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| **Multiple Choice** |

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| 1. Which feature of life is the ability to maintain a stable internal state?​   |  |  |  | | --- | --- | --- | |  | a. | ​energy production | |  | b. | ​sensing the outside world | |  | c. | ​reproduction | |  | d. | ​homeostasis | |  | e. | ​growth |  |  |  | | --- | --- | | *ANSWER:* | d | | *DIFFICULTY:* | Bloom’s: Remember | | *REFERENCES:* | 1.1 Shared Features of Life | | *LEARNING OBJECTIVES:* | HBIO.STMC.16.1.1 - Describe five basic characteristics of life. | | *DATE CREATED:* | 8/28/2014 4:10 AM | | *DATE MODIFIED:* | 9/23/2015 9:16 PM | |

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| 2. From which molecule do organisms receive instructions to reproduce and grow?​   |  |  |  | | --- | --- | --- | |  | a. | ​ATP | |  | b. | ​carbon | |  | c. | ​hydrogen | |  | d. | ​DNA | |  | e. | ​elements |  |  |  | | --- | --- | | *ANSWER:* | d | | *DIFFICULTY:* | Bloom’s: Remember | | *REFERENCES:* | 1.1 Shared Features of Life | | *LEARNING OBJECTIVES:* | HBIO.STMC.16.1.1 - Describe five basic characteristics of life. | | *DATE CREATED:* | 8/28/2014 4:15 AM | | *DATE MODIFIED:* | 9/23/2015 9:16 PM | |

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| 3. ​The basic unit of life is the \_\_\_\_.   |  |  |  | | --- | --- | --- | |  | a. | ​atom | |  | b. | ​molecule | |  | c. | ​organelle | |  | d. | ​cell | |  | e. | ​organism |  |  |  | | --- | --- | | *ANSWER:* | d | | *DIFFICULTY:* | Bloom’s: Remember | | *REFERENCES:* | 1.1 Shared Features of Life | | *LEARNING OBJECTIVES:* | HBIO.STMC.16.1.1 - Describe five basic characteristics of life. | | *DATE CREATED:* | 8/28/2014 4:16 AM | | *DATE MODIFIED:* | 9/23/2015 9:16 PM | |

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| 4. Homeostasis refers to \_\_\_\_.​   |  |  |  | | --- | --- | --- | |  | a. | the ability of a cell to reproduce​ | |  | b. | ​directions the cell receives from DNA | |  | c. | ​the maintenance of a constant internal state | |  | d. | ​the extraction of energy from nutrients | |  | e. | ​the ability of organisms to move within their environment |  |  |  | | --- | --- | | *ANSWER:* | c | | *DIFFICULTY:* | Bloom’s: Remember | | *REFERENCES:* | 1.1 Shared Features of Life | | *LEARNING OBJECTIVES:* | HBIO.STMC.16.1.1 - Describe five basic characteristics of life. | | *DATE CREATED:* | 8/28/2014 4:17 AM | | *DATE MODIFIED:* | 9/23/2015 9:16 PM | |

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| 5. The pancreas is an organ that regulates blood glucose levels. When glucose levels rise above normal, the pancreas releases insulin to lower blood glucose levels. This is an example of \_\_\_\_.​   |  |  |  | | --- | --- | --- | |  | a. | ​evolution | |  | b. | ​mutation | |  | c. | ​immunity | |  | d. | ​homeostasis | |  | e. | ​variability |  |  |  | | --- | --- | | *ANSWER:* | d | | *DIFFICULTY:* | Bloom’s: Remember | | *REFERENCES:* | 1.1 Shared Features of Life | | *LEARNING OBJECTIVES:* | HBIO.STMC.16.1.1 - Describe five basic characteristics of life. | | *DATE CREATED:* | 8/28/2014 4:19 AM | | *DATE MODIFIED:* | 9/23/2015 9:16 PM | |

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| 6. “A change over time” is the definition of \_\_\_\_.​   |  |  |  | | --- | --- | --- | |  | a. | ​classification | |  | b. | ​ecology | |  | c. | ​physiology | |  | d. | ​evolution | |  | e. | ​heritage |  |  |  | | --- | --- | | *ANSWER:* | d | | *DIFFICULTY:* | Bloom’s: Remember | | *REFERENCES:* | 1.1 Our Place in the Natural World | | *LEARNING OBJECTIVES:* | HBIO.STMC.16.1.2 - Describe the evolution of human beings over the years. | | *DATE CREATED:* | 8/28/2014 4:21 AM | | *DATE MODIFIED:* | 9/23/2015 9:16 PM | |

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| 7. Which evolutionary descriptive term is common to both fish and humans?​   |  |  |  | | --- | --- | --- | |  | a. | ​primates | |  | b. | ​mammals | |  | c. | ​bacteria | |  | d. | ​vertebrates | |  | e. | ​archaea |  |  |  | | --- | --- | | *ANSWER:* | d | | *DIFFICULTY:* | Bloom’s: Understand | | *REFERENCES:* | 1.1 Our Place in the Natural World | | *LEARNING OBJECTIVES:* | HBIO.STMC.16.1.2 - Describe the evolution of human beings over the years. | | *DATE CREATED:* | 8/28/2014 4:22 AM | | *DATE MODIFIED:* | 9/23/2015 9:16 PM | |

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| 8. In terms of classification, humans belong to which domain?​   |  |  |  | | --- | --- | --- | |  | a. | ​prokaryote | |  | b. | ​Eukarya | |  | c. | ​Archaea | |  | d. | ​Bacteria | |  | e. | ​protists |  |  |  | | --- | --- | | *ANSWER:* | b | | *DIFFICULTY:* | Bloom’s: Remember | | *REFERENCES:* | 1.1 Our Place in the Natural World | | *LEARNING OBJECTIVES:* | HBIO.STMC.16.1.2 - Describe the evolution of human beings over the years. | | *DATE CREATED:* | 8/28/2014 4:23 AM | | *DATE MODIFIED:* | 9/23/2015 9:16 PM | |

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| 9. Which characteristic distinguishes humans from other primates?​   |  |  |  | | --- | --- | --- | |  | a. | ​complexity of the brain | |  | b. | ​walking upright | |  | c. | ​using tools | |  | d. | ​body hair | |  | e. | ​manual dexterity |  |  |  | | --- | --- | | *ANSWER:* | a | | *DIFFICULTY:* | Bloom’s: Remember | | *REFERENCES:* | 1.1 Our Place in the Natural World | | *LEARNING OBJECTIVES:* | HBIO.STMC.16.1.2 - Describe the evolution of human beings over the years. | | *DATE CREATED:* | 8/28/2014 4:25 AM | | *DATE MODIFIED:* | 9/23/2015 9:16 PM | |

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| 10. "Vertebrates" refers to animals that possess \_\_\_\_.​   |  |  |  | | --- | --- | --- | |  | a. | ​hair | |  | b. | ​mammary glands | |  | c. | ​the ability to give birth to live young | |  | d. | ​a backbone | |  | e. | ​lungs |  |  |  | | --- | --- | | *ANSWER:* | d | | *DIFFICULTY:* | Bloom’s: Understand | | *REFERENCES:* | 1.1 Our Place in the Natural World | | *LEARNING OBJECTIVES:* | HBIO.STMC.16.1.2 - Describe the evolution of human beings over the years. | | *DATE CREATED:* | 8/28/2014 4:26 AM | | *DATE MODIFIED:* | 9/23/2015 9:16 PM | |

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| 11. All organisms in domain \_\_\_\_ are single-celled.​   |  |  |  | | --- | --- | --- | |  | a. | Protists​ | |  | b. | ​Fungi | |  | c. | ​Plants | |  | d. | ​Bacteria | |  | e. | ​Eukarya |  |  |  | | --- | --- | | *ANSWER:* | d | | *DIFFICULTY:* | Bloom’s: Understand | | *REFERENCES:* | 1.1 Our Place in the Natural World | | *LEARNING OBJECTIVES:* | HBIO.STMC.16.1.2 - Describe the evolution of human beings over the years. | | *DATE CREATED:* | 8/28/2014 4:28 AM | | *DATE MODIFIED:* | 1/26/2016 8:38 AM | |

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| 12. The most basic level of organization is the \_\_\_\_.​   |  |  |  | | --- | --- | --- | |  | a. | ​atom | |  | b. | ​molecule | |  | c. | ​compound | |  | d. | ​cell | |  | e. | ​organ |  |  |  | | --- | --- | | *ANSWER:* | a | | *DIFFICULTY:* | Bloom’s: Remember | | *REFERENCES:* | 1.3 Life's Organization | | *LEARNING OBJECTIVES:* | HBIO.STMC.16.1.3 - Explain how nature is organized. | | *DATE CREATED:* | 8/28/2014 4:29 AM | | *DATE MODIFIED:* | 9/23/2015 9:16 PM | |

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| 13. Which form of organization is classified between cell and organ?​   |  |  |  | | --- | --- | --- | |  | a. | ​atom | |  | b. | ​molecule | |  | c. | ​compound | |  | d. | ​organelle | |  | e. | ​tissue |  |  |  | | --- | --- | | *ANSWER:* | e | | *DIFFICULTY:* | Bloom’s: Remember | | *REFERENCES:* | 1.3 Life's Organization | | *LEARNING OBJECTIVES:* | HBIO.STMC.16.1.3 - Explain how nature is organized. | | *DATE CREATED:* | 8/28/2014 4:32 AM | | *DATE MODIFIED:* | 9/23/2015 9:16 PM | |

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| 14. Energy flows into the biosphere from \_\_\_\_.​   |  |  |  | | --- | --- | --- | |  | a. | ​water | |  | b. | ​raw materials | |  | c. | ​decomposition | |  | d. | ​ecosystems | |  | e. | ​the sun |  |  |  | | --- | --- | | *ANSWER:* | e | | *DIFFICULTY:* | Bloom’s: Remember | | *REFERENCES:* | 1.3 Life's Organization | | *LEARNING OBJECTIVES:* | HBIO.STMC.16.1.3 - Explain how nature is organized. | | *DATE CREATED:* | 8/28/2014 4:34 AM | | *DATE MODIFIED:* | 9/23/2015 9:16 PM | |

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| 15. Which is the correct order of organization in nature, from least inclusive to most inclusive?​   |  |  |  | | --- | --- | --- | |  | a. | ecosystem → community → population → organism​ | |  | b. | ​organism → community → population → ecosystem | |  | c. | ​organism → population → community → ecosystem | |  | d. | population → organism → ecosystem → community​ | |  | e. | ​community → organism → population → ecosystem |  |  |  | | --- | --- | | *ANSWER:* | c | | *DIFFICULTY:* | Bloom’s: Understand | | *REFERENCES:* | 1.3 Life's Organization | | *LEARNING OBJECTIVES:* | HBIO.STMC.16.1.3 - Explain how nature is organized. | | *DATE CREATED:* | 8/28/2014 4:36 AM | | *DATE MODIFIED:* | 1/26/2016 8:39 AM | |

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| 16. The flow of \_\_\_\_ and the cycling of \_\_\_\_ maintains nature’s organization.​   |  |  |  | | --- | --- | --- | |  | a. | ​water; populations | |  | b. | ​atoms; energy | |  | c. | ​nutrients; water | |  | d. | ​energy; materials | |  | e. | raw materials; water​ |  |  |  | | --- | --- | | *ANSWER:* | d | | *DIFFICULTY:* | Bloom’s: Understand | | *REFERENCES:* | 1.3 Life's Organization | | *LEARNING OBJECTIVES:* | HBIO.STMC.16.1.3 - Explain how nature is organized. | | *DATE CREATED:* | 8/30/2014 1:38 AM | | *DATE MODIFIED:* | 9/23/2015 9:16 PM | |

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| 17. Populations of different species comprise a(n) \_\_\_\_.​   |  |  |  | | --- | --- | --- | |  | a. | populations​ | |  | b. | ​biosphere | |  | c. | ​ecosystem | |  | d. | ​community | |  | e. | evolution​ |  |  |  | | --- | --- | | *ANSWER:* | d | | *REFERENCES:* | 1.3 Life's Organization | | *LEARNING OBJECTIVES:* | HBIO.STMC.16.1.3 - Explain how nature is organized. | | *DATE CREATED:* | 8/30/2014 1:40 AM | | *DATE MODIFIED:* | 1/26/2016 8:40 AM | |

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| 18. A systematic way of obtaining knowledge about the natural world is \_\_\_\_.​   |  |  |  | | --- | --- | --- | |  | a. | ​science | |  | b. | ​an hypothesis | |  | c. | ​an experiment | |  | d. | ​the variable | |  | e. | ​a prediction |  |  |  | | --- | --- | | *ANSWER:* | a | | *DIFFICULTY:* | Bloom’s: Remember | | *REFERENCES:* | 1.4 Using Science to Explain Natural Events | | *LEARNING OBJECTIVES:* | HBIO.STMC.16.1.4.1 - Identify the five steps used in the scientific method. | | *DATE CREATED:* | 8/30/2014 1:42 AM | | *DATE MODIFIED:* | 9/23/2015 9:17 PM | |

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| 19. The first step of the scientific method is to \_\_\_\_.​   |  |  |  | | --- | --- | --- | |  | a. | ​perform an experiment | |  | b. | ​make a prediction | |  | c. | ​test a prediction | |  | d. | ​analyze data | |  | e. | ​observation of a natural event |  |  |  | | --- | --- | | *ANSWER:* | e | | *DIFFICULTY:* | Bloom’s: Remember | | *REFERENCES:* | 1.4 Using Science to Explain Natural Events | | *LEARNING OBJECTIVES:* | HBIO.STMC.16.1.4.1 - Identify the five steps used in the scientific method. | | *DATE CREATED:* | 8/30/2014 1:44 AM | | *DATE MODIFIED:* | 9/23/2015 9:17 PM | |

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| 20. The statement “animals that live in the desert will produce concentrated urine” is \_\_\_\_.​   |  |  |  | | --- | --- | --- | |  | a. | ​an opinion | |  | b. | ​a hypothesis | |  | c. | ​data | |  | d. | ​a variable | |  | e. | ​a control group |  |  |  | | --- | --- | | *ANSWER:* | b | | *DIFFICULTY:* | Bloom’s: Understand | | *REFERENCES:* | 1.4 Using Science to Explain Natural Events | | *LEARNING OBJECTIVES:* | HBIO.STMC.16.1.4.2 - Explain how experiments are used to test scientific predictions. | | *DATE CREATED:* | 8/30/2014 1:46 AM | | *DATE MODIFIED:* | 1/26/2016 8:40 AM | |

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| 21. Which of these is designed by researchers to test only a single prediction of a hypothesis at a time?​   |  |  |  | | --- | --- | --- | |  | a. | controlled experiment​ | |  | b. | ​experimental variable | |  | c. | ​control group | |  | d. | ​controlled variable | |  | e. | ​experimental constant |  |  |  | | --- | --- | | *ANSWER:* | a | | *DIFFICULTY:* | Bloom’s: Understand | | *REFERENCES:* | 1.4 Using Science to Explain Natural Events | | *LEARNING OBJECTIVES:* | HBIO.STMC.16.1.4.3 - Explain the relationship between science and logic. | | *DATE CREATED:* | 8/30/2014 1:50 AM | | *DATE MODIFIED:* | 9/23/2015 9:17 PM | |

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| 22. The control in an experiment \_\_\_\_.​   |  |  |  | | --- | --- | --- | |  | a. | makes the experiment invalid​ | |  | b. | ​is an additional replicate for statistical purposes | |  | c. | ​reduces experimental errors | |  | d. | ​minimizes experimental inaccuracy | |  | e. | allows a standard of comparison for the experimental group​ |  |  |  | | --- | --- | | *ANSWER:* | e | | *DIFFICULTY:* | Bloom’s: Understand | | *REFERENCES:* | 1.4 Using Science to Explain Natural Events | | *LEARNING OBJECTIVES:* | HBIO.STMC.16.1.4.3 - Explain the relationship between science and logic. | | *DATE CREATED:* | 8/30/2014 1:52 AM | | *DATE MODIFIED:* | 1/26/2016 8:41 AM | |

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| 23. Critical thinking means to \_\_\_\_.​   |  |  |  | | --- | --- | --- | |  | a. | challenge all concepts​ | |  | b. | ​evaluate information before accepting it | |  | c. | ​disagree with proposed ideas | |  | d. | ​make quick decisions | |  | e. | ​base decisions on opinions |  |  |  | | --- | --- | | *ANSWER:* | b | | *DIFFICULTY:* | Bloom’s: Understand | | *REFERENCES:* | 1.5 Critical Thinking in Science and Life | | *LEARNING OBJECTIVES:* | HBIO.STMC.16.1.5 - Discuss the importance of critical thinking in science and everyday life. | | *DATE CREATED:* | 8/30/2014 1:54 AM | | *DATE MODIFIED:* | 1/26/2016 8:41 AM | |

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| 24. Science is based on \_\_\_\_.​   |  |  |  | | --- | --- | --- | |  | a. | ​faith | |  | b. | ​evidence | |  | c. | ​authority | |  | d. | ​consensus | |  | e. | ​opinions |  |  |  | | --- | --- | | *ANSWER:* | b | | *DIFFICULTY:* | Bloom’s: Remember | | *REFERENCES:* | 1.6 Science in Perspective | | *LEARNING OBJECTIVES:* | HBIO.STMC.16.1.6 - Discuss the strengths and limits of scientific study. | | *DATE CREATED:* | 8/30/2014 1:56 AM | | *DATE MODIFIED:* | 9/23/2015 9:17 PM | |

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| 25. In science, the word "theory" \_\_\_\_.​   |  |  |  | | --- | --- | --- | |  | a. | is an explanation that has not been published​ | |  | b. | ​has essentially the same meaning as a prediction | |  | c. | ​is based mostly on opinions | |  | d. | ​signifies that a hypothesis has been tested and proven over a period of time | |  | e. | ​means that a scientist has a hunch something is true |  |  |  | | --- | --- | | *ANSWER:* | d | | *DIFFICULTY:* | Bloom’s: Remember | | *REFERENCES:* | 1.6 Science in Perspective | | *LEARNING OBJECTIVES:* | HBIO.STMC.16.1.6 - Discuss the strengths and limits of scientific study. | | *DATE CREATED:* | 8/30/2014 1:58 AM | | *DATE MODIFIED:* | 9/23/2015 9:17 PM | |

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| 26. ​The validity of scientific discoveries should be based on \_\_\_\_.   |  |  |  | | --- | --- | --- | |  | a. | ​opinions | |  | b. | ​evidence | |  | c. | ​philosophy | |  | d. | ​hearsay | |  | e. | ​hunches |  |  |  | | --- | --- | | *ANSWER:* | b | | *DIFFICULTY:* | Bloom’s: Remember | | *REFERENCES:* | 1.6 Science in Perspective | | *LEARNING OBJECTIVES:* | HBIO.STMC.16.1.6 - Discuss the strengths and limits of scientific study. | | *DATE CREATED:* | 8/30/2014 1:59 AM | | *DATE MODIFIED:* | 9/23/2015 9:17 PM | |

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| 27. After many years of testing, an hypothesis becomes accepted as a \_\_\_\_.​   |  |  |  | | --- | --- | --- | |  | a. | fact​ | |  | b. | ​prediction | |  | c. | ​theory | |  | d. | ​conclusion | |  | e. | ​variable |  |  |  | | --- | --- | | *ANSWER:* | c | | *DIFFICULTY:* | Bloom’s: Remember | | *REFERENCES:* | 1.6 Science in Perspective | | *LEARNING OBJECTIVES:* | HBIO.STMC.16.1.6 - Discuss the strengths and limits of scientific study. | | *DATE CREATED:* | 8/30/2014 2:01 AM | | *DATE MODIFIED:* | 9/23/2015 9:17 PM | |

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| 28. A scientific theory will involve four of the following. Which is the exception?​   |  |  |  | | --- | --- | --- | |  | a. | subjective conclusions​ | |  | b. | ​carefully stated hypothesis | |  | c. | ​repeated controlled experiments | |  | d. | ​revisions or rejection if new evidence comes to light | |  | e. | ​explanation of a large number of observations |  |  |  | | --- | --- | | *ANSWER:* | a | | *DIFFICULTY:* | Bloom’s: Remember | | *REFERENCES:* | 1.6 Science in Perspective | | *LEARNING OBJECTIVES:* | HBIO.STMC.16.1.6 - Discuss the strengths and limits of scientific study. | | *DATE CREATED:* | 8/30/2014 2:03 AM | | *DATE MODIFIED:* | 9/23/2015 9:17 PM | |

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| 29. Emerging diseases \_\_\_\_.​   |  |  |  | | --- | --- | --- | |  | a. | ​are related to lifestyle factors | |  | b. | ​are caused by poor diet | |  | c. | ​are never caused by viruses | |  | d. | ​are caused by pathogens that until recently had limited impact on human health | |  | e. | ​include obesity and type 2 diabetes |  |  |  | | --- | --- | | *ANSWER:* | d | | *DIFFICULTY:* | Bloom’s: Remember | | *REFERENCES:* | 1.8 Living in a World of Disease Threats | | *LEARNING OBJECTIVES:* | HBIO.STMC.16.1.8 - Identify three causes of emerging diseases. | | *DATE CREATED:* | 8/30/2014 2:05 AM | | *DATE MODIFIED:* | 9/23/2015 9:17 PM | |

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| 30. Which health concerns are related to lifestyle factors?​   |  |  |  | | --- | --- | --- | |  | a. | ​obesity and diabetes | |  | b. | ​all cancers | |  | c. | ​Lyme disease | |  | d. | ​bacterial infections | |  | e. | ​SARS respiratory infections |  |  |  | | --- | --- | | *ANSWER:* | a | | *DIFFICULTY:* | Bloom’s: Remember | | *REFERENCES:* | 1.8 Living in a World of Disease Threats | | *LEARNING OBJECTIVES:* | HBIO.STMC.16.1.8 - Identify three causes of emerging diseases. | | *DATE CREATED:* | 8/30/2014 2:07 AM | | *DATE MODIFIED:* | 9/23/2015 9:17 PM | |

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| **Completion** |

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| 31. The systematic approach to exploring the natural world is known as the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.   ​   |  |  | | --- | --- | | *ANSWER:* | scientific method​ | | *DIFFICULTY:* | Bloom’s: Remember | | *REFERENCES:* | 1.4 Using Science to Explain Natural Events | | *LEARNING OBJECTIVES:* | HBIO.STMC.16.1.4 - Describe how scientists study the natural world. | | *DATE CREATED:* | 8/30/2014 2:52 AM | | *DATE MODIFIED:* | 9/23/2015 9:17 PM | |

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| 32. A(n) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a testable statement proposed to explain an observation.​   |  |  | | --- | --- | | *ANSWER:* | hypothesis​ | | *DIFFICULTY:* | Bloom’s: Remember | | *REFERENCES:* | 1.4 Using Science to Explain Natural Events | | *LEARNING OBJECTIVES:* | HBIO.STMC.16. 1.4 - Describe how scientists study the natural world. | | *DATE CREATED:* | 8/30/2014 2:54 AM | | *DATE MODIFIED:* | 9/23/2015 9:17 PM | |

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| 33. A(n) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a statement that explains what you should observe about the question being addressed if the hypothesis is valid.​   |  |  | | --- | --- | | *ANSWER:* | prediction​ | | *DIFFICULTY:* | Bloom’s: Remember | | *REFERENCES:* | 1.4 Using Science to Explain Natural Events | | *LEARNING OBJECTIVES:* | HBIO.STMC.16. 1.4 - Describe how scientists study the natural world. | | *DATE CREATED:* | 8/30/2014 2:55 AM | | *DATE MODIFIED:* | 9/23/2015 9:17 PM | |

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| 34. A(n) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the group to which experimental results can be compared.​   |  |  | | --- | --- | | *ANSWER:* | control​ | | *DIFFICULTY:* | Bloom’s: Remember | | *REFERENCES:* | 1.4 Using Science to Explain Natural Events | | *LEARNING OBJECTIVES:* | HBIO.STMC.16. 1.4 - Describe how scientists study the natural world. | | *DATE CREATED:* | 8/30/2014 2:56 AM | | *DATE MODIFIED:* | 9/23/2015 9:17 PM | |

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| 35. If the sample size in an experiment is too small, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ error might distort the results.​   |  |  | | --- | --- | | *ANSWER:* | sampling​ | | *DIFFICULTY:* | Bloom’s: Remember | | *REFERENCES:* | 1.4 Using Science to Explain Natural Events | | *LEARNING OBJECTIVES:* | HBIO.STMC.16. 1.4 - Describe how scientists study the natural world. | | *DATE CREATED:* | 8/30/2014 2:58 AM | | *DATE MODIFIED:* | 9/23/2015 9:17 PM | |

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| 36. In controlled experiments, researchers study a(n) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ variable and compare the results to those of the control group.​   |  |  | | --- | --- | | *ANSWER:* | single​ | | *DIFFICULTY:* | Bloom’s: Remember | | *REFERENCES:* | 1.4 Using Science to Explain Natural Events | | *LEARNING OBJECTIVES:* | HBIO.STMC.16. 1.4 - Describe how scientists study the natural world. | | *DATE CREATED:* | 8/30/2014 2:59 AM | | *DATE MODIFIED:* | 9/23/2015 9:17 PM | |

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| 37. The objective evaluation of information is called evidence-based learning or \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.​   |  |  | | --- | --- | | *ANSWER:* | critical thinking​ | | *DIFFICULTY:* | Bloom’s: Remember | | *REFERENCES:* | 1.5 Critical Thinking in Science and Life | | *LEARNING OBJECTIVES:* | HBIO.STMC.16. 1.5 - Discuss the importance of critical thinking in science and everyday life. | | *DATE CREATED:* | 8/30/2014 3:01 AM | | *DATE MODIFIED:* | 9/23/2015 9:17 PM | |

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| 38. A(n) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ cannot be verified because it involves subjective judgment.​   |  |  | | --- | --- | | *ANSWER:* | opinion​ | | *DIFFICULTY:* | Bloom’s: Remember | | *REFERENCES:* | .5 Critical Thinking in Science and Life | | *LEARNING OBJECTIVES:* | HBIO.STMC.16. 1.5 - Discuss the importance of critical thinking in science and everyday life. | | *DATE CREATED:* | 8/30/2014 3:02 AM | | *DATE MODIFIED:* | 9/23/2015 9:17 PM | |

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| 39. A(n) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is verifiable information.​   |  |  | | --- | --- | | *ANSWER:* | fact​ | | *DIFFICULTY:* | Bloom’s: Remember | | *REFERENCES:* | 1.5 Critical Thinking in Science and Life | | *LEARNING OBJECTIVES:* | HBIO.STMC.16. 1.5 - Discuss the importance of critical thinking in science and everyday life. | | *DATE CREATED:* | 8/30/2014 3:03 AM | | *DATE MODIFIED:* | 9/23/2015 9:17 PM | |

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| 40. Explain the concept of homeostasis using the example of how we regulate our body temperature.​   |  |  | | --- | --- | | *ANSWER:* | Answers will vary but should be similar to this. Homeostasis refers to the maintenance of a constant internal environment. In terms of temperature, our body attempts to maintain an internal temperature of 37oC. When body temperature falls below this value, we shiver. The contractions of our muscles generate heat and raises temperature back towards normal. When body temperature rises above this value, we sweat. As the sweat evaporates from our skin, it pulls heat from the body, reducing temperature back towards normal.​ | | *DIFFICULTY:* | Bloom’s: Apply | | *REFERENCES:* | 1.1 Shared Features of Life | | *LEARNING OBJECTIVES:* | HBIO.STMC.16.1.1 - Describe five basic characteristics of life. | | *DATE CREATED:* | 8/30/2014 3:05 AM | | *DATE MODIFIED:* | 9/23/2015 9:17 PM | |

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| **Matching** |

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| Answer the questions by matching the statement to the most appropriate function, process, or trait listed below.​   |  |  | | --- | --- | | a. | ​experiment | | b. | ​evolution | | c. | ​photosynthesis | | d. | ​biosphere | | e. | ​homeostasis |  |  |  | | --- | --- | | *DIFFICULTY:* | Bloom’s: Remember | | *REFERENCES:* | Chapter 1 Learning about Human Biology | | *LEARNING OBJECTIVES:* | HBIO.STMC.16. 1.1 - Describe five basic characteristics of life. | | *DATE CREATED:* | 9/21/2015 9:45 PM | | *DATE MODIFIED:* | 9/23/2015 9:17 PM | |

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| 41. ​a process that converts sunlight into nutrient energy   |  |  | | --- | --- | | *ANSWER:* | c | |

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| 42. ​process by which body temperature is kept fairly constant   |  |  | | --- | --- | | *ANSWER:* | e | |

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| 43. ​a process whereby a researcher can manipulate the conditions under which observations are made   |  |  | | --- | --- | | *ANSWER:* | a | |

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| 44. ​explains how populations of organisms change over time   |  |  | | --- | --- | | *ANSWER:* | b | |

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| 45. ​refers to all parts of Earth where organisms live   |  |  | | --- | --- | | *ANSWER:* | d | |

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| Answer the questions by matching the examples to the proper group according to their characteristics.​   |  |  | | --- | --- | | a. | ​Vertebrate | | b. | ​Mammal | | c. | ​Primate | | d. | ​Eukarya | | e. | ​Bacteria |  |  |  | | --- | --- | | *DIFFICULTY:* | Bloom’s: Remember | | *REFERENCES:* | 1.2 Our Place in the Natural World | | *LEARNING OBJECTIVES:* | HBIO.STMC.16. 1.2 - Describe the evolution of human beings over the years. | | *DATE CREATED:* | 9/21/2015 9:54 PM | | *DATE MODIFIED:* | 9/23/2015 9:17 PM | |

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| 46. ​kingdom of mostly single-celled organisms​   |  |  | | --- | --- | | *ANSWER:* | e | |

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| 47. ​​includes humans, deer and dogs   |  |  | | --- | --- | | *ANSWER:* | b | |

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| 48. ​includes humans, fish and lizards​   |  |  | | --- | --- | | *ANSWER:* | a | |

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| 49. ​kingdom to which humans belong   |  |  | | --- | --- | | *ANSWER:* | d | |

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| 50. ​distinct group of mammals that includes humans and apes​   |  |  | | --- | --- | | *ANSWER:* | c | |

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| Answer the questions by matching the examples to the proper group according to their characteristics.​   |  |  | | --- | --- | | a. | ​atom | | b. | ​molecule | | c. | ​cell | | d. | ​tissue | | e. | ​organ | | f. | ​organ system | | g. | ​organism | | h. | ​population | | i. | ​community | | j. | ​ecosystem | | k. | ​biosphere |  |  |  | | --- | --- | | *DIFFICULTY:* | Bloom’s: Remember | | *REFERENCES:* | 1.3 Life’s Organization | | *LEARNING OBJECTIVES:* | HBIO.STMC.16. 1.3 - Explain how nature is organized. | | *DATE CREATED:* | 9/21/2015 10:16 PM | | *DATE MODIFIED:* | 9/23/2015 9:17 PM | |

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| 51. ​these structures come together to form cells   |  |  | | --- | --- | | *ANSWER:* | b | |

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| 52. ​a human being   |  |  | | --- | --- | | *ANSWER:* | g | |

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| 53. ​smallest unit of life​   |  |  | | --- | --- | | *ANSWER:* | c | |

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| 54. ​groups of the same species   |  |  | | --- | --- | | *ANSWER:* | h | |

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| 55. ​smallest unit of structure   |  |  | | --- | --- | | *ANSWER:* | a | |

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| 56. ​the interaction of various communities   |  |  | | --- | --- | | *ANSWER:* | j | |

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| 57. ​heart muscle   |  |  | | --- | --- | | *ANSWER:* | d | |

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| 58. ​the most inclusive level of organization   |  |  | | --- | --- | | *ANSWER:* | k | |

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| 59. ​the cardiovascular system   |  |  | | --- | --- | | *ANSWER:* | f | |

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| 60. ​groups of different organisms interacting in a local area​   |  |  | | --- | --- | | *ANSWER:* | i | |

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| 61. ​the heart   |  |  | | --- | --- | | *ANSWER:* | e | |