

Name _____

Date _____

Class _____

Ch 1 wkst

1. All the organisms in West Nyack make up a(n)
 - a. ecosystem
 - b. community
 - c. population
 - d. experimental group
 - e. domain.

2. Which of the following is a correct sequence of levels in life's hierarchy, proceeding from least exclusive to most exclusive?
 - a. brain, organ system, nerve cell, nervous tissue
 - b. organ system, nervous tissue, brain
 - c. organism, organ system, tissue, cell, organ
 - d. nervous system, brain, nervous tissue, nerve cell
 - e. organ system, tissue, molecule, cell

3. Which of the following is *neither* an observation nor inference regarding the theory of natural selection?
 - a. Poorly adapted individuals never produce offspring.
 - b. There is heritable variation among individuals.
 - c. Because of overproduction of offspring, there is competition for limited resources.
 - d. Individuals whose inherited characteristics best fit them to the environment will generally produce more offspring.
 - e. A population can become adapted to its environment over time.

4. Protists and bacteria are classified in different domains because
 - a. protists eat bacteria.
 - b. bacteria are not made of cells.
 - c. protists have a membrane-bounded nucleus, which bacterial cells lack.
 - d. bacteria decompose protists.
 - e. protists are photosynthetic.

5. Which of the following best describes the logic of scientific inquiry?
 - a. If I generate a testable hypothesis, tests and observations will support it.
 - b. If my prediction is correct, it will lead to a testable hypothesis.
 - c. If my observations are accurate, they will support my hypothesis.
 - d. If my hypothesis is supported, I can expect certain test results.
 - e. If my experiments are set up right, they will lead to a testable hypothesis.

6. Which of the following lends the best support to the unity of all organisms?
 - a. matching DNA nucleotide sequences
 - b. descent with modification
 - c. the structure and function of DNA
 - d. natural selection
 - e. emergent properties

7. A controlled experiment is one that
 - a. proceeds slowly enough that a scientist can make careful records of the results.
 - b. tests experimental and control groups in parallel.
 - c. is repeated many times to make sure the results are accurate.
 - d. keeps all variables constant.
 - e. is supervised by an experienced scientist.

8. Which of the following statements best distinguishes hypotheses from theories in science?
 - a. Theories are hypotheses that have been proved.
 - b. Hypotheses are guesses; theories are correct answers.
 - c. Hypotheses usually are relatively narrow in scope; theories have broad explanatory power.
 - d. Hypotheses and theories are essentially the same thing.
 - e. Theories are proved true; hypotheses are often falsified.

9. Qualitative data would be
 - a. The temperature decreased from 20°C to 15°C.
 - b. The plant's height is 25 centimeters (cm).
 - c. The fish swam in a zigzag motion.
 - d. The six pairs of robins hatched an average of three chicks.
 - e. The contents of the stomach are mixed every 20 seconds.