

SUPPLEMENTAL INSTRUCTION FOR SURVEY OF BIOLOGY by Richard X. Thripp

Week 12, Fall 2009, Nov 18 / 19. Taxonomy and Microbes ch. 14-15. daytonastate.org/biology

- 1.) Carolus Linnaeus developed the taxonomic naming system.
- 2.) Which of these is correct? (Circle one) Panthera pardus Panthera pardus Panther Pardus
- 3.) Domain, Kingdom, Phylum, Class, Order, Family, Genus, species
- 4.) Prokaryotic cells divide by binary fission. DNA is in the nucleoid, part of the cytoplasm.
- 5.) What shape of bacteria is spherical? (Circle) Coccus Bacillis Spirochetes
- 6.) What shape of bacteria is brick or rod shaped? Bacillis Spiral shaped? Spirochetes
- 7.) Autotrophs get carbon from CO<sub>2</sub> (carbon dioxide—inorganic). Heterotrophs get carbon from organic compounds. A photoautotroph gets its energy from sunlight and carbon from CO<sub>2</sub>.
- 8.) A chemoautotroph gets its energy from inorganic chemicals and its carbon from CO<sub>2</sub>.
- 9.) A photoheterotroph gets its energy from sunlight and carbon from organic compounds.
- 10.) A chemoheterotroph gets its energy AND carbon from organic compounds
- 11.) Green, red, and brown algae are multicellular Protista (eukaryotic kingdom).
- 12.) What is the ancestor of land plants? green algae (unicellular and colonial)
- 13.) A ciliate moves by cilia. A flagellate moves by flagella.
- 14.) Which of these is a chemoheterotroph? (Circle 2) humans trees flowers mushrooms
- 15.) Which of these is a photoautotroph? (Circle 1) mushrooms humans trees w/ leaves
- 16.) A waxy cuticle prevents dehydration in plants. (ch. 16)
- 17.) Mosses (bryophytes) alternate between the gametophyte and the sporophyte generations. The gametophyte is haploid (1N), and makes gametes by mitosis. (ch. 16)
- 18.) The sporophyte is diploid (2N) and makes spores by meiosis. (ch. 16)
- 19.) Ferns were the first plants to develop a vascular system. They are seedless. (ch. 16)
- 20.) Gymnosperms (conifers) were the first seed plants. (ch. 16)