

It's Not My Fault!

Geology/Earth Science

Mr. Traeger

Name: _____ Period: _____ Date: _____

Purpose

The purpose of this activity is to become familiar with the different types of earthquake-producing faults.

Materials

- Fault block cutout sheet
- Tape/Glue Stick
- Textbook pages 238-241
- Scissors
- Colored Pencils

Procedure/Questions

1. Color the fault model on the activity sheet using the color key printed on the sheet.
2. Cut out the fault model. Fold the rock layer extensions down to form a box with the features (trees, train track, river) on the top. Tape touching corners together. The box you make is a three dimensional model of the top layer of the Earth's crust.
3. The dotted lines on your model represent a fault. Carefully cut along the dotted lines. You should end up with two pieces.
4. Locate points A and B on your model. Move the two pieces so that point A is next to point B. a) In the space below, draw how the rock layers X, Y, and Z now appear from the side. b) Use your book, pages 240-241, to determine and label what type of fault this is. c) Label the hanging wall and foot wall. d) Show which way each side of the fault moved using arrows.
5. Locate points C and D on your model. Move the two pieces so that point C is next to point D. a) In the space below, draw how the rock layers X, Y, and Z now appear from the side. b) Use your book, pages 240-241, to determine and label what type of fault this is. c) Label the hanging wall and foot wall. d) Show which way each side of the fault moved using arrows.

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6. Locate points E and F on your model. Move the two pieces so that point E is next to point F. a) In the space below, draw how the surface of the ground looks from up above. Label the road, river, and railroad tracks. b) Use your book, pages 240-241, to determine and label what type of fault this is. c) Label the hanging wall and foot wall. d) Show which way each side of the fault moved using arrows.

7. In the following chart, indicate the type of stress that causes each type of fault to move.

<i>Type of Fault</i>	Normal	Reverse/Thrust	Strike-Slip
<i>Type of Stress</i>			

8. What is an anticline? Draw one below.

9. What is a syncline? Draw one below.

10. What causes anticlines and synclines to form?

11. Why do some rock types fold and other rock types fault (break)?

12. What is the difference between a right-lateral and a left-lateral strike slip fault?