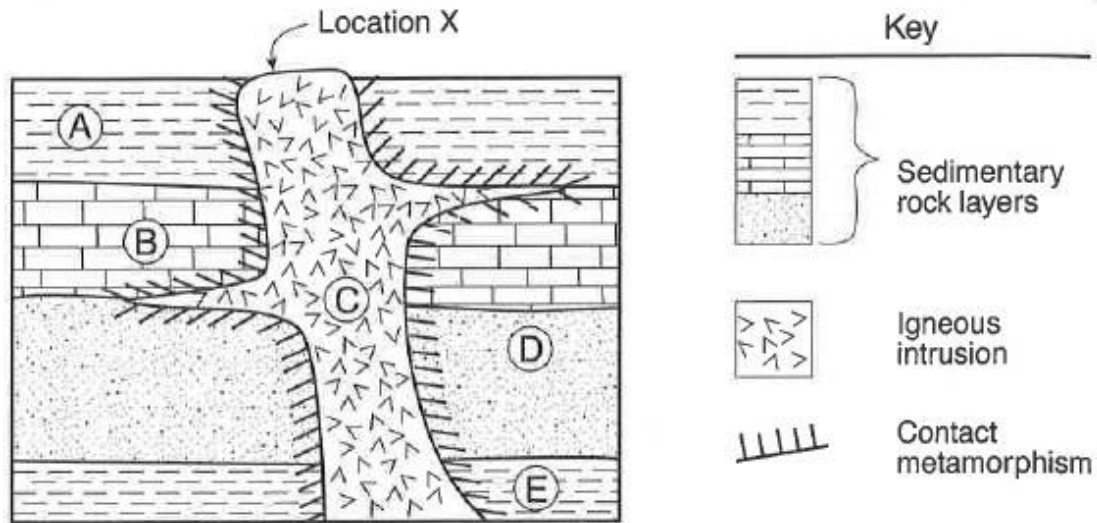


Part 8: Geologic History

Sequence of Events

The cross section below shows an outcrop in which the layers have not been overturned. Rock units are labeled A through E.



1. Geologists use a number of principles to help them determine the relative age of bedrock. Match each of these principles with their definition.

- | | |
|----------------------------|--|
| ___ Uniformitarianism | a. A disruption that cuts through a rock or another geologic feature must be younger than that rock or geologic feature. |
| ___ Original horizontality | b. In undisturbed rock layers, the oldest layer is on the bottom and each overlying layer is younger. |
| ___ Superposition | c. The geologic processes that took place in the past are similar to those that take place now. |
| ___ Cross-cutting | d. Sediments are deposited in parallel, horizontal layers. |

2. Using letters A through E, list the rock units in order from oldest to youngest.

_____ Oldest _____ Youngest

3. Which layer would you expect to find the youngest fossils? Explain your answer. _____
4. State the name of the sediment that was compacted to form rock unit A. _____
5. State the name of the metamorphic rock that will form in the zone of contact metamorphism between sedimentary rock layer B and igneous intrusion C. _____
6. State the name of the metamorphic rock that will form in the zone of contact metamorphism between sedimentary rock layer D and igneous intrusion C. _____