

Name: \_\_\_\_\_

1.

Approximately how many years ago did the solar system originate?

- |                  |                   |
|------------------|-------------------|
| 1. 570,000,000   | 3. 4,600,000,000  |
| 2. 1,000,000,000 | 4. 10,000,000,000 |
- 

2.

A layer of shale is located below Devonian limestone and above Cambrian sandstone. Overturning has not occurred. During which period was the shale most likely deposited?

- |                  |             |
|------------------|-------------|
| 1. Silurian      | 3. Triassic |
| 2. Carboniferous | 4. Tertiary |
- 

3.

Near the end of which era did the dinosaurs become extinct?

- |                |             |
|----------------|-------------|
| 1. Precambrian | 3. Mesozoic |
| 2. Paleozoic   | 4. Cenozoic |
- 

4.

Which era covers the shortest length of geologic time?

- |             |                |
|-------------|----------------|
| 1. Cenozoic | 3. Paleozoic   |
| 2. Mesozoic | 4. Precambrian |
- 

5.

During which geologic time interval did the mammoth live?

- |                |             |
|----------------|-------------|
| 1. Precambrian | 3. Mesozoic |
| 2. Paleozoic   | 4. Cenozoic |
- 

6.

Why are fossils rarely found in Precambrian rock layers?

1. Few Precambrian rock layers have been discovered.
  2. Nearly all fossils from this era have been destroyed by glaciers.
  3. Few rock layers were formed during the Precambrian Era
  4. Life that would produce fossils was not abundant during the Precambrian Era.
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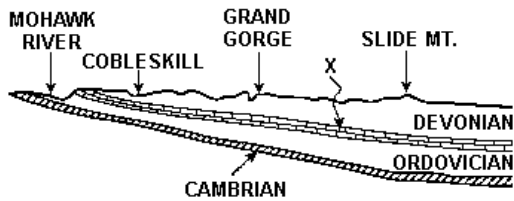
7.

Which inference can be made about the fossil record?

1. Very few life forms have become extinct.
  2. Fossils were extremely rare for most of the geologic past.
  3. A great variety of plants and animals existed during the Precambrian Era
  4. Primitive humans have existed through most of the geologic past.
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8.

The diagram shows a geologic cross section of a portion of a New York State landscape region.



What is the probable geologic age of sedimentary rock unit X?

1. Cambrian
2. Precambrian
3. Permian
4. Silurian

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9.

The data table shows the fossils found in three layers of sedimentary rock.

Rock Layer	Fossil
A	trilobites
B	mastodont tusk
C	dinosaur bones

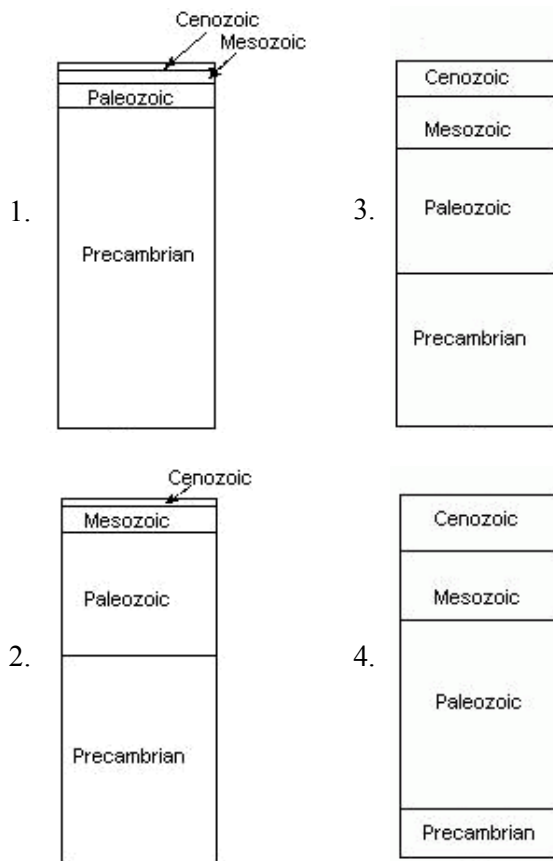
The relative age of the rock layers from oldest to youngest is

1.  $A \rightarrow B \rightarrow C$
2.  $A \rightarrow C \rightarrow B$
3.  $B \rightarrow A \rightarrow C$
4.  $C \rightarrow A \rightarrow B$

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10.

Which column best represents the relative duration of the major intervals of geologic history?



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11.

Which life-form appeared first?

1. trilobite
2. human
3. coelophysis
4. mastodont

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12.

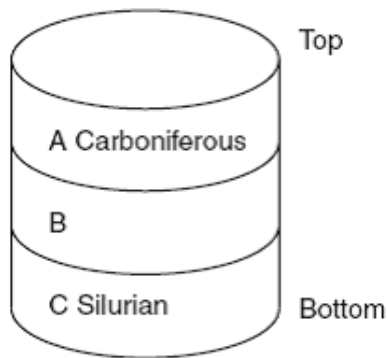
Trilobite fossils were recently discovered in Himalayan Mountain bedrock. During which geologic period could these organisms have lived?

- |               |             |
|---------------|-------------|
| 1. Tertiary   | 3. Triassic |
| 2. Cretaceous | 4. Cambrian |

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13.

The geologic drill core below shows bedrock layers *A*, *B*, and *C* that have not been overturned. The geological ages of layers *A* and *C* are shown.



What is the geologic age of layer *B*?

- |               |             |
|---------------|-------------|
| 1. Cambrian   | 3. Devonian |
| 2. Ordovician | 4. Permian  |

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14.

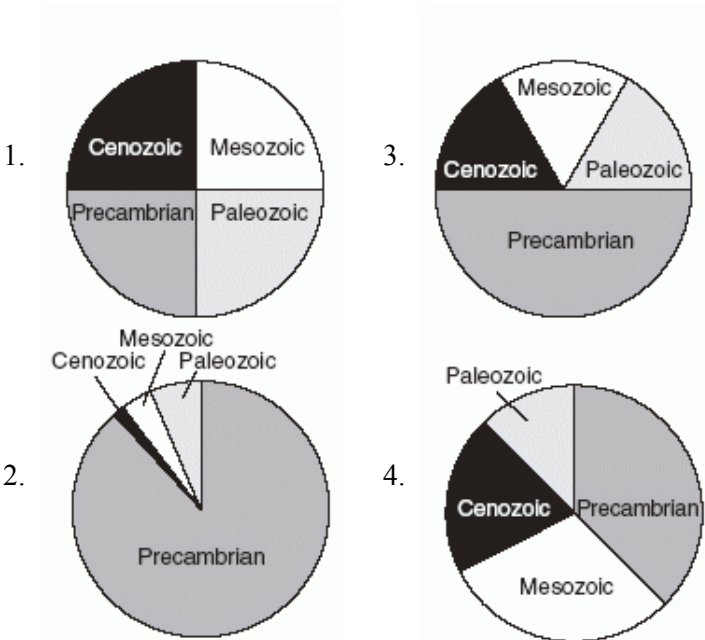
A very large, circular, impact crater under the coast of Mexico is believed to be approximately 65 million years old. This impact event is inferred to be related to the

1. appearance of the earliest trilobites
2. advance and retreat of the last continental ice sheet
3. extinction of the dinosaurs
4. formation of Pangea

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15.

Which graph shows the relative duration of geologic time for the Precambrian, Paleozoic, Mesozoic, and Cenozoic time intervals?



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16.

Which sequence shows the correct order of Earth's geologic time intervals from oldest to youngest?

1. Archean → Mesozoic → Cenozoic → Paleozoic → Proterozoic
2. Archean → Proterozoic → Paleozoic → Mesozoic → Cenozoic
3. Cenozoic → Mesozoic → Paleozoic → Proterozoic → Archean
4. Cenozoic → Paleozoic → Archean → Mesozoic → Proterozoic

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17.

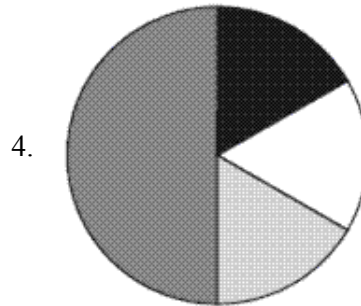
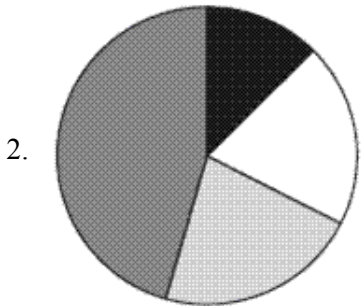
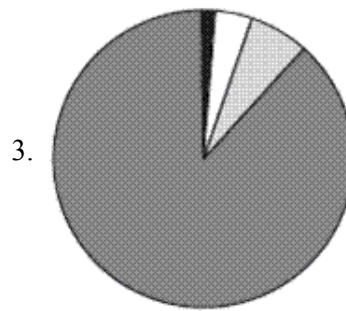
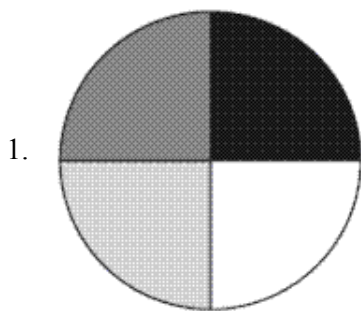
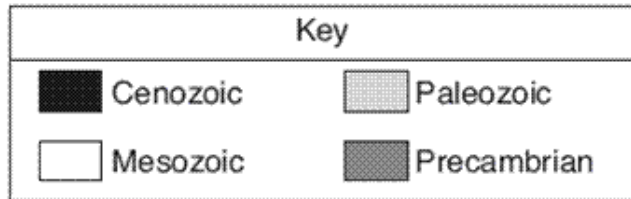
During which geologic time period did great coal-forming forests exist?

- 1. Devonian      3. Mississippian
- 2. Quaternary    4. Pennsylvanian

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18.

Which pie graph best represents the percentage of total time for the four major divisions of geologic time?



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19.

The time line below represents the entire geologic history of Earth.



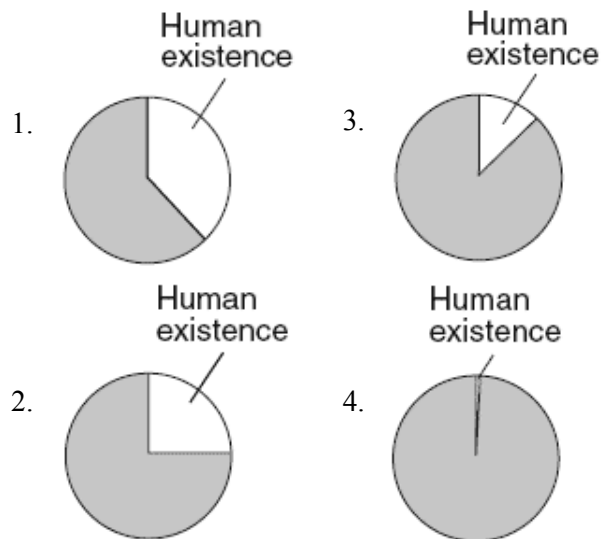
Which letter best represents the first appearance of humans on Earth?

1. *A*     3. *C*
2. *B*     4. *D*

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20.

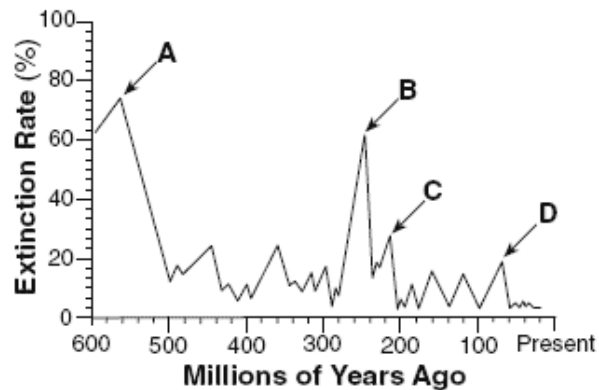
Which graph best represents human existence on Earth, compared with Earth's entire history?



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21.

The graph below shows the extinction rate of organisms on Earth during the last 600 million years. Letters *A* through *D* represent mass extinctions.



Which letter indicates when dinosaurs became extinct?

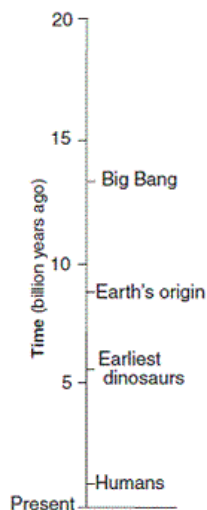
1. *A*      3. *C*
2. *B*      4. *D*

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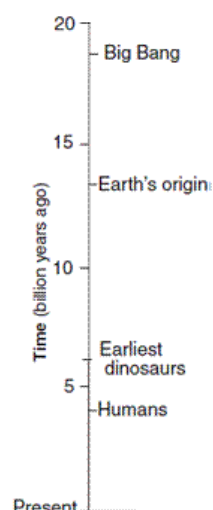
22.

Which time line most accurately indicates when this sequence of events in Earth's history occurred?

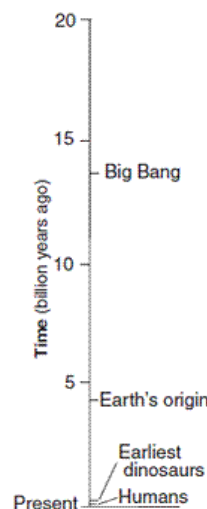
1.



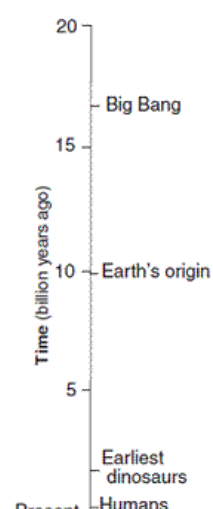
3.



2.



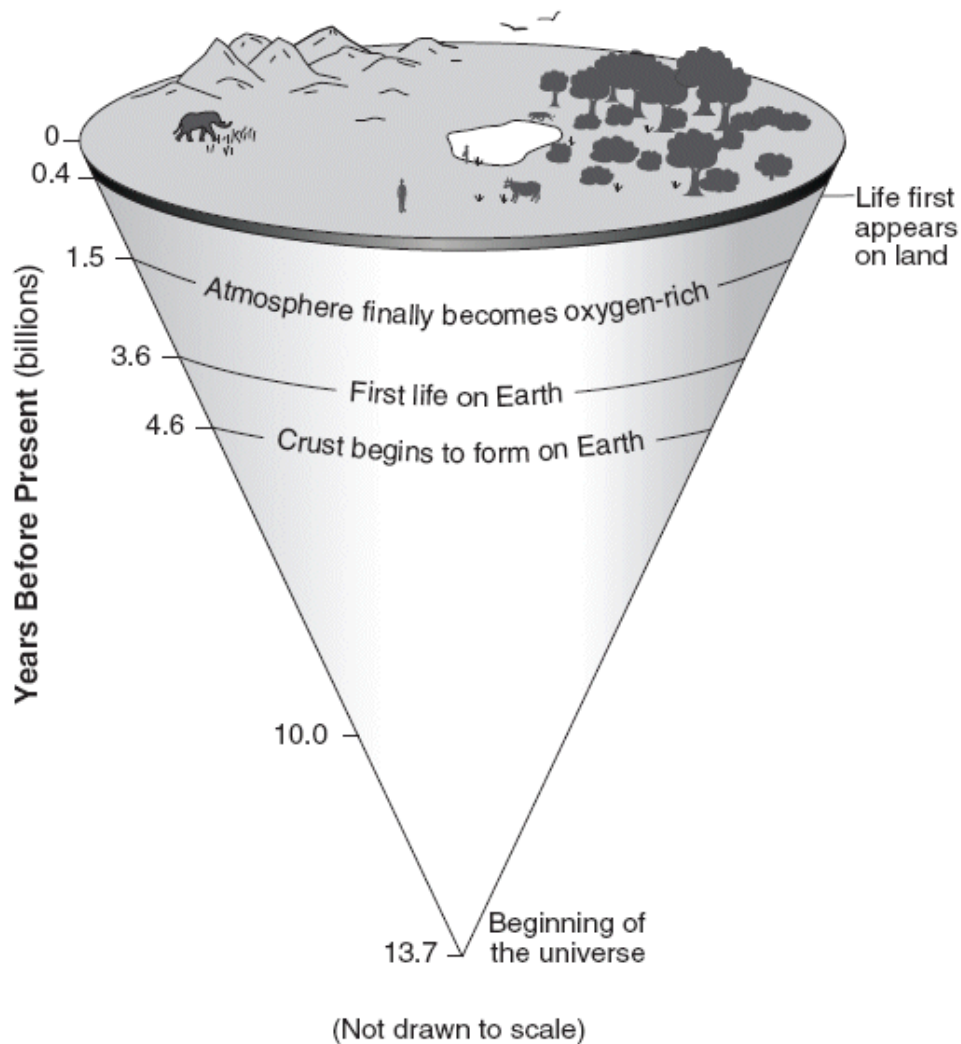
4.



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23.

Base your answer to this question on the diagram below, which shows specific events in the history of Earth from the beginning of the universe to the present.



**Figure 1**

Approximately how many billion years after the beginning of the universe did a solid crust form on Earth?

- |        |         |
|--------|---------|
| 1. 0.7 | 3. 9.1  |
| 2. 3.9 | 4. 13.7 |

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24.

**[Refer to figure 1 in question 23]**

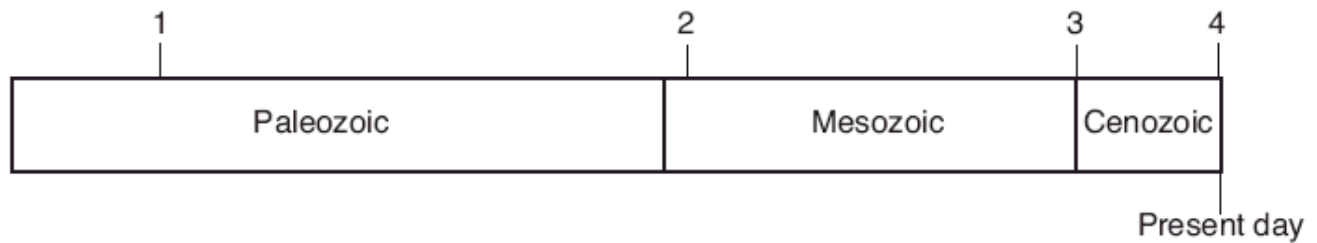
During which geologic era did life first appear on land?

1. Middle Archean
2. Paleozoic
3. Middle Proterozoic
4. Cenozoic

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25.

The geologic time line below represents the three most recent geologic eras. The numbers represent events in Earth's history.



Which number best represents when humans are inferred to have first appeared on Earth?

- |      |      |
|------|------|
| 1. 1 | 3. 3 |
| 2. 2 | 4. 4 |

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