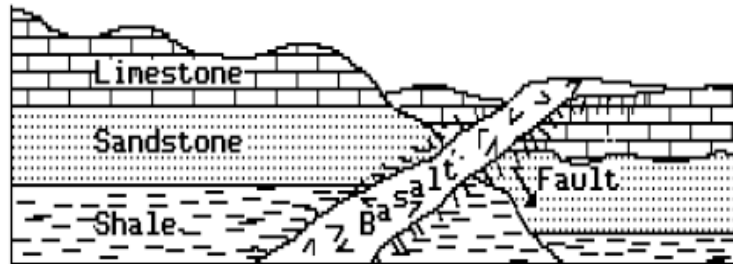


Name: _____

Date: _____ Period: _____

Worksheet: Relative Dating I

Use the diagram below to answer question 1 and 2. The rock layers represent a cross section of the Earth's crust showing rock units and a fault. The rock layers are not overturned.

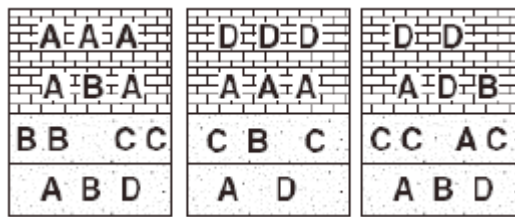


- Which rock unit is the youngest?
 - shale
 - sandstone
 - limestone
 - basalt
- Which rock unit is the oldest?
 - shale
 - sandstone
 - limestone
 - basalt
- Which feature in a rock layer is older than the rock layer?
 - mineral veins
 - igneous intrusions
 - rock fragments
 - faults
- Unless a series of sedimentary rock layers has been overturned, the bottom rock layer usually
 - is the oldest
 - contains the greatest variety of minerals
 - contains fossils
 - has the finest texture
- Why are ancient volcanic ash deposits important to geologists?
 - They form resistant rock layers containing fossils.
 - They are easily dated using carbon-14.
 - They serve as good geological time makers.
 - They indicate major areas where earthquakes occurred.
- What characteristics of fossils are most useful in correlating sedimentary rock layers?
 - limited geographic distribution and limited to a particular rock formation
 - wide geographic distribution but limited to a particular rock formation
 - wide geographic distribution and found in many rock formations
 - limited geographic distribution but limited to a particular rock formation

Worksheet: Relative Dating I

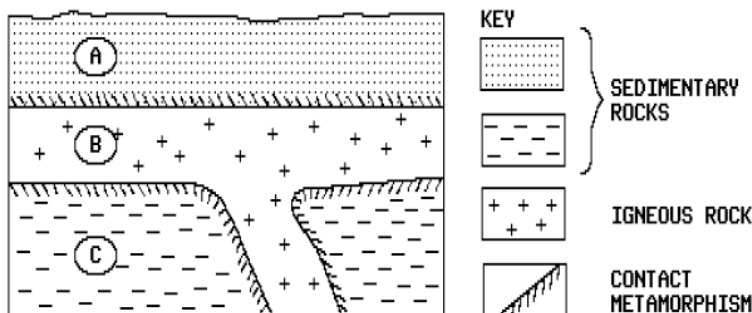
7. Index fossils have usually formed from organisms which had a
- narrow geographic distribution and existed for a long time
 - wide geographic distribution and existed for a long time
 - wide geographic distribution and existed for only a short time
 - narrow geographic distribution and existed for only a short time
8. Living corals are found in warm shallow seas. Coral fossils have been found in the sedimentary rocks of Alaska. These findings suggest that
- ocean currents carried the coral to Alaska
 - coral usually develops in cold climates
 - Alaska's cold climate fossilized the coral
 - Alaska once had a tropical marine environment

The three cross sections of sedimentary bedrock shown below represent widely separated surface exposures of layers that contain fossils. Letters A, B, C, and D represent four different marine fossils found in these rock layers.



9. Which letter best represents an index fossil?
- A
 - B
 - C
 - D

The diagram below represents layers of rock.



10. Rock layer A is inferred to be older than intrusion B because
- layer B is located between layer A and layer C
 - parts of layer A were altered by intrusion B
 - parts of layer C were altered by intrusion B
 - layer A is composed of sedimentary rocks