

## RELATIVE DATING OF ROCK!

Directions – complete the following activities to help you learn more about relative dating of rocks.

### Activity 1 – Can You Sort it Out?

For this activity, you need to go to Class Craft and open the quest named “Relative Dating” to complete the following questions.

1. Who formulated the law of superposition?
2. According to the law of superposition, where is the youngest rock located?
3. According to the law of superposition, where is the oldest rock located?
4. How can you use the law of superposition to identify the culprit?
5. Who is the culprit?
6. What is the cross-cutting law?
7. What is a fracture?
8. What is a fault?
9. What caused the brown semi-circle line at point C?
10. Is the dark brown diagonal line showing a fault or a fracture? How do you know?

11. List the layers in order from oldest to youngest.

12. Putting it all Together – Which of the following places the fossil skulls in order from youngest to oldest?

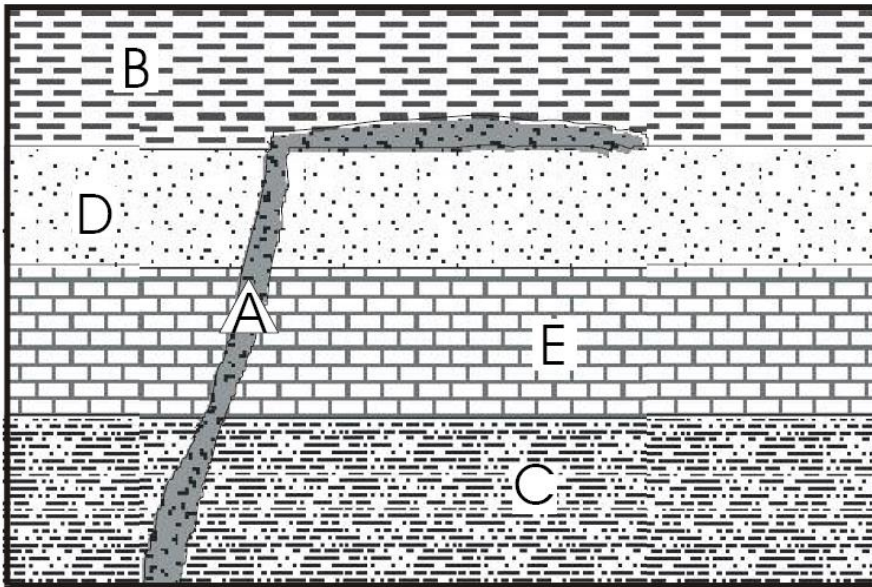
- a. W, X, Z, Y
- b. Y, Z, X, W
- c. X, W, Y, Z
- d. Z, Y, X, W

13. If artifact 6 is 600 years old, how closely can we approximate the date of artifact 7?

- a. They are similar in age because they are in the same layer
- b. Artifact 7 is slightly younger because the layer above is more shallow
- c. Artifact 7 is slightly older because it's buried deeper
- d. Artifact 6 is older because the artifact is darker

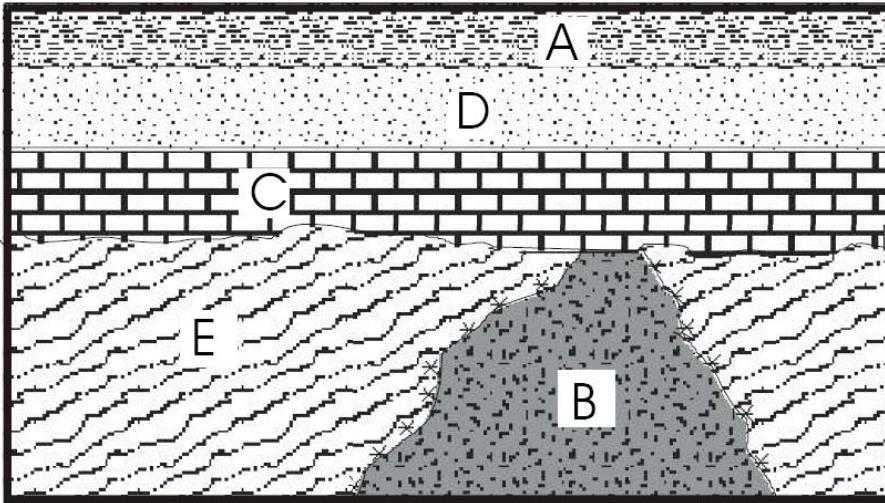
## Activity 2 – Relative Dating Practice

Look at the following drawings, then use the relative age laws (principles) to determine the age relationships. Typically, geologists will list the age order of rocks from top to bottom, with the oldest rocks at the bottom and youngest at the top (like the principle of superposition).

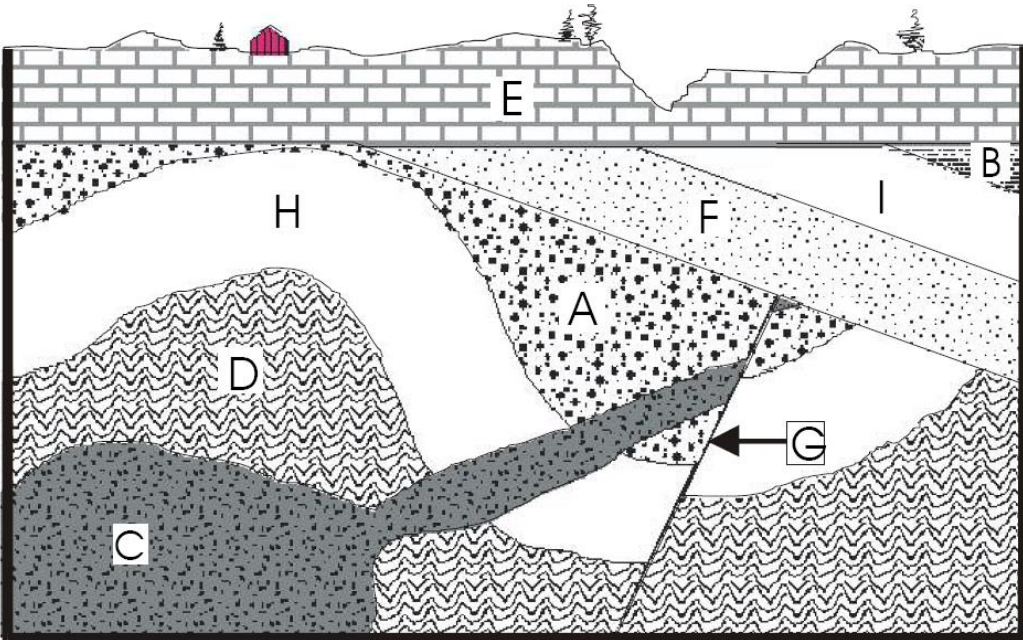


Youngest \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Oldest \_\_\_\_\_

14. List the law(s) (principles) you used to determine the age relationships:



15. List the law(s) (principles) you used to determine the age relationships:



Youngest \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Oldest \_\_\_\_\_

16. List the law(s) (principles) you used to determine the age relationships: