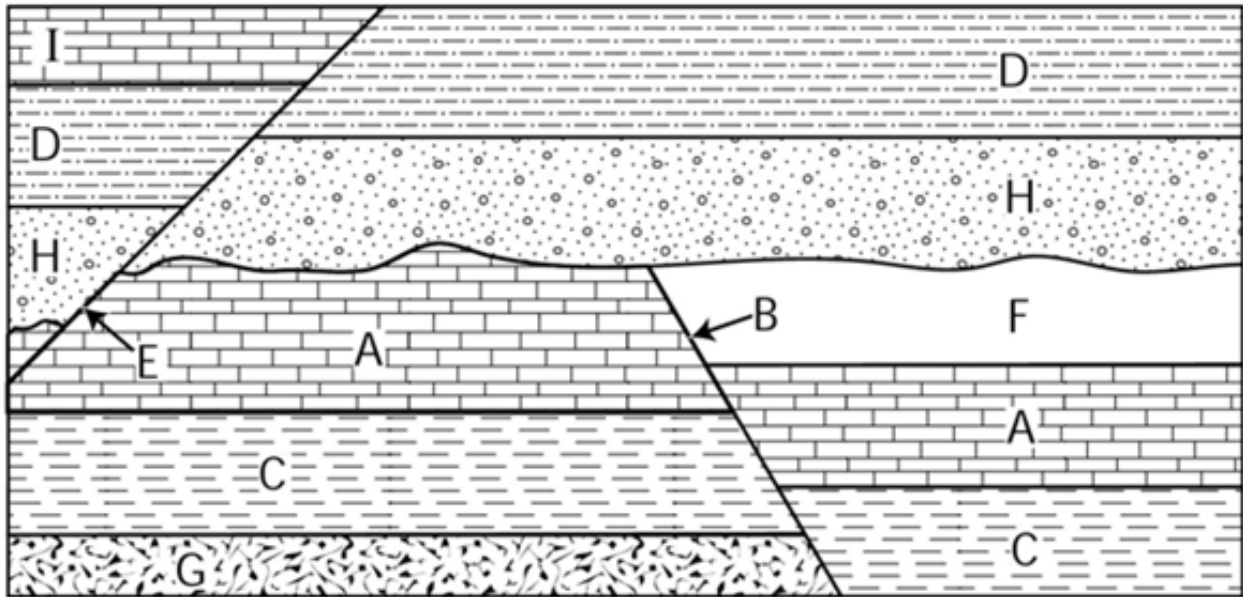


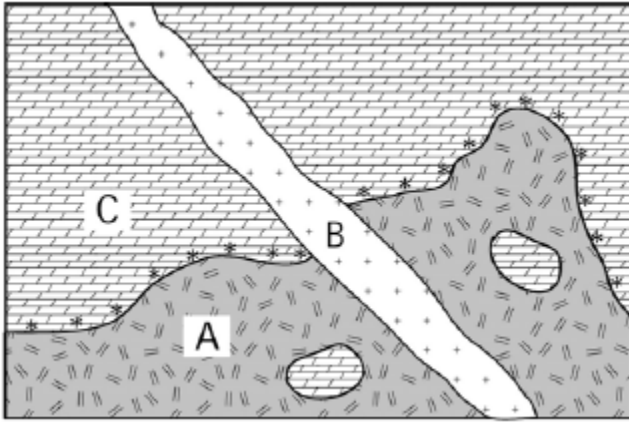
Multiple Choice

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

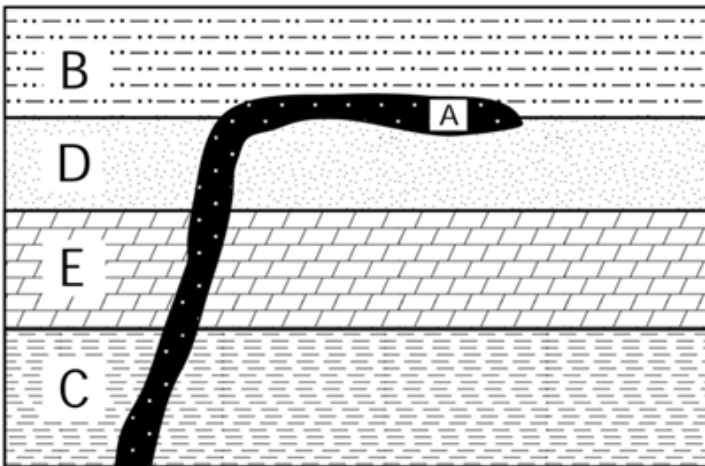


1. Consider rock layers C, A, F, and fault B in the diagram of the geologic column shown above. Which event occurred most recently?
 - a. Layer F was deposited on layer A
 - b. Fault B cut through layers F, A, and C
 - c. Fault C cut through layers A, C, and B
 - d. layer A formed through the process of sedimentation
2. Which choice represents the oldest and most recent (respectively) features in the geologic column shown above?
 - a. E and G
 - b. G and E
 - c. B and E
 - d. G and I
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
4. 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. all sedimentary beds are separated by bedding planes
- d. all sedimentary beds start off being horizontal

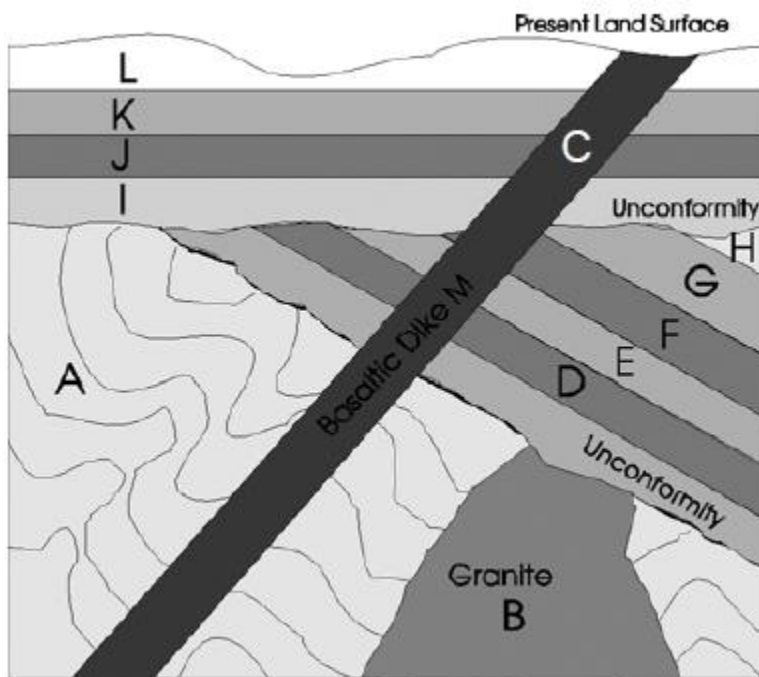


5. Which two stratigraphic principles are demonstrated in the geologic column shown above?
 - a. original horizontality, and superposition
 - b. inclusion, and original horizontality
 - c. lateral continuity, and faunal succession
 - d. superposition, and cross-cutting relationships
6. What is the correct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

- a. cross-cutting relationships, and superposition
 - b. faunal succession and cross-cutting relationships
 - c. Superposition and original horizontality
 - d. original horizontality, and inclusion
8. Which of the following answer choices correctly describes the age (from youngest to oldest) of the strata in the diagram above?
- a. C, E, D, B, A
 - b. B, E, C, A, D
 - c. B, A, D, B, O, Y
 - d. 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?
- a. eruption
 - b. tilting
 - c. effects of heat and pressure
 - d. erosion
10. 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

11. Study the cross-section above. Which of the following choices represent the *most recent* rock layer?
 - a. K
 - b. L
 - c. C
 - d. B
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
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
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
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