

Timelines- Fossils Review Sheet (Mid Sum 3)

1. Name the 4 Eras in Earth History in order from the beginning of time until today
2. Why don't Geologists measure geological time in units such as days or months?
3. The geologist that came up with the principle that says that the Present is the key to the Past was
4. The geologist that was the first to give a name to remnants of prehistoric living things that are preserved in rocks was
5. The geologist that used index fossils to come up with the relative age of rocks was
6. What are Index Fossils used to determine about the history of the Earth?
7. What are the 2 criteria for a fossil to be an Index Fossil?
8. Which Era did the dinosaurs live in- middle life?
9. What is an unconformity and **WHY** do they occur?
10. What era do mammals thrive in?
11. During the Paleozoic era what happened to many of the organisms that developed?
12. What organism was believed to be the 1st to evolve on Earth
13. The statement that says that older rocks are on the bottom is

14. Why are the rock layers like the pages of a book?

15. Explain 1 theory on why the dinosaurs became extinct

Geologists have identified fossils in three different rock layers on the Colorado Plateau.

Layer A contains fossil trilobites.

Layer B contains a fossilized skull from a small horselike animal.

Layer C contains fossilized dinosaur bones.

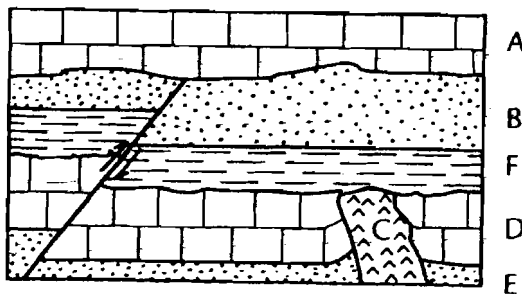
Put the layers in order from oldest to youngest.

(oldest) _____ (youngest)

Explain how you decided on the order in item 2.

Number the rock layers according to their relative ages. Label the oldest rock type #1.

- A. _____
- B. _____
- C. _____
- D. _____
- E. _____
- F. _____



GEOLOGICAL TIME SCALE

Era	Period	Years before present (m)
Cenozoic	Quaternary	1.5 -
	Tertiary	66 -
Mesozoic	Cretaceous	144 -
	Jurassic	208 -
	Triassic	245 -
	Permian	286 -
Paleozoic	Pennsylvanian	320 -
	Mississippian	360 -
	Devonian	408 -
	Silurian	438 -
	Ordovician	505 -
	Cambrian	570 -
	Precambrian	4500 -

Information from new canyon found in Canada:

Rock name	Age (mya)
Alberta Sandstone	320 to 300
Marden Creek Shale	360 to 320
Columbia Limestone	400 to 360
Superior Limestone	530 to 505



During which geological periods were the rocks in the Canadian canyon formed?

Alberta Sandstone _____

Columbia Limestone _____

Marden Creek Shale _____

Superior Limestone _____

Use the line below to construct a time line showing the rock layers. Before you begin, think about the scale you should use (the line is 25 units long). - 50 by 10's

550
mya

300
mya



What do you think happened between the formation of Superior Limestone and the Columbia Limestone?

Directions:

Circle the Index fossils in the Canyons. Cut out the Little Basin State Park and Barney Hills State Park. Line up the Index Fossil that is indicated. Paste the pictures on another piece of paper- think- how did we line them out in your lab folder? Once you have them lined up: color the oldest rock layer red and the youngest rock layer blue.

