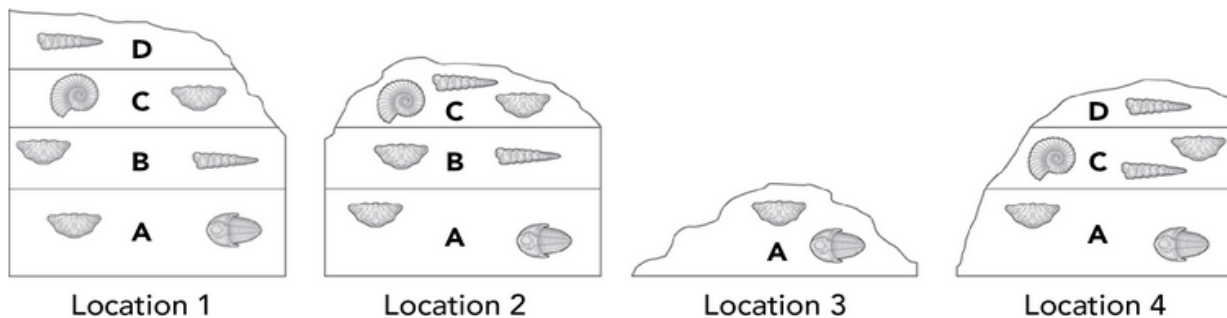


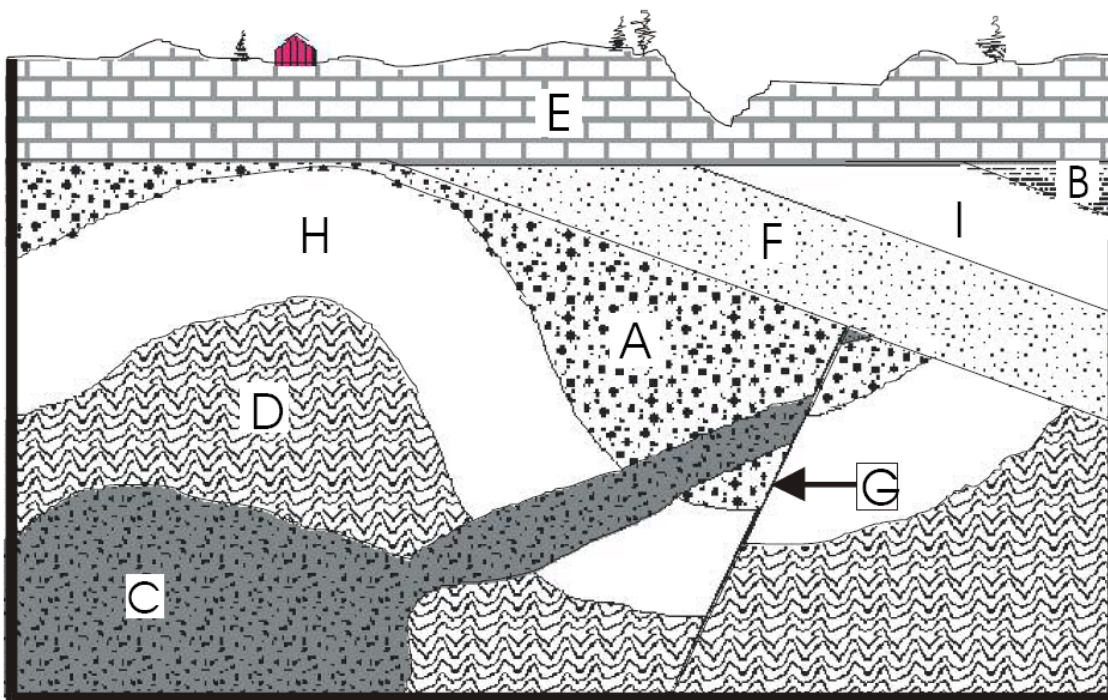
Topic 5 History of the Earth Test Study Guide – Key

- Define the following words
 - relative age** of a rock is its age compared to the ages of other rocks.
 - absolute age** of a rock is the number of years that have passed since the rock formed.
 - law of superposition** to determine the relative ages of sedimentary rock layers. According to the law of superposition, in undisturbed horizontal sedimentary rock layers, the oldest layer is at the bottom and the youngest layer is at the top.
 - Principal/Law of Original Horizontality** : Sedimentary rock layers are deposited horizontally, unless disturbed.
 - Principal/Law of Crosscutting relationships**: The layer that cuts through other layers is younger than the layers it cuts through.
 - Unconformity**: a gap in the geologic records that shows where rock layers have been eroded away or lost due to erosion.
 - Radioactive Dating**: the process of determining the age of an object using the half-life of one or more radioactive isotopes.
 - Geologic Time Scale**: the record of geologic events and life forms in Earth's History
 - Era**: One of three long units of geologic time between the Precambrian and the present
 - Period**: geologists use this period of time to divide the eras
 - Fossil**: the preserved remains or traces of an organism that lived in the past
- After looking at the diagrams below, Sara noticed that the rock layers at Location 4 differed from those of the other three locations. What likely occurred at Location 4?



- Layer B isn't shown due to the absence of index fossils.
 - Location 4 held index fossils similar to the other locations.
 - Location 4 had heavy erosion, and soon a layer of rock will be deposited on top of it.
 - Layer B eroded away, and layers C and D were deposited on top of layer A at a later time.**
- What is the purpose of the geologic time scale? **C**
 - What does "relative age" tell about a rock layers or fossils?
The age of one rock layer or fossil compared to another. (Ex: one is older or younger than another)
 - What does "absolute age" tell about a rock layer or fossil?
The "exact" age of a fossil determined by radiometric dating or the half life of radioactive elements.
 - Name the characteristics of index fossils
 - Easily recognizable**
 - Abundant**
 - Wide geographic distribution**
 - Live a short time**
 - Relative Dating
 - Cenozoic Era
 - Precambrian time
 - Mesozoic Era
 - Complete the relative dating hadout

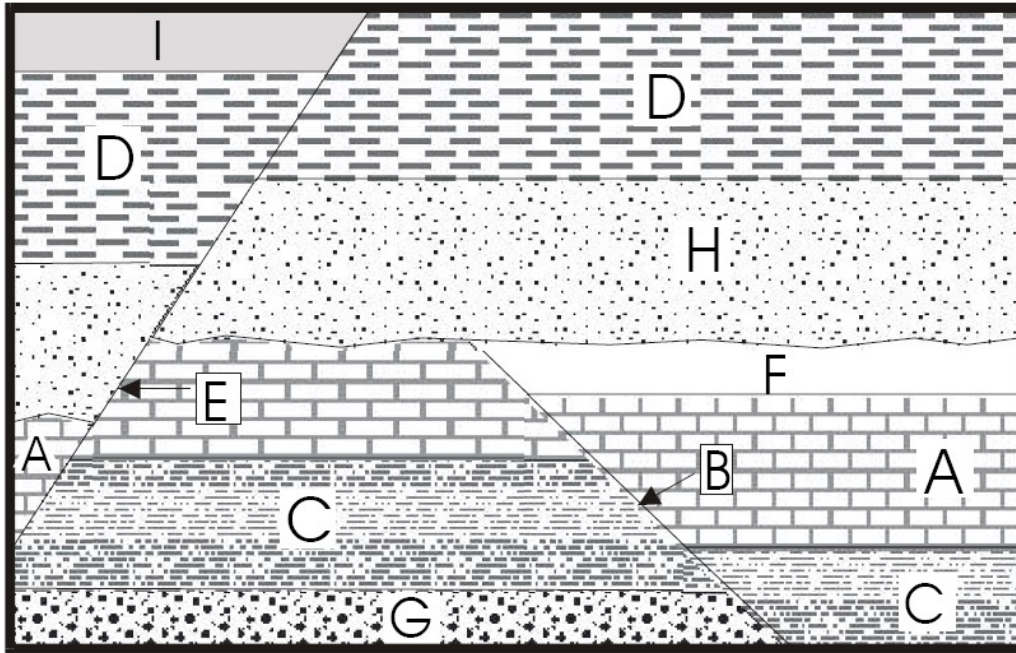
Figure 5:



Youngest to Oldest- E,B,I,F, G,C,A,H,D

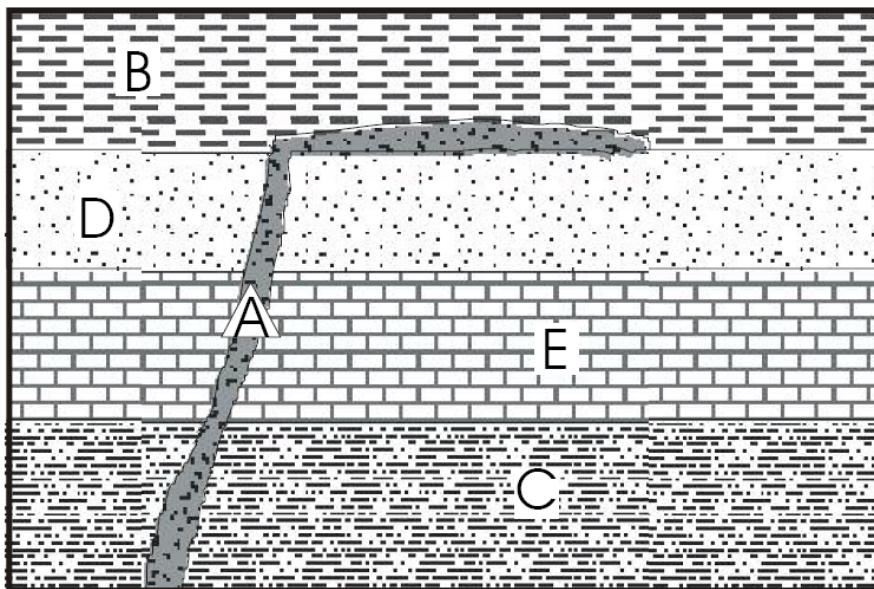
The folding event occurred between the deposition of which two rock layers? **F & G**

Figure 4:



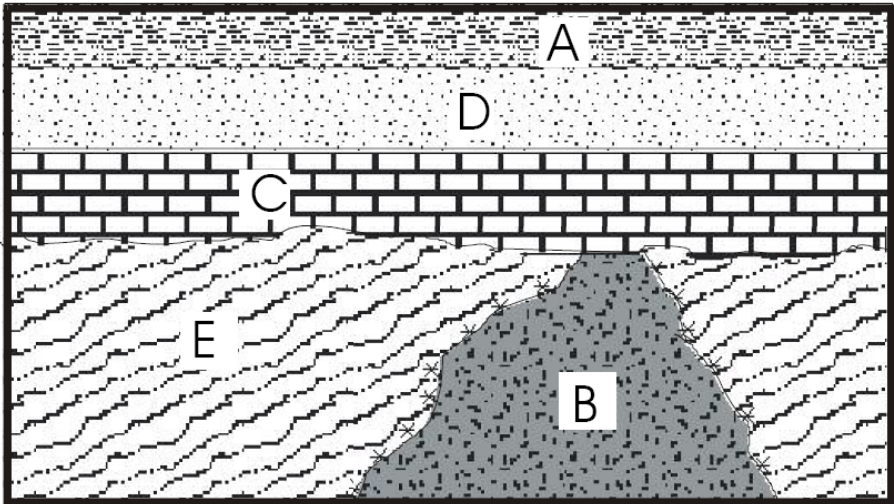
YOUNGEST TO OLDEST- E,I, D, H, B, F, A, C, G

Figure 1:



YOUNGEST TO OLDEST- A,B,D,E,C

Figure 2:



YOUNGEST TO OLDEST: A , D, C, B, E