

- (1) Chemicals make up everything around you, including your own body. (1 point)
- True False
- (2) Chemists study the properties of substances and the particles that compose those substances. (1 point)
- True False
- (3) The properties of water do not depend on how the atoms are bonded together in the molecule. (1 point)
- True False
- (4) Atoms and molecules determine how matter behaves. (1 point)
- True False
- (5) The scientific method emphasizes reason as the way to understand the world. (1 point)
- True False
- (6) A hypothesis can never be proven as wrong. (1 point)
- True False
- (7) The first step in acquiring scientific knowledge is often the observation or measurement of some aspect of nature. (1 point)
- True False
- (8) Which of the statements below is NOT part of the scientific method? (2 point)
- A) observation and measurement
B) formation of a hypothesis
C) testing of a hypothesis by experimentation
D) refinement of a hypothesis as needed
E) All of the above steps are part of the scientific method.
- (9) What term best describes a brief statement that summarizes many past observations and predicts new ones? (2 point)
- A) experiment
B) hypothesis
C) scientific law
D) theory
E) none of the above
- (10) A sample of wood with a mass of 3.0 grams was burned in an open dish. The ashes weighed 1.2 grams. What happened to the rest of the wood? (2 point)
- A) The remaining mass was destroyed.
B) The remaining 1.8 grams was converted into gaseous compounds.
C) Nothing, the burned wood simply has a mass of 1.2 grams.
D) The remaining 1.8 grams was converted into heat.
E) none of the above

- (11) Which statement accurately describes the purpose of experiments? (2 point)
- A) Experiments are designed to produce the results predicted by a theory.
 - B) Experiments can be replaced by a simple, logical reasoning of known facts.
 - C) Experiments are designed to produce unexplainable results for further investigation.
 - D) Experiments look for other observable predictions of a theory.
 - E) none of the above