

Life Science MSP Review

<p>1. Life science can be studied</p> <ol style="list-style-type: none"> in the forest. in space. on a farm. All of the above 	<p>2. Which of the following SI units represents the smallest length?</p> <ol style="list-style-type: none"> mm km nm cm
<p>3. The region of a cell between the cell membrane and the nucleus is called the</p> <ol style="list-style-type: none"> cell membrane. organelles. cytoplasm. nucleus. 	<p>4. Which of the following do eukaryotic and prokaryotic cells have in common?</p> <ol style="list-style-type: none"> circular DNA nucleus membrane-covered organelles cell membrane
<p>5. A controlled experiment</p> <ol style="list-style-type: none"> keeps things from getting too dangerous. tests only one factor at a time. is a practice or "warm-up" experiment. doesn't allow much creativity. 	<p>6. All organisms that do not make their own food are called</p> <ol style="list-style-type: none"> consumers. decomposers. herbivores. producers.
<p>7. To find the volume of an object, you would</p> <ol style="list-style-type: none"> multiply length and width. multiply length, width, and height. measure how much fluid the object displaces. Either b or c 	<p>8. The amount of matter that an object is made of is the object's</p> <ol style="list-style-type: none"> area. surface area. volume. mass.
<p>9. A stimulus</p> <ol style="list-style-type: none"> is very interesting. causes an organism to respond. should be avoided if possible. appears real but is not. 	<p>10. Most single-celled organisms reproduce by</p> <ol style="list-style-type: none"> photosynthesis. sexual reproduction. asexual reproduction. intersexual reproduction.
<p>11. Which of the following is most like a blueprint or set of instructions?</p> <ol style="list-style-type: none"> ATP DNA starch hemoglobin 	<p>12. Which of the following is NOT an example of an organ?</p> <ol style="list-style-type: none"> skin heart stomach digestive system
<p>13. Which of the following gases do green plants need to survive?</p> <ol style="list-style-type: none"> oxygen only carbon dioxide only oxygen and carbon dioxide oxygen and carbon monoxide 	<p>14. Which of the following molecules do not mix well with water?</p> <ol style="list-style-type: none"> proteins lipids carbohydrates nucleic acids
<p>15. Cells can use food energy only in the form of</p> <ol style="list-style-type: none"> carbohydrates. sugars. lipids. ATP. 	<p>16. Which of the following lists shows a progression from smaller to larger levels of organization as you read from left to right?</p> <ol style="list-style-type: none"> Organism, organ system, population Tissue, organ system, organism Organism, community, population Tissue, organ system, organ

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<p>17. When cells of one type work together as a group, they are</p> <ol style="list-style-type: none"> an organ. a tissue. a system. a community. 	<p>18. The passing on of traits from parents to offspring is called</p> <ol style="list-style-type: none"> DNA. development. metabolism. heredity.
<p>19. Single-celled organisms</p> <ol style="list-style-type: none"> grow by increasing the size of the cell. grow by increasing the number of cells. grow by increasing the number of nuclei. do not grow. 	<p>20. Which of the following is NOT a part of the cell theory?</p> <ol style="list-style-type: none"> All cells have a nucleus. All organisms are composed of one or more cells. The cell is the basic unit of life in all living things. All cells come from existing cells
<p>21. Proteins are put together at</p> <ol style="list-style-type: none"> ribosomes. the nucleus. lysosomes. vesicles. 	<p>22. All mammals belong to the same</p> <ol style="list-style-type: none"> genus. family. order. class.
<p>23. Which of the cell structures below is responsible for making ATP?</p> <ol style="list-style-type: none"> mitochondria chloroplasts ribosomes endoplasmic reticulum 	<p>24. Which of the following would you expect to see only in a plant cell?</p> <ol style="list-style-type: none"> ribosomes mitochondria chloroplasts lysosomes
<p>25. Mendel called the trait that disappeared after a cross of two true-breeding plants the</p> <ol style="list-style-type: none"> dominant trait. recessive trait. disappearing trait. genetic trait. 	<p>26. Two different forms of the same gene for a particular characteristic are called</p> <ol style="list-style-type: none"> alleles. genotypes. homologous chromosomes. encrypted genes.
<p>27. An organism's appearance, or expression of its genes, is called its</p> <ol style="list-style-type: none"> genotype. phenotype. allelotype. Punnett type. 	<p>28. Sex cells receive the proper number of chromosomes through</p> <ol style="list-style-type: none"> osmosis. halitosis. mitosis. meiosis.
<p>29. There are many shades of eye color in humans because eye color is determined by</p> <ol style="list-style-type: none"> the environment. more than one gene. one gene affecting many traits. incomplete dominance 	<p>30. The double helix structure of DNA most closely resembles a</p> <ol style="list-style-type: none"> bent soda straw. broken fork. twisted ladder. coiled spring.
<p>31. Evidence suggests that hominids—the family of primates that humans belong to—existed as long ago as</p> <ol style="list-style-type: none"> 4.4 billion years ago. 4.4 million years ago. 4,400 years ago. 440,000 years ago. 	<p>32. Members of which of the following kingdoms are commonly found living in conditions lethal to other organisms?</p> <ol style="list-style-type: none"> Protista Fungi Archaeobacteria Plantae

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<p>33. Darwin found that the finches on the different islands were</p> <ol style="list-style-type: none"> identical to each other. slightly different from each other. identical to the finches on the mainland. completely different from the finches on the mainland. 	<p>34. Pangaea was</p> <ol style="list-style-type: none"> a large land bird that is now extinct. disease believed to be responsible for mass extinctions. the second period of the Paleozoic era. a giant landmass making up a single "supercontinent."
<p>35. The scientific method</p> <ol style="list-style-type: none"> is used by all scientists in exactly the same way. is strict and rigid, without much room for creativity. is a series of steps used to answer a question. is only accurate if each step is done in the official order. 	<p>36. Scientists define a species as</p> <ol style="list-style-type: none"> a group of organisms that look similar. a group of organisms that live in the same environment. a group of organisms that can produce fertile offspring. a group of organisms that can have similar adaptations.
<p>37. Which of the following would most closely resemble modern humans?</p> <ol style="list-style-type: none"> Homo erectus Neanderthals Cro-magnons Homo habilis 	<p>38. Scientists hypothesize that the Earth's earliest atmosphere lacked</p> <ol style="list-style-type: none"> Oxygen. Carbon dioxide. Carbon monoxide. Nitrogen.
<p>39. One reason that insects can evolve quickly is that</p> <ol style="list-style-type: none"> they have short generation times. they have long generation times. their DNA mutates more easily. they have circular DNA. 	<p>40. The variety of dog breeds we see today is the result of</p> <ol style="list-style-type: none"> natural selection. chance breeding. selective breeding. many different ancestral species
<p>41. Which of the following levels of classification includes the most organisms?</p> <ol style="list-style-type: none"> genus phylum order class 	<p>42. Which of the following bases would pair with thymine?</p> <ol style="list-style-type: none"> guanine adenine cytosine thymine
<p>43. Wolves can benefit the health of an ecosystem by</p> <ol style="list-style-type: none"> controlling the populations of deer and elk. eating unwanted plants and shrubs. creating more habitat for woodpeckers. eliminating erosion problems. 	<p>44. A scientific theory is</p> <ol style="list-style-type: none"> well supported by many observations and experiments. usually just a scientist's best guess. a hypothesis that has not yet been tested. a hypothesis that has been proven incorrect.
<p>45. The term Blarina in Blarina brevicauda (short-tailed shrew) represents the</p> <ol style="list-style-type: none"> name of the species. name of the genus. name of the family. name of the order. 	<p>46. Succession is best described as</p> <ol style="list-style-type: none"> the death of a forest. the growth of small plants on rocks. the growth of an organism, such as a tree. a series of changes in a community over time.

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<p>47. Which type of interaction benefits both species involved?</p> <ol style="list-style-type: none"> commensalism mutualism parasitism symbiosis 	<p>48. Unlike vascular plants, nonvascular plants lack</p> <ol style="list-style-type: none"> true vascular tissues to carry water. gametophyte and sporophyte stages. cell walls. the green pigment chlorophyll.
<p>49. Water and minerals absorbed by the roots are transported by which type of tissue?</p> <ol style="list-style-type: none"> xylem phloem stoma epidermis 	<p>50. Plants with small flowers that lack an aroma probably</p> <ol style="list-style-type: none"> are deformed. will not be pollinated. rely on animals for pollination. rely on the wind for pollination.
<p>51. Which of the following is an abiotic part of the environment?</p> <ol style="list-style-type: none"> water alligator cordgrass all of the above 	<p>52. A healthy ecosystem should consist mostly of</p> <ol style="list-style-type: none"> herbivores. carnivores. omnivores. producers.
<p>53. Whether you are a boy or a girl is determined by</p> <ol style="list-style-type: none"> sex cells. any sex chromosomes. the sex chromosome from the mother's egg cell. the sex chromosome from the father's sperm cell. 	<p>54. Scientists can determine the age of a fossil through absolute dating by</p> <ol style="list-style-type: none"> comparing the fossil with other nearby fossils in the same layer. measuring the ratio of stable atoms to unstable atoms in the fossil. determining the age of the organism when it had lived half of its life. examining the sequence of fossils within several layers of rock.
<p>55. Competition occurs whenever</p> <ol style="list-style-type: none"> two members of the same species meet. two members of different species meet. animals are in the same area at the same time. two organisms go after the same limited resource. 	<p>56. A flower that has the shape and odor to attract a single type of pollinator, which feeds only on that type of flower, is probably the result of</p> <ol style="list-style-type: none"> parasitism. commensalism. coevolution. the interaction between predator and prey.
<p>57. Which of the following biomes receives the most rainfall?</p> <ol style="list-style-type: none"> temperate grassland tundra coniferous forest deciduous forest 	<p>58. On the ground in a lush rain forest, the limiting factor for plants is likely to be</p> <ol style="list-style-type: none"> water. sunlight. oxygen. carbon dioxide.
<p>59. How do protists differ from bacteria?</p> <ol style="list-style-type: none"> Protists can be single celled. Protists have nuclei. Protists contain DNA. Protists digest food. 	<p>60. An organism's way of life within an ecosystem is its</p> <ol style="list-style-type: none"> habitat. niche. level. community.