper mache
- Example materials for coloring the layers might be:
 - Paint, markers, beads, pipe cleaners, glitter, food items, etc.

Labels: You **MUST** label all of the following on your model.

- Crust
- Mantle
- Outer Core
- Inner Core

Resources: You may use the internet or your textbook.
Textbook Chapter 7, "Heat Inside Earth" pages 137-151
Helpful illustrations on pages: 142, 144, 145, 150

Student Name _____

Block # _____

Model of the Earth 3D Project Rubric

Category	Scoring Criteria	Points	Total
Construction/ Materials	Appropriate materials were selected and creatively modified in ways that made them even better.	20	
Effort	Great care taken in construction process so that the structure is neat and attractive.	20	
Base	Earth is securely attached to a base.	10	
Labels	Student name, date due, and block number	5	
	Project title	5	
	Crust	10	
	Mantle	10	
	Outer Core	10	
	Inner Core	10	
Score	Total Points	100	

Printout Rubric and turn in with your project. 😊

Mrs. Keller's Earth Science Class

Choice 2: 3D Model of Plate Tectonics Project Directions

Project Due Date: April 28th

Objective:

- You will create a 3D model of plate tectonics, choose one type of plate boundary and make a model of how the plates move and at least one result of the movement.

Requirements:

- Clearly show the type of plate boundary chosen: Convergent, Divergent, or Transform Fault Boundary
- Show/Color Earth's Layers on the plate boundary pieces
- Have a result of the movement of the boundary. (must match what would happen correctly) For example: mountains, valleys, earthquakes, trench, mid-ocean ridge, etc.
- The model must be securely attached to a base.
- Include a title, your name, block number, and date due.

Materials:

- You may use a variety of materials. BE CREATIVE!!!
- Example materials for the plate boundary pieces might be:
 - Styrofoam purchased from a craft store
 - Wood pieces
 - Clay
 - Paper mache
- Example materials for coloring/design the layers might be:
 - Paint, markers, small buildings, trees, pipe cleaners, etc.
- Added Challenge: (optional) Make your plate boundaries move in the correct direction! (For example: Transform Fault Boundary could cause an earthquake and make a building fall down.)

Labels: You **MUST** label all of the following on your model.

- Type of Plate Boundary
- Definition of the plate boundary chosen
- Result of the movement

Resources: You may use the internet or your textbook.

Textbook Chapter 8, "Plate Tectonics" pages 158-174

Helpful illustrations on pages: 162, 165, 167-170

Student Name _____

Block # _____

Model of Plate Boundary 3D Project Rubric

Category	Scoring Criteria	Points	Total
Construction/ Materials	Appropriate materials were selected and creatively modified in ways that made them even better.	20	
Effort	Great care taken in construction process so that the structure is neat and attractive.	20	
Base	Model is securely attached to a base.	10	
Labels	Student name, date due, and block number	5	
	Project title	5	
	Type of Plate Boundary labeled and shown (arrows)	10	
	Result of movement (what did it cause)	10	
	Definition of plate boundary chosen	10	
	Layers of earth colored on plates and/or added effects	10	
Score	Total Points	100	

Printout Rubric and turn in with your project. 😊

Mrs. Keller's Earth Science Class

Choice 3: 3D Model of a Volcano Project Directions

Project Due Date: April 28th

Objective:

- You will create a 3D model of a volcano, labeling the various parts of the volcano's composition.

Requirements:

- Clearly show the type of volcano is chosen: Shield, Cinder, or Composite (needs to be the correct formation).
- Clearly show if the volcano is active, dormant, or extinct and needs to have added features or represent the current state. (for example lava flowing for an active volcano)
- Label parts of the volcano (ex: magma chamber, conduit, vent, lava, magma, etc.)
- The model must be securely attached to a base.
- Include a title, your name, block number, and date due.

Materials:

- You may use a variety of materials. BE CREATIVE!!!
- Example materials for the volcano might be:
 - Styrofoam purchased from a craft store
 - Recycled materials (ex: plastic bottle)
 - Clay
 - Paper mache
- Example materials for coloring/design might be:
 - Paint, markers, small buildings, trees, pipe cleaners, glitter, etc.
- Added Challenges: (optional) Make your volcano erupt! Add something that would come from your type of volcano (for example fire fountain - active shield volcano, lava bombs - active composite volcano, lahars - composite volcano)

Labels: You **MUST** label all of the following on your model.

- Type of Volcano
- State of volcano (active, dormant, or extinct)
- Label parts of the volcano
- Added objects (ex: lava bomb)

Resources: You may use the internet or your textbook.

Textbook Chapter 10, "Volcanoes" pages 203-220

Helpful illustrations on pages: 203-204, 215-218

Student Name _____

Block # _____

Model of a Volcano 3D Project Rubric

Category	Scoring Criteria	Points	Total
Construction/ Materials	Appropriate materials were selected and creatively modified in ways that made them even better.	20	
Effort	Great care taken in construction process so that the structure is neat and attractive.	20	
Base	Model is securely attached to a base.	10	
Labels	Student name, date due, and block number	5	
	Project title	5	
	Type of volcano labeled and shown (formation)	10	
	State of volcano (active, dormant, extinct)	10	
	Labeled parts of a volcano	10	
	Added Objects (optional)	10	
Score	Total Points	100	

Printout Rubric and turn in with your project. 😊