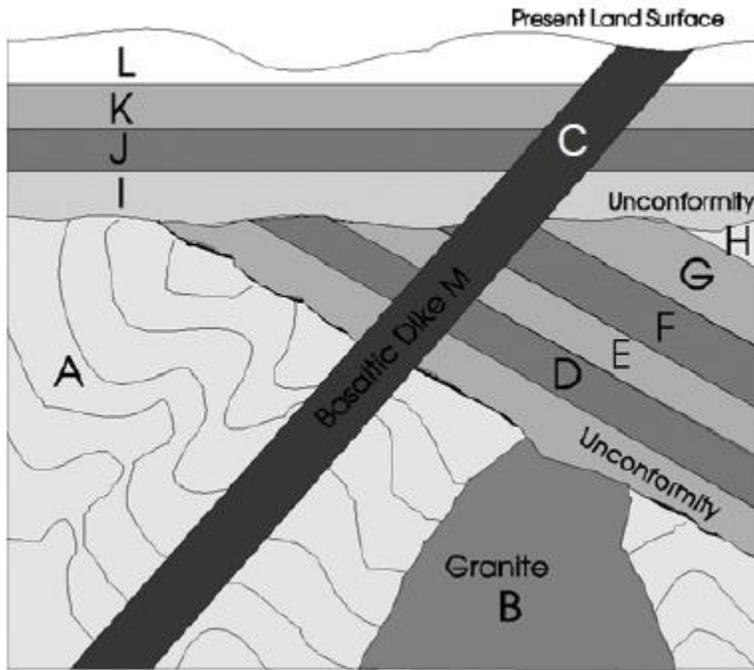


## Relative Dating and Stratigraphic Principles Quiz

TEST NO. E

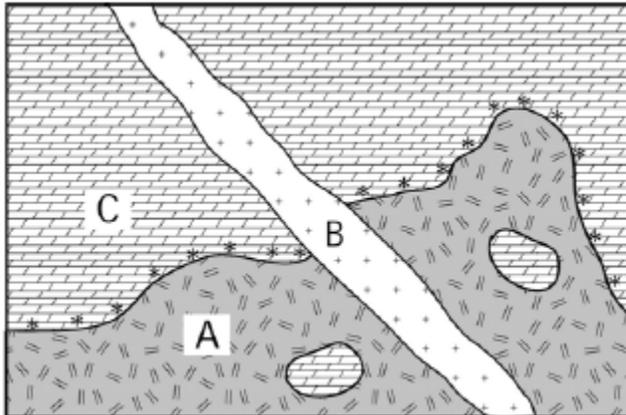
### Multiple Choice

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

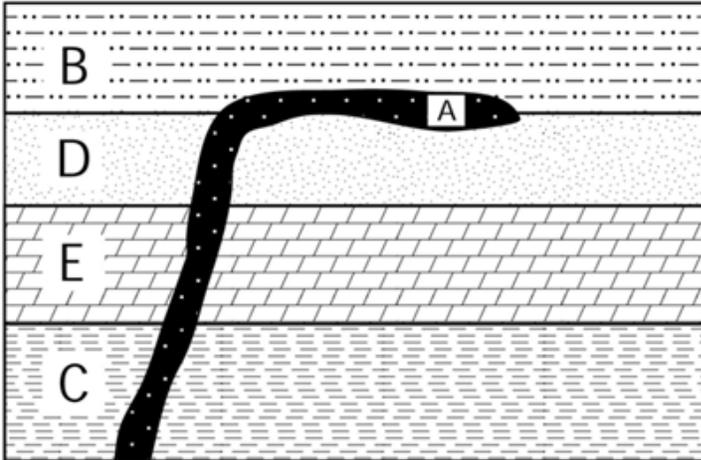


1. Study the cross-section above. Which of the following choices represent the *oldest* rock layer?
  - a. A
  - b. B
  - c. C
  - d. D
  - e. E
2. Study the cross-section above. Which of the following choices represent the *most recent* rock layer?
  - a. K
  - b. B
  - c. C
  - d. A
  - e. L
3. Study 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. erosion
  - c. eruption

d. effects of heat and pressure

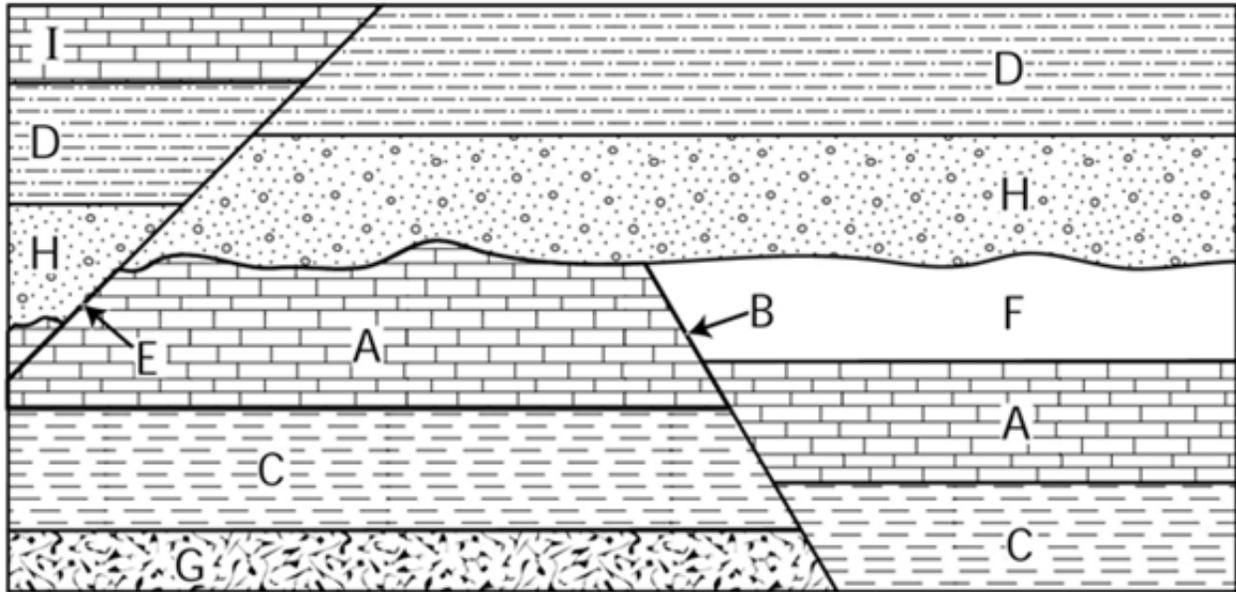


4. Which two stratigraphic principles are demonstrated in the geologic column shown above?
  - a. original horizontality, and superposition
  - b. superposition, and cross-cutting relationships
  - c. cross-cutting relationships, and inclusion
  - d. lateral continuity, and faunal succession
  - e. inclusion, and original horizontality
5. What is the correct sequence of events, from earliest to most recent?
  - a. B formed through sedimentation, followed by C, and A - also through sedimentation.
  - b. All three rock layers formed at the same time.
  - c. C Formed through sedimentation, B cut across C, and A formed through the intrusion of magma.
  - d. layer A formed from inclusion, B cut across A, and C was formed by sedimentation.
  - e. C formed through sedimentation, A intruded upon C, B cut across both A and C.
6. "A fault is always younger than the rock it cuts through" defines the:
  - a. Principle of Lateral Continuity
  - b. Principle of Cross-Cutting Relationships
  - c. Principle of inclusion
  - d. Principle of Original Horizontality
  - e. Principle of Fossil Succession
7. 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 fault, then the dike
  - b. the fault formed first, then the dike, then the sedimentary rock layer
  - c. the sedimentary rock layer formed first, then the dike, then the fault
  - d. no age sequence can be inferred from this information
  - e. the fault formed first, then the sedimentary rock layer, then the dike



8. 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. original horizontality, and inclusion
  - b. faunal succession and cross-cutting relationships
  - c. inclusion, and cross-cutting relationships
  - d. Superposition and original horizontality
  - e. cross-cutting relationships, and superposition
  
9. 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. C, E, D, B, A
  - c. B, A, D, B, O, Y
  - d. A, B, C, D, E
  - e. A, B, D, E, C
  
10. Relative dating is -
  - a. Determining the order or sequence in which geologic events took place
  - b. Going to the movies with your cousin
  - c. Using radioactive isotopes to date rock layers
  - d. Determining the numerical age of a geological event
  
11. 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. no age sequence can be inferred from this information
  - c. the fault formed first, then the bed, then the dike
  - d. the bed formed first, then the fault, then the dike
  - e. the bed formed first, then the dike, then the fault
  
12. In stratigraphy, the principle of superposition states that:
  - a. a sedimentary bed is older than the bed above it and younger than the bed below it

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



13. Which choice represents the oldest and most recent (respectively) features in the geologic column shown above?
  - a. B and E
  - b. I and G
  - c. G and I
  - d. E and G
  - e. G and E
14. 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 A formed through the process of sedimentation
  - b. Layer F was deposited on layer A
  - c. Fault C cut through layers A, C, and B
  - d. Layer C formed through the process of intrusion.
  - e. Fault B cut through layers F, A, and C
15. 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. superposition
  - b. inclusion
  - c. original horizontality
  - d. cross-cutting relationships
  - e. fossil succession