1. Chemistry is the study of...
   a. candles.
   b. properties.
   c. reactions.
   d. matter.

2. Which of these is a qualitative observation?
   a. The candle is 3.0 centimeters long.
   b. The wick of the burning candle is curled at the top.
   c. The wax contains carbon and hydrogen.

*Students may have incorrectly chosen “c” here because it is indeed qualitative, but you must remind them that this
is a conclusion, not an observation.

3. An educated guess which explains observations is called ...
   a. a law.
   b. an experiment.
   c. a hypothesis.
   d. a variable.

4. In an experiment, the variable which is deliberately changed by the
   scientist is called ...
   a. the controlled variable.
   b. the manipulated variable.
   c. the resulting variable.

5. True or False? When a hypothesis is tested and shown to be incorrect,
   the experiment is a failure.
   a. True
   b. False