

Topic 1 Review: History of life

Topic 1 learning targets

- Describe the methods used in each of the origin of life experiments and explain the results of each experiment.
- Create a basic timeline of the history of living organisms

1. Explain the difference between relative dating and absolute dating.

2. What do scientists hypothesize about early Earth and the origin of life?

3. What is spontaneous generation and which scientist supported it?

4. What is biogenesis and which scientist first found evidence to support it?

5a. Which animal life was dominant in the Mesozoic Era? _____

5b. Which animal life was dominant in the Cenozoic Era? _____

5c. Which animal life was dominant in the Paleozoic Era? _____

6. What is the endosymbiosis theory and what are two lines of evidence to support it?

7. Number the events from history of life on earth (number 1 being oldest, 7 youngest):

- | # | Event |
|-------|---|
| _____ | Cyanobacteria evolve; modify atmosphere |
| _____ | Eukaryotes evolve |
| _____ | Complex multicellular organisms evolve, and first land plants appear |
| _____ | Unicellular life (prokaryotic heterotrophs) |
| _____ | First organic molecules form from components of early atmosphere + energy |
| _____ | Mammals evolve |
| _____ | Reptiles dominate; angiosperms (flowering plants) and insects co-evolve |

Unit 8: Evolution & Classification
Topic 1 Review: History of life

Name: _____ Period: _____

8. Who conducted the following experiment?

9. How did they model conditions that existed on early Earth in their experiments?

10. What question did they experiment seek to answer?

11. What were the results of their experiment?

12. Describe or draw Pasteur's experiment and explain how it showed evidence to support biogenesis.

