

1. A trial idea about the nature of an observation or relationship is called
a) a theory b) a hypothesis c) a law d) a control
2. Is the following an example of inductive or deductive reasoning? If we accept the premise that all fish can swim, and we observe that sharks are fish, then we can conclude that sharks can swim.
a) inductive reasoning b) deductive reasoning
3. Is the following an example of inductive or deductive reasoning? Our new dog has recently started running to the door each time someone puts on their coat. Therefore, this behavior must be learned.
a) inductive reasoning b) deductive reasoning
4. A scientist hypothesizes that drug X will prevent hair loss. She designs an experiment giving mice in group 1 a normal diet without drug X and mice in group 2 a normal diet with drug X. The control group is
a) group 1 b) group 2 c) there is no control group
5. Human populations grow
a) geometircally b) arithmetically c) both of these d) neither of these
6. A hypothesis which, over time becomes supported by a large body of observations and experimental evidence is called a
a) placebo b) law c) theory d) none of the above
7. A major unifying concept of biology is :
a) that cells use the same laws of bioenergetics to function as the physical universe
b) the theory of evolution b) the Cell theory d) all of the above
8. All cells arise from pre-existing cells ?
a) true b) false
9. The bioenergetic pathways Glycolysis & Krebs Cycle are different in bacteria than they are in mammals ?
a) true b) false
10. The scientific project that is attempting to determine if there is extra-terrestrial life in the universe by searching for radio wave intelligent communications is known by the acronym ?
a) Big Bang b) SETI c) Panspermia d) none of these
11. Theory that life may have arisen by seeding of the planet Earth by meteorite contamination is ?
a) Special Creation b) Evolution c) Panspermia d) none of these
12. In the current theories of chemical evolution, which came first protobionts or amino acid monomers?
a) amino acids came first b) protobionts came first c) neither came first