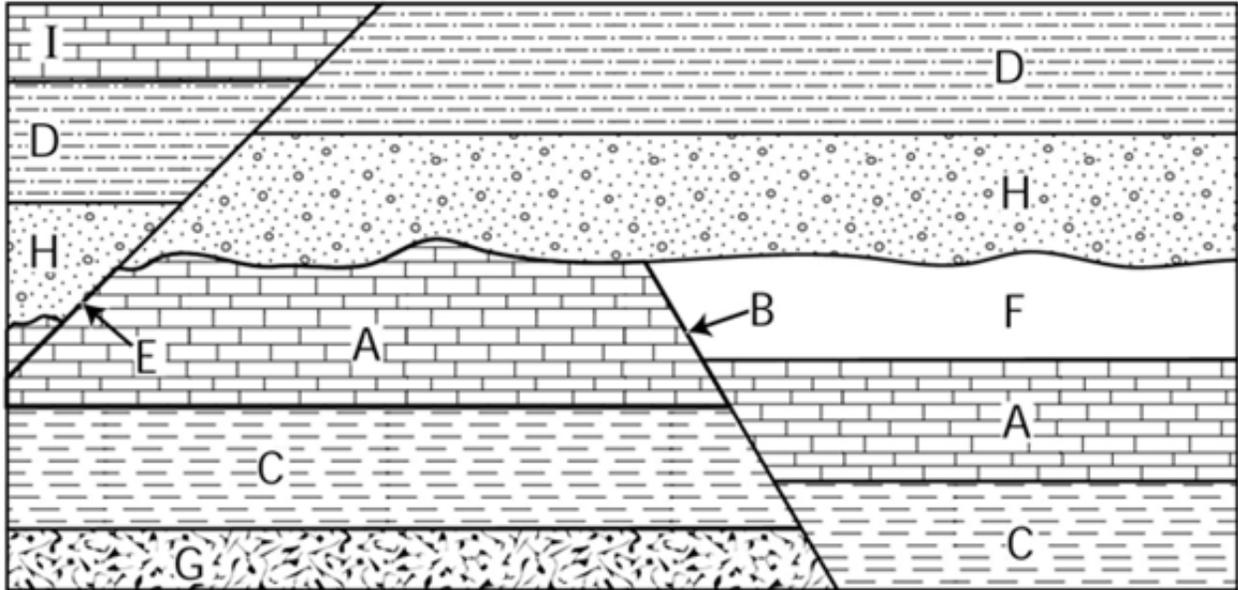


PLEASE DO NOT WRITE ON THIS QUIZ
Relative Dating and Stratigraphic Principles Quiz

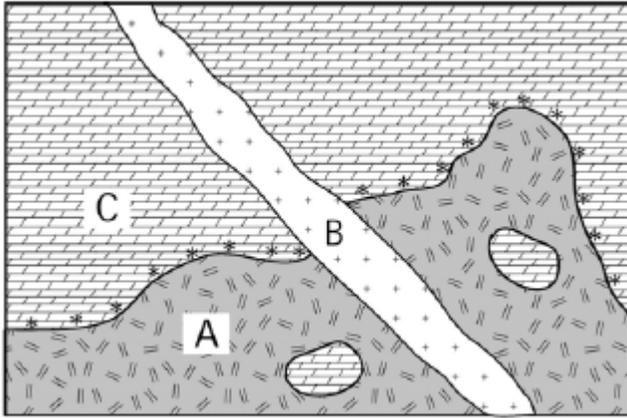
TEST NO C

Multiple Choice

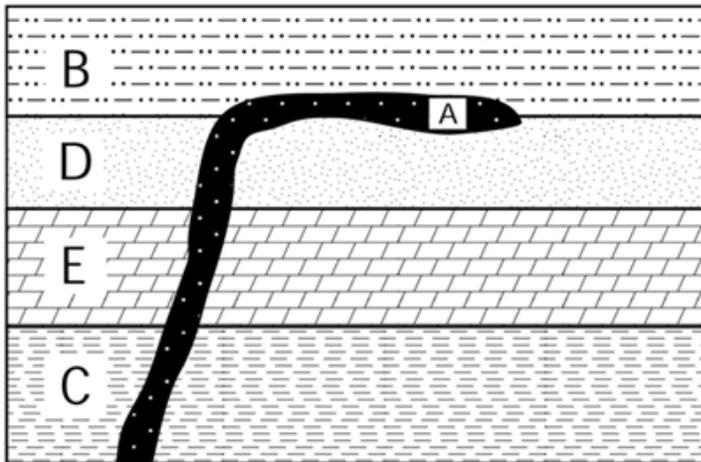
Identify the letter of the choice that best completes the statement or answers the question.



1. Consider rock layers C, A, F, and fault B in the diagram of the geologic column shown above. Which event occurred most recently?
 - a. Layer F was deposited on layer A
 - b. Fault B cut through layers F, A, and C
 - c. Fault C cut through layers A, C, and B
 - d. layer A formed through the process of sedimentation
 - e. Layer C formed through the process of intrusion.
2. Which choice represents the oldest and most recent (respectively) features in the geologic column shown above?
 - a. I and G
 - b. B and E
 - c. G and I
 - d. E and G
 - e. G and E
3. If we see a sedimentary bed (rock layer) that has a dike cutting through it as well as a fault that cuts through both the bed and the dike, we can use the principle of cross-cutting relationships to infer:
 - a. no age sequence can be inferred from this information
 - b. the dike formed first, then the bed, then the fault
 - c. the bed formed first, then the dike, then the fault
 - d. the fault formed first, then the bed, then the dike
 - e. the bed formed first, then the fault, then the dike
4. In stratigraphy, the principle of superposition states that:
 - a. all sedimentary beds start off being horizontal
 - b. a sedimentary bed is younger than the bed above it and older than the bed below it
 - c. a sedimentary bed must be older than any feature that cuts through it or disrupts it
 - d. all sedimentary beds are separated by bedding planes
 - e. a sedimentary bed is older than the bed above it and younger than the bed below it

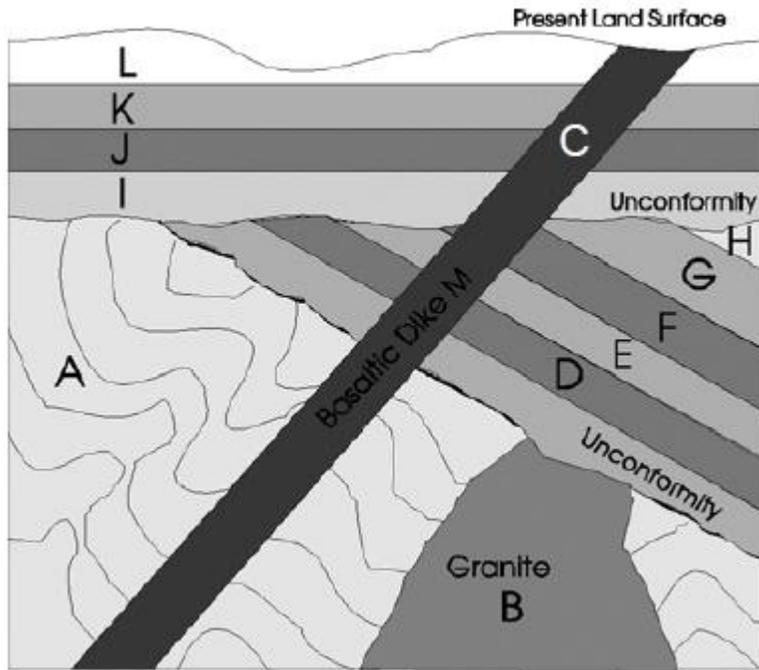


5. Which two stratigraphic principles are demonstrated in the geologic column shown above?
- original horizontality, and superposition
 - inclusion, and original horizontality
 - lateral continuity, and faunal succession
 - superposition, and cross-cutting relationships
 - cross-cutting relationships, and inclusion
6. What is the correct sequence of events, from earliest to most recent?
- C Formed through sedimentation, B cut across C, and A formed through the intrusion of magma.
 - C formed through sedimentation, A intruded upon C, B cut across both A and C.
 - All three rock layers formed at the same time.
 - layer A formed from inclusion, B cut across A, and C was formed by sedimentation.
 - B formed through sedimentation, followed by C, and A - also through sedimentation.



7. Which two stratigraphic principles can be used to determine the relative order of the formation of the rock layers shown in the geologic column above?
- cross-cutting relationships, and superposition
 - faunal succession and cross-cutting relationships
 - Superposition and original horizontality
 - original horizontality, and inclusion
 - inclusion, and cross-cutting relationships

8. Which of the following answer choices correctly describes the age (from youngest to oldest) of the strata in the previous diagram?
- B, E, C, A, D
 - B, A, D, B, O, Y
 - A, B, C, D, E
 - C, E, D, B, A
 - A, B, D, E, C



9. Study the cross section above. Which of the following is the *most likely* cause of the both unconformity between layers A, B, and D, and the unevenness of the present land surface?
- eruption
 - tilting
 - effects of heat and pressure
 - erosion
10. Study the cross-section above. Which of the following choices represent the *oldest* rock layer?
- A
 - B
 - C
 - D
 - E
11. Study the cross-section above. Which of the following choices represent the *most recent* rock layer?
- K
 - L
 - C
 - B
 - A

12. A rock body that contains fragments of another rock body must be older than the fragments of the rock it contains describes the principle of -
 - a. inclusion
 - b. superposition
 - c. cross-cutting relationships
 - d. fossil succession
 - e. original horizontality
13. If we see a layer of sedimentary rock that has a fault cutting through it as well as a dike that cuts through both the bed and the fault, we can use the principle of cross-cutting relationships to infer:
 - a. the sedimentary rock layer formed first, then the dike, then the fault
 - b. no age sequence can be inferred from this information
 - c. the sedimentary rock layer formed first, then the fault, then the dike
 - d. the fault formed first, then the dike, then the sedimentary rock layer
 - e. the fault formed first, then the sedimentary rock layer, then the dike
14. "A fault is always younger than the rock it cuts through" defines the:
 - a. Principle of Cross-Cutting Relationships
 - b. Principle of Lateral Continuity
 - c. Principle of Original Horizontality
 - d. Principle of Fossil Succession
 - e. Principle of inclusion
15. Relative dating is -
 - a. Determining the numerical age of a geological event
 - b. Using radioactive isotopes to date rock layers
 - c. Going to the movies with your cousin
 - d. Determining the order or sequence in which geologic events took place