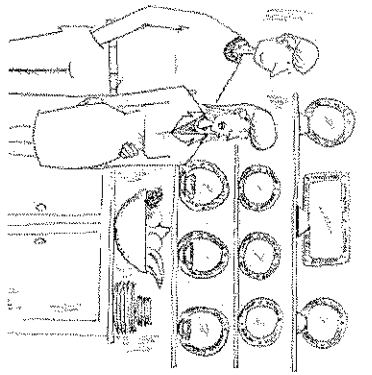


# Faulting Lab



Name: \_\_\_\_\_

**Objective:** Analyze the different ways faulting can happen. Also, understand the outcomes of differing faults.

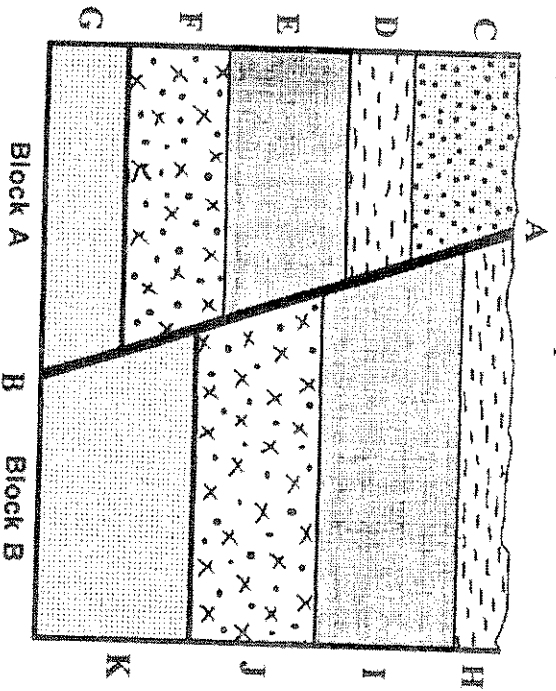
**Answer the following:**

1. What is the difference between a fault and a fracture? \_\_\_\_\_

1. What is a hanging wall? \_\_\_\_\_

2. What is a foot wall? \_\_\_\_\_

Use the diagram below to answer questions 4-8



3. What is the line AB called? \_\_\_\_\_
4. Which side (left or right) is the hanging wall? \_\_\_\_\_
5. a. In which direction did the rock layers move? \_\_\_\_\_  
b. How do you know? \_\_\_\_\_
6. What type of fault is this? \_\_\_\_\_

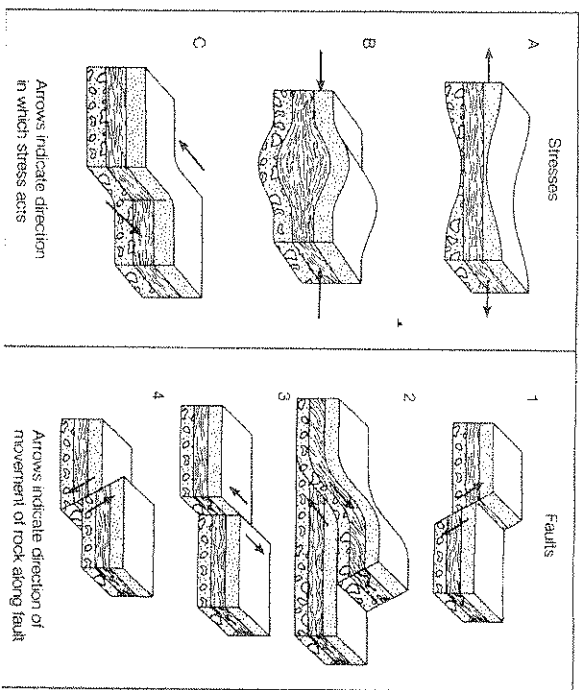
7. Which rock layer in Block A does not have a matching layer in Block B? \_\_\_\_\_

8. How can you explain the missing layer from block B? \_\_\_\_\_

9. Describe the four fault types below.

Fault Type	Description	Stress Type	Effects on Volume and Density (If Any)

Use the diagram below to answer questions 10-12.



10. What kind of stress is illustrated in the following: A: \_\_\_\_\_

B: \_\_\_\_\_ C: \_\_\_\_\_

11. Is the left or the right wall the hanging wall in:

1: \_\_\_\_\_ 2: \_\_\_\_\_

3: \_\_\_\_\_ 4: \_\_\_\_\_

12. What kind of fault is illustrated in:

1: \_\_\_\_\_ 2: \_\_\_\_\_

3: \_\_\_\_\_ 4: \_\_\_\_\_

13. How is a fault block mountain formed? \_\_\_\_\_

14. What are some examples of fault block mountains found on earth? \_\_\_\_\_

Use your fault block model in class to answer questions 14-16:

15. Which side of your model is the hanging wall? (Points A, D, F, L, J OR Points B, C, E, G, H, K)? \_\_\_\_\_

16. What type of fault is created by aligning points A and B on your model? \_\_\_\_\_

17. What type of stress would be necessary to align points C and D? \_\_\_\_\_

18. What type of fault would cause the most disruption to the road on the top of the model? Why? \_\_\_\_\_

**Folding:**

1. What are the factors that determine whether a rock will fold or fault? \_\_\_\_\_

2. What is an anticline? (Explain and draw one): \_\_\_\_\_

3. What type of stress is generally associated with an anticline? \_\_\_\_\_

4. What is a syncline? (Explain and draw one): \_\_\_\_\_

5. What type of stress is generally associated with a syncline? \_\_\_\_\_

6. What is a monocline? \_\_\_\_\_

7. What is the difference between a dome and a basin in geologic terms? (How is each created?) \_\_\_\_\_

8. How is a folded mountain created? \_\_\_\_\_