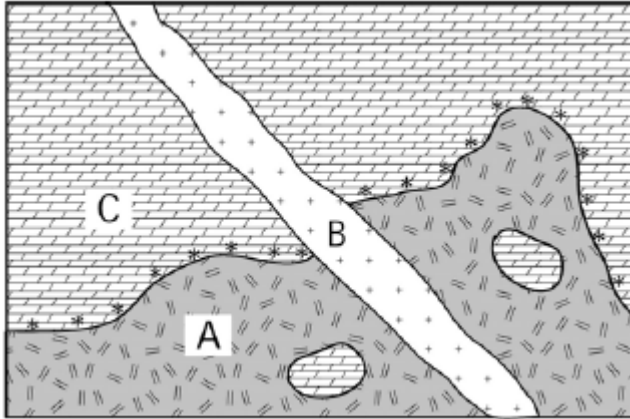


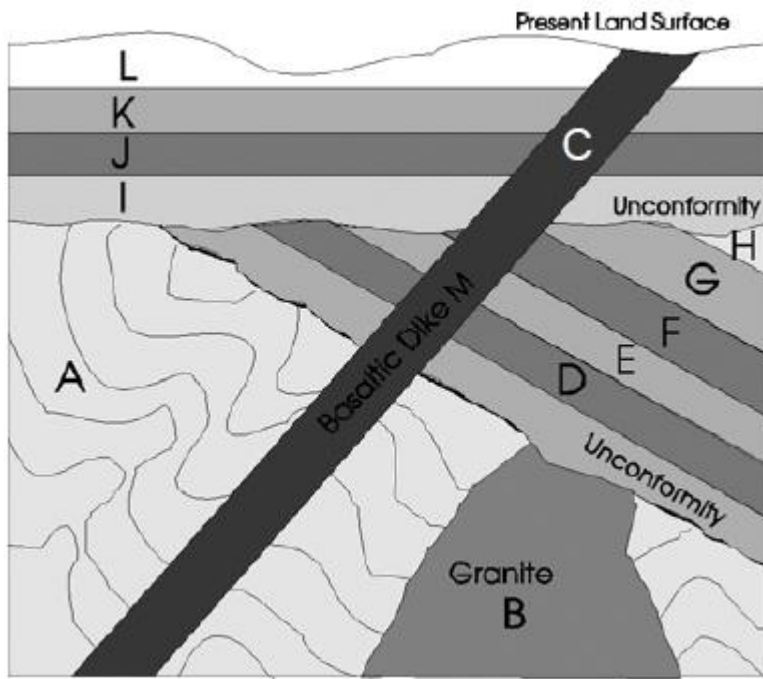
Relative Dating and Stratigraphic Principles Quiz

Multiple Choice

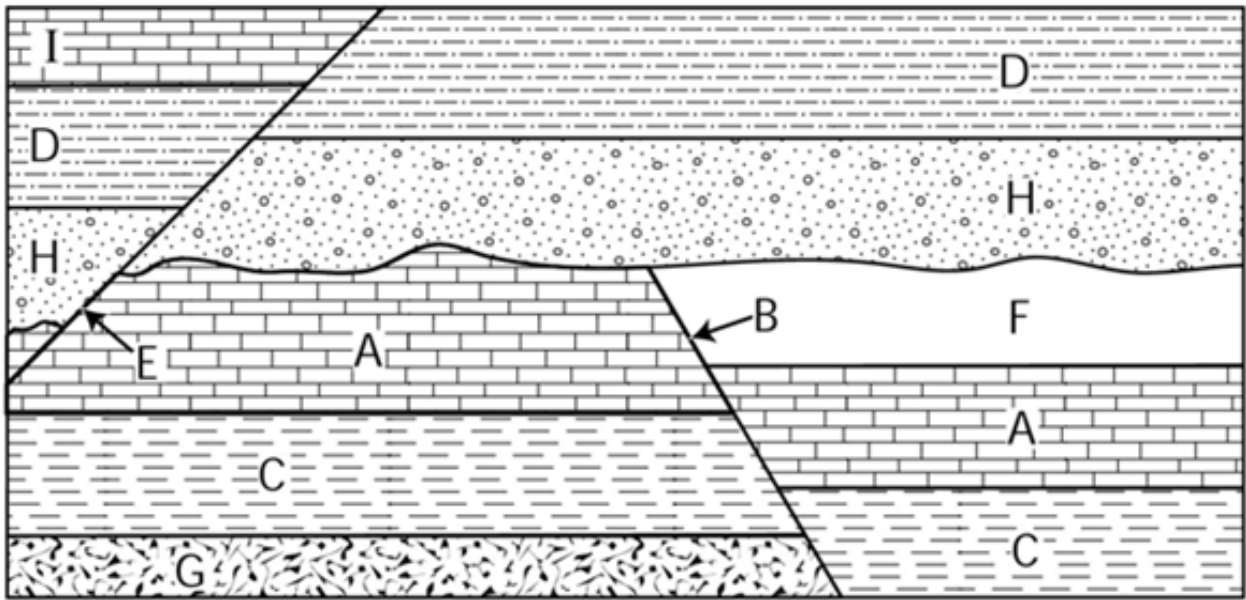
Identify the letter of the choice that best completes the statement or answers the question.



1. What is the correct sequence of events, from earliest to most recent?
 - a. layer A formed from inclusion, B cut across A, and C was formed by sedimentation.
 - b. C Formed through sedimentation, B cut across C, and A formed through the intrusion of magma.
 - c. B formed through sedimentation, followed by C, and A - also through sedimentation.
 - d. C formed through sedimentation, A intruded upon C, B cut across both A and C.
 - e. All three rock layers formed at the same time.
2. Which two stratigraphic principles are demonstrated in the geologic column shown above?
 - a. inclusion, and original horizontality
 - b. superposition, and cross-cutting relationships
 - c. original horizontality, and superposition
 - d. lateral continuity, and faunal succession
 - e. cross-cutting relationships, and inclusion
3. Relative dating is -
 - a. Going to the movies with your cousin
 - b. Using radioactive isotopes to date rock layers
 - c. Determining the numerical age of a geological event
 - d. Determining the order or sequence in which geologic events took place

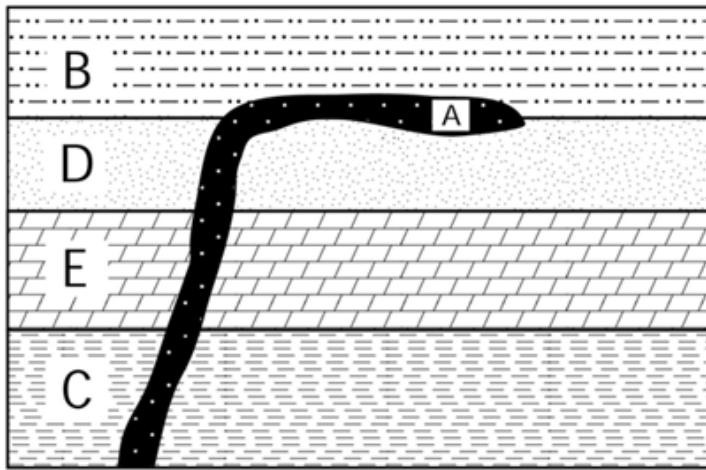


4. Study the cross-section above. Which of the following choices represent the *oldest* rock layer?
 - a. A
 - b. B
 - c. C
 - d. D
 - e. E
5. Study the cross section above. Which of the following is the *most likely* cause of the both unconformity between layers A, B, and D, and the unevenness of the present land surface?
 - a. tilting
 - b. eruption
 - c. effects of heat and pressure
 - d. erosion
6. Study the cross-section above. Which of the following choices represent the *most recent* rock layer?
 - a. B
 - b. L
 - c. A
 - d. K
 - e. C
7. 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. fossil succession
 - b. inclusion
 - c. cross-cutting relationships
 - d. original horizontality
 - e. superposition



8. 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. E and G
 - d. G and E
 - e. G and I
9. 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. Layer C formed through the process of intrusion.
 - d. Fault C cut through layers A, C, and B
 - e. layer A formed through the process of sedimentation
10. "A fault is always younger than the rock it cuts through" defines the:

a. Principle of Fossil Succession	d. Principle of Cross-Cutting Relationships
b. Principle of inclusion	e. Principle of Original Horizontality
c. Principle of Lateral Continuity	
11. 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. no age sequence can be inferred from this information
 - b. the sedimentary rock layer formed first, then the dike, then the fault
 - c. the fault formed first, then the sedimentary rock layer, then the dike
 - d. the fault formed first, then the dike, then the sedimentary rock layer
 - e. the sedimentary rock layer formed first, then the fault, then the dike



12. Which of the following answer choices correctly describes the age (from youngest to oldest) of the strata in the diagram above?
 - a. B, E, C, A, D
 - b. A, B, D, E, C
 - c. B, A, D, B, O, Y
 - d. C, E, D, B, A
 - e. A, B, C, D, E

13. 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?
 - a. Superposition and original horizontality
 - b. inclusion, and cross-cutting relationships
 - c. cross-cutting relationships, and superposition
 - d. faunal succession and cross-cutting relationships
 - e. original horizontality, and inclusion

14. In stratigraphy, the principle of superposition states that:
 - a. a sedimentary bed must be older than any feature that cuts through it or disrupts it
 - b. a sedimentary bed is older than the bed above it and younger than the bed below it
 - c. a sedimentary bed is younger than the bed above it and older than the bed below it
 - d. all sedimentary beds are separated by bedding planes
 - e. all sedimentary beds start off being horizontal

15. 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. the dike formed first, then the bed, then the fault
 - b. the bed formed first, then the fault, then the dike
 - c. the fault formed first, then the bed, then the dike
 - d. no age sequence can be inferred from this information
 - e. the bed formed first, then the dike, then the fault