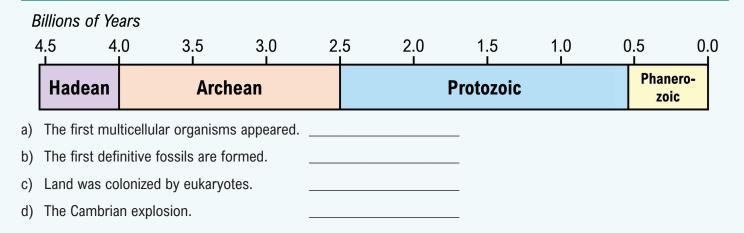
# **TOPIC: HISTORY OF LIFE**

#### Geologic Record ◆ **Humans**: 200,000 yrs. ◆ Geologic Record: history of life as told through \_\_\_\_\_\_ (\_\_\_\_ 31, \_\_\_\_\_) • Earth is billion years old. ◆ Visualizing the history of earth as a calendar year: **◆** Colonization of : 500 mya (\_\_\_\_ 21) ◆ First fossils: 3.5 bya (\_\_\_\_\_ 25) ◆ First multicellular eukaryote: • Stromatolites: fossil layered 1.3 bya (\_\_\_\_\_ 18) ▶ First plants, animals, & fungi move to \_\_\_\_\_ environments. rocks formed by \_\_\_\_\_ • Form of red . Apr. Sept. Jan. Feb. Mar. May Jun. Jul. Aug. Oct. Nov. Dec. ◆ Great event: ◆ First \_\_\_\_\_: 1.8 bya (\_\_\_\_ 8) **◆** Cambrian Explosion: 2.7-2.4 bya (\_\_\_\_\_ 19) Endosymbiosis: prokaryotes 535-525 mya (\_\_\_\_19) • \_\_\_\_\_ increases \_\_\_\_\_ diversification of engulfed by larger cells become 02 levels drastically. and chloroplasts. lifeforms (especially animal).

## **TOPIC: HISTORY OF LIFE**

### **EXAMPLE**

The timeline below shows the four eons of Earth's history, along with dates from 4.5 billion years ago. Based on your knowledge of the timing of major events in the history of life, identify in which eon each of the four events listed below occurred. Not all eons may have a corresponding event.



#### **PRACTICE**

Each option below lists several of the major events in the history of life on Earth. Which option presents the events in the correct order from the oldest to the most recent?

- a) Endosymbiosis leads to the appearance of eukaryotes  $\rightarrow$  Eukaryotes colonize land  $\rightarrow$  Cambrian explosion.
- b) Prokaryotes form stromatolites → Multicellular organisms appear → First eukaryotes.
- c) Land colonization → Cambrian explosion → Endosymbiosis leads to the appearance of eukaryotes.
- d) Prokaryotes form stromatolites  $\rightarrow$  Cambrian explosion  $\rightarrow$  Eukaryotes colonize land.