

## Revealing Earth's History

### The Geologic Time Scale

1. What forces have helped shaped the recent landscape of the Grand Canyon?
  - A. Volcanic activity
  - B. Earthquakes from a fault line
  - C. Erosion from the Colorado River
  - D. Glaciation carving the landscape
2. What forces have helped shaped the recent landscape of Ontario?
  - A. Volcanic activity
  - B. Earthquakes from a fault line
  - C. Erosion from the Colorado River
  - D. Glaciation carving the landscape
3. What is the function of an index fossil?
  - A. To pinpoint a specific time when the fossil was represented.
  - B. To indicate a specific location where the fossil was found.
  - C. To define a particular time interval in the geologic time scale.
  - D. To differentiate between marine and land organisms.
4. An extensive calendar timeline of events and changes that have occurred throughout Earth's History.
  - A. Fossil records
  - B. Geologic Time Scale
  - C. Theory of Evolution
  - D. Big Bang Theory
5. The following are included in the four major eons except
  - A. Phanerozoic
  - B. Cambrian
  - C. Ordovician
  - D. Hadean
6. Active volcanic events during the Pre-Cambrian created an oxygen-rich atmosphere that supported the early unicellular bacteria.  
True  
False



7. The following are true about the Hadean except

- A. Detrital zircon fossils revealed earthquake activities
- B. First signs of life appeared
- C. Rock fossils were found in among cooled down magma and with water interactions and impressions
- D. Crusts and oceans were formed.



8. One of the stable regions that formed via active tectonic plates during Proterozoic era is called

- A. Australia
- B. Eurasia
- C. Antarctic
- D. Gondwanaland

9. The Mesozoic, Cenozoic and Paleozoic belong to

- A. Pre-Cambrian
- B. Phanerozoic
- C. Cambrian
- D. Archaean

10. The oldest fossil ever recorded was

- A. Discovered to be approximately 3.7 bya
- B. *Dickinsonia costata*
- C. Discovered to be 4.6 bya
- D. A stromatolite fossil

11. Which of the following does not belong in this group

- A. Phanerozoic
- B. Hadean
- C. Archaean
- D. Proterozoic



Arrange the following events during the Pre-Cambrian

1 <sup>st</sup>	a	<i>First signs of life</i>
2 <sup>nd</sup>	b	<i>Cambrian explosion</i>
3 <sup>rd</sup>	c	<i>Formation of the Moon</i>
4 <sup>th</sup>	d	<i>Coolin down of magmatic crust</i>
5 <sup>th</sup>	e	<i>Oxygen-rich atmosphere</i>

### Matching

12. Match the items in Column A to those in Column B

Period	Phanerozoic
Eon	Miocene
Supereon	Tertiary
Era	Mesozoic
Epoch	Pre-Cambrian



13. For each geological classification, match the corresponding era or eon

Precambrian super eon	Paleogene period, Neogene period, and Quaternary period:
Phanerozoic eon	Hadean, Archean, Proterozoic eons
Cenozoic era	Paleozoic era, Mesozoic era, Cenozoic era :

14. For each geological event, choose the corresponding time

Homo sapiens evolve in Africa:	10,000 years ago
Earth forms as a planet:	65 million years ago
Shelled marine animals appear:	520 million years ago
Last ice sheets retreat:	4.6 billion years ago
Mass extinction of the dinosaurs:	200,000 years ago

15. Indicate the approximate age of the features of the Grand Canyon listed in the table:

Feature	Age
Rocks in canyon walls	
Canyon formation	

16. List at least three valuable metals mined from the Canadian Shield.

