

Attachment A: Quiz

Please indicate if this quiz is being taken

a) before viewing the eTrip b) after viewing the eTrip

- 1. The Tree of Life categorizes all life on Earth by differences in**
a) cellular structure b) spinal structure c) DNA d) global ecological zones
- 2. Extremophiles are organisms that**
a) are extremely rare b) exist in extreme conditions c) are extremely fragile
d) are extremely large
- 3. Prokaryotic cells are those cells that**
a) do not contain a nucleus b) cannot exist by themselves c) die when
exposed to sunlight d) make up the human body
- 4. The colors within Yellowstone's hot springs are often due to**
a) extremely rare fish b) spray paint which rangers use to help illustrate hot spring
depth c) flowering plants d) microorganisms
- 5. The three domains on the Tree of Life are**
a) Plants, Animals, and Fungi b) Bacteria, Archaea, and Eukarya
c) Fungi, algae, and protozoa d) Archaea, Vertebrates, and Invertebrates
- 6. Examples of microorganisms are**
a) algae and bacteria b) spiders and ticks c) igneous and metamorphic rocks
d) amphibians and marsupials
- 7. Microorganisms decompose matter and return nutrients to the environment.**
a) True b) False
- 8. Microorganisms can exist in**
a) acidic water b) drinking water c) both of the above d) none of the above
- 9. No single extremophile can live in every environment on Earth.**
a) True b) False
- 10. Archaea are special types of bacteria.**
a) True b) False
- 11. In which trunk of the Tree of Life do mammals belong?**
a) Mammalia b) Eukarya c) Archaea d) Vertebrates
- 12. Microorganisms are approximately how many times smaller than humans?**
a) 10X b) 100X c) 1000X d) 1,000,000X
- 13. The hydrothermal features in Yellowstone are heated by**
a) people b) the sun c) microorganisms d) areas of partially molten rock beneath
the Earth's surface

- 14. All microorganisms have identical shapes.**
a) True b) False
- 15. Many different types of microorganisms can exist together to form a “microbial community.”**
a) True b) False
- 16. The amount of sunlight penetrating within a mat may affect the type of microorganisms existing there.**
a) True b) False
- 17. What do chemosynthetic organisms use for energy?**
a) sunlight b) water c) soil d) chemicals
- 18. Viruses are**
a) bacteria b) fungi c) algae d) none of the above
- 19. The pH level in water indicates its**
a) acidity b) number of microorganisms c) purity d) temperature
- 20. It’s likely that microorganisms gave rise to all the life on our planet.**
a) True b) False
- 21. Life on Earth probably began in which of the following types of environments?**
a) deep water b) ice age c) high-temperature d) swamp
- 22. The hot springs of Yellowstone pose no threat to human safety.**
a) True b) False
- 23. Fossils of microorganisms are found on Earth and may exist on other planets.**
a) True b) False
- 24. Visitors are encouraged to wade in the hot springs in Yellowstone.**
a) True b) False
- 25. Yellowstone’s hydrothermal features provide habitats for diverse thermophilic life forms that we are only beginning to explore.**
a) True b) False