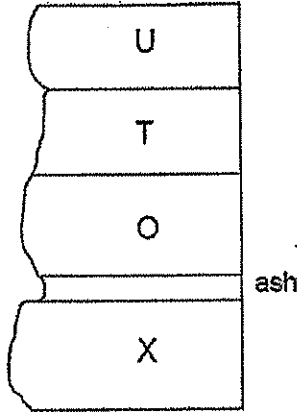
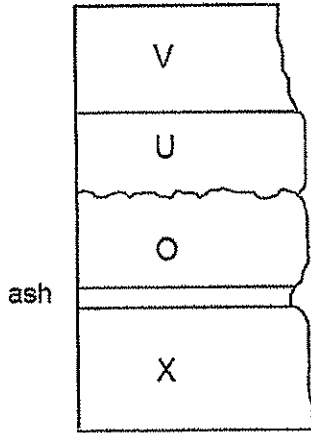


Name \_\_\_\_\_ Period \_\_\_\_\_

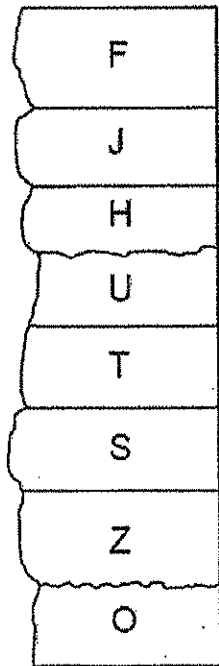
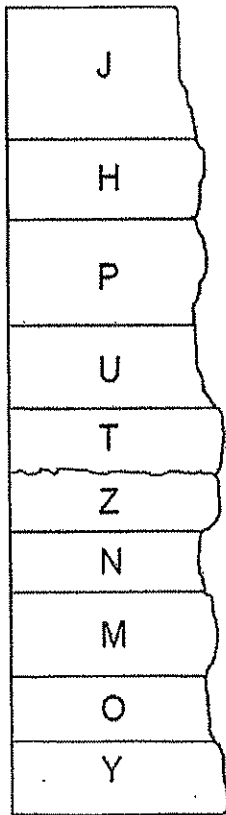
### ROCK CORRELATION PRACTICE



Youngest \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Oldest \_\_\_\_\_



Youngest \_\_\_\_\_

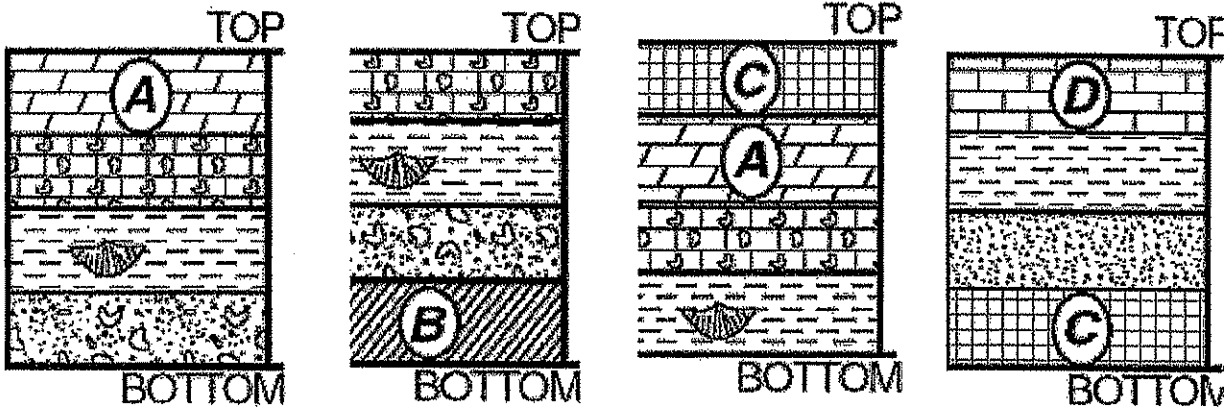
\_\_\_\_\_  
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Oldest \_\_\_\_\_

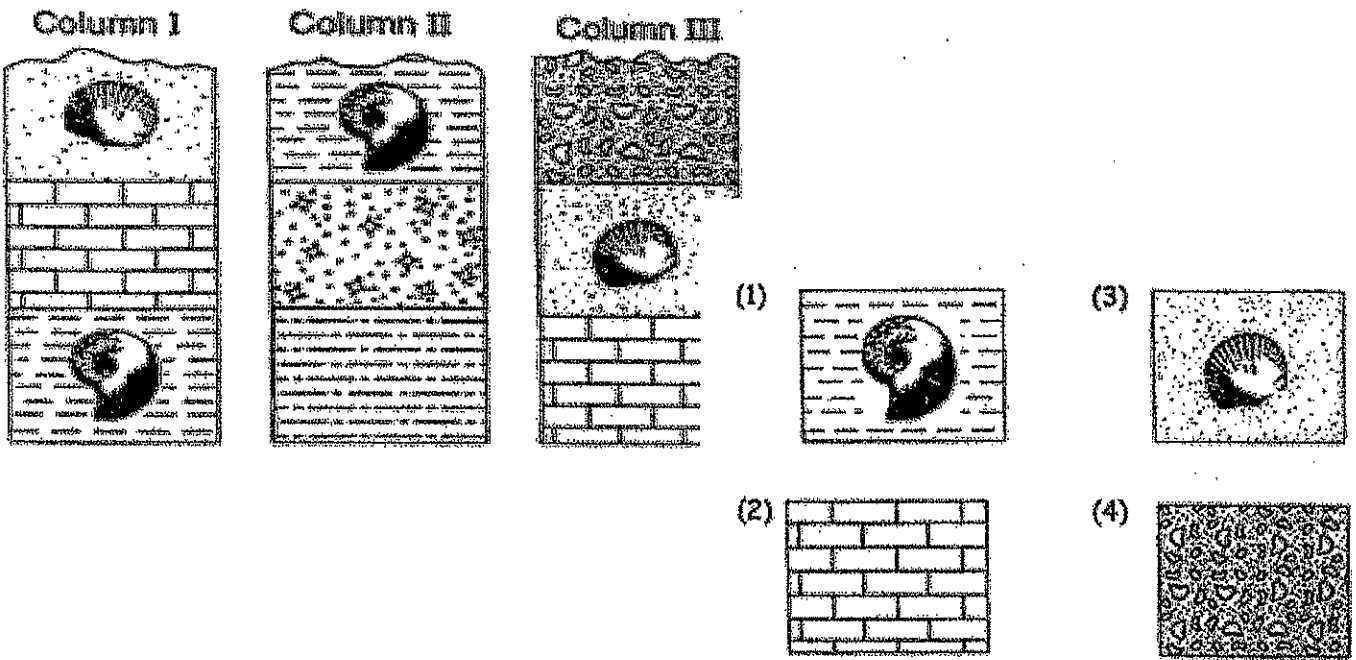




1. Use the index fossils and matching rock layers to determine the oldest layer in all four columns.

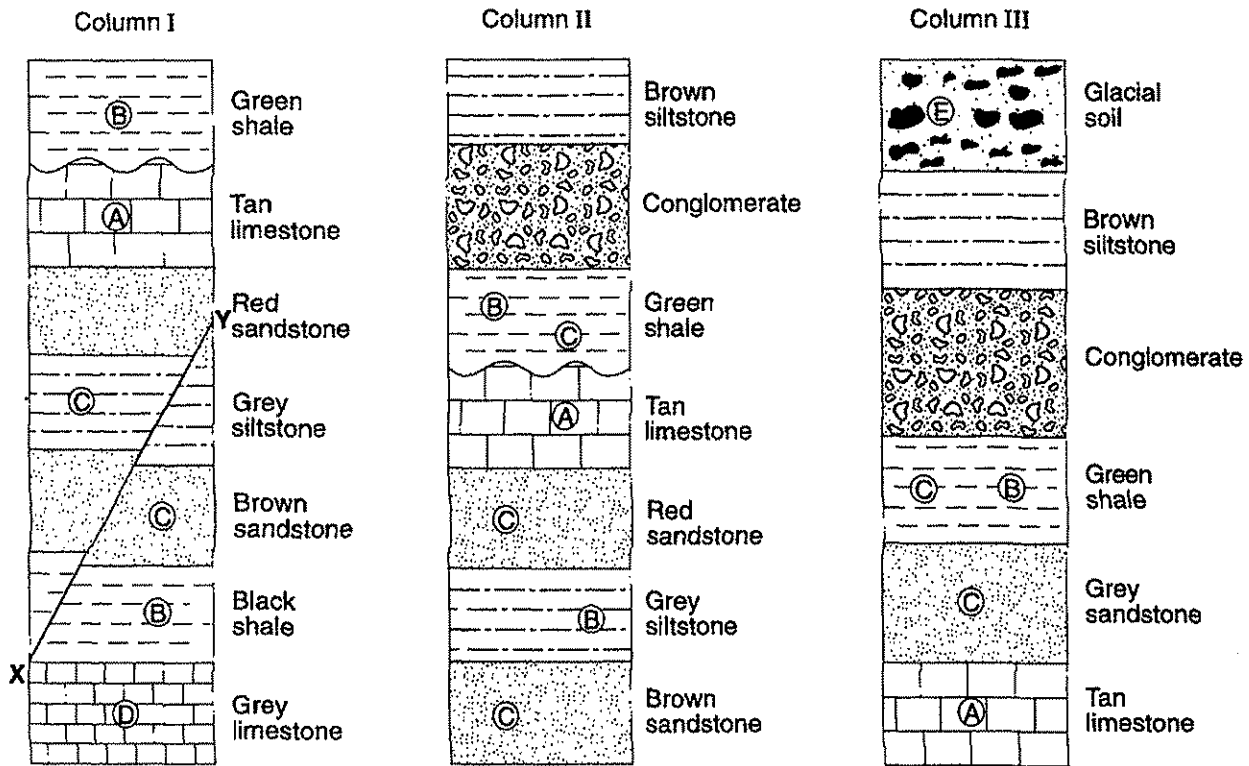


2. Rock layers in outcrops located several miles apart. Two different index fossils are shown. What is the youngest layer?



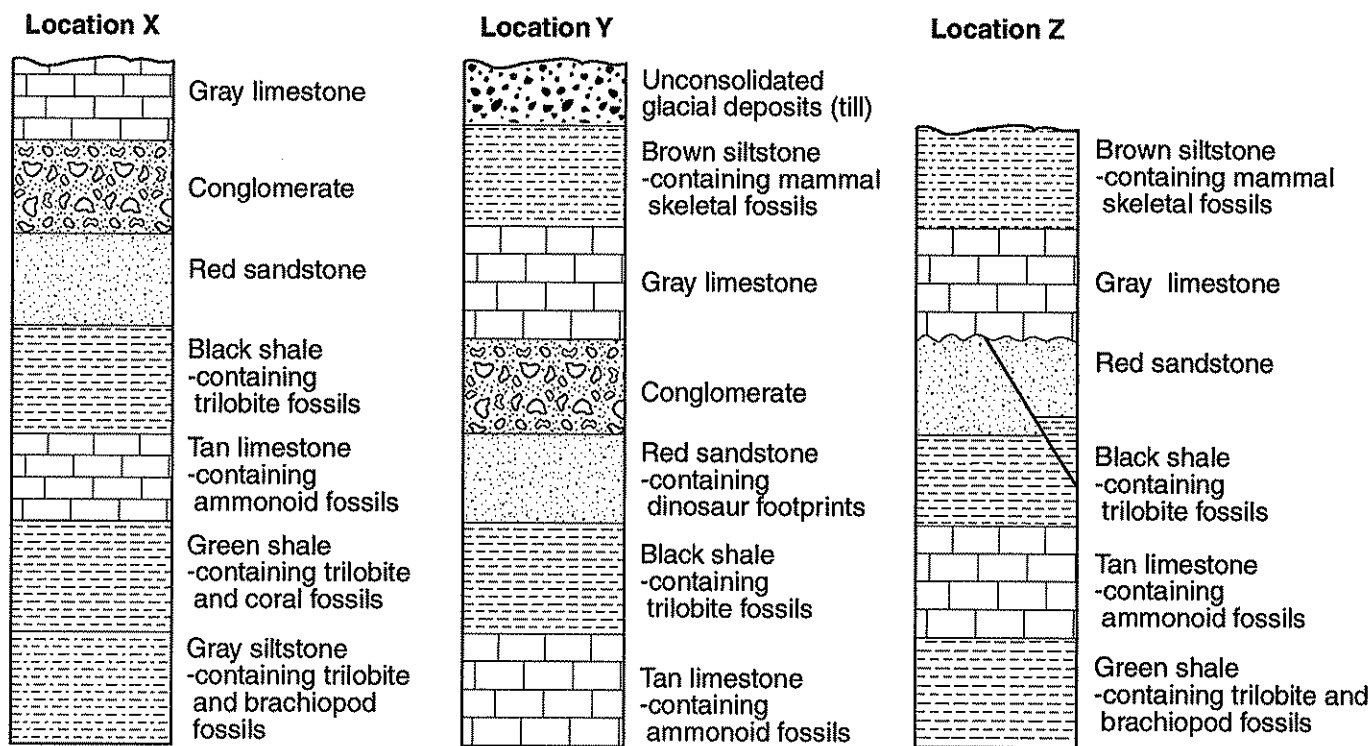
Base your answers to questions 1 through 5 on the diagram below which shows three geologic columns representing widely separated rock outcrops. Letters *A* through *E* represent fossils found in the outcrops. Line *XY* represents a fault in column I. The layers have not been overturned.

Rock Outcrops



- What is the oldest layer shown?
  - glacial soil
  - brown sandstone
  - tan limestone
  - grey limestone
- When did fault *XY*, located in column I, most likely occur?
  - before the formation of the grey limestone
  - during the formation of the grey siltstone
  - during the formation of the black shale
  - after the formation of the red sandstone
- Which rock would most likely be produced by the metamorphism of the grey limestone?
  - quartzite
  - slate
  - marble
  - gneiss
- The wavy line located between the green shale and the tan limestone layers in columns I and II most likely represents
  - contact metamorphism
  - a volcanic ash layer
  - a buried erosional surface
  - an igneous intrusion
- Fossil *A*, in the tan limestone layer, is a fossil of the first known coral. This tan limestone layer was most likely deposited during which geologic time interval?
  - Precambrian
  - Paleozoic
  - Mesozoic
  - Cenozoic

Base your answers to questions 6 through 9 on the cross sections below, which show widely separated outcrops at locations X, Y, and Z.



6. Which rock layer is oldest?
  - (1) gray siltstone
  - (2) green shale
  - (3) tan limestone
  - (4) brown siltstone
7. At location Y, the boundary between the red sandstone and the black shale marks the
  - (1) beginning of the Cenozoic Era
  - (2) beginning of the Mesozoic Era
  - (3) end of the Cenozoic Era
  - (4) end of the Mesozoic Era
8. An unconformity can be observed at location Z. Which rock layer was most probably removed by erosion during the time represented by the unconformity?
  - (1) conglomerate
  - (2) gray siltstone
  - (3) black shale
  - (4) brown siltstone
9. The fossils in the rock formations at location X indicate that this area was often covered by
  - (1) tropical rain forests
  - (2) glacial ice
  - (3) desert sand
  - (4) seawater