

Quiz #3

Directions: Choose the letter of the BEST answer and place it onto your scantron sheet.

1. From the Thinkwell notes, which of the following is *NOT* part of the scientific method?
 - A. Design experiments and make observations.
 - B. Formulate a theory based on a single observation
 - C. Create a hypothesis.
 - D. Test hypothesis with an experiment.
2. From the Thinkwell notes, according to the scientific method, what is the term for *a tentative explanation of a scientific event*?
 - A. Theory
 - B. Observation
 - C. Law
 - D. Hypothesis
 - E. Experiment
3. From the Thinkwell notes, which of the following is FALSE about a theory?
 - A. More observations can be used to predict a theory
 - B. A theory is usually consistent with reported experimental results.
 - C. A theory is a proven fact that is indisputably true.
 - D. A theory is an all-encompassing explanation for scientific events.
4. From the Thinkwell notes, according to Dalton's atomic theory of matter, what happens during a chemical reaction?
 - A. Atoms change into different elements to make new substances.
 - B. Phlogiston is lost in the formation of new substances.
 - C. Atoms rearrange to form new compounds.
 - D. Mass is lost in the formation of new substances.
5. From your textbook reading in Chapter 1, which of the following is the standard for comparison used in an experiment?
 - A. Independent variable
 - B. Control
 - C. Conclusion
 - D. Dependent variable
 - E. Model
6. From your textbook reading in Chapter 1, when working with chemicals in the laboratory, which of the following is something you should NOT do?
 - A. Read the label of chemical bottles before using them.
 - B. Use lots of water to wash skin that has been splashed with chemicals.
 - C. Take only as much as you need of shared chemicals.
 - D. Pour any unused chemicals back into their original bottles.

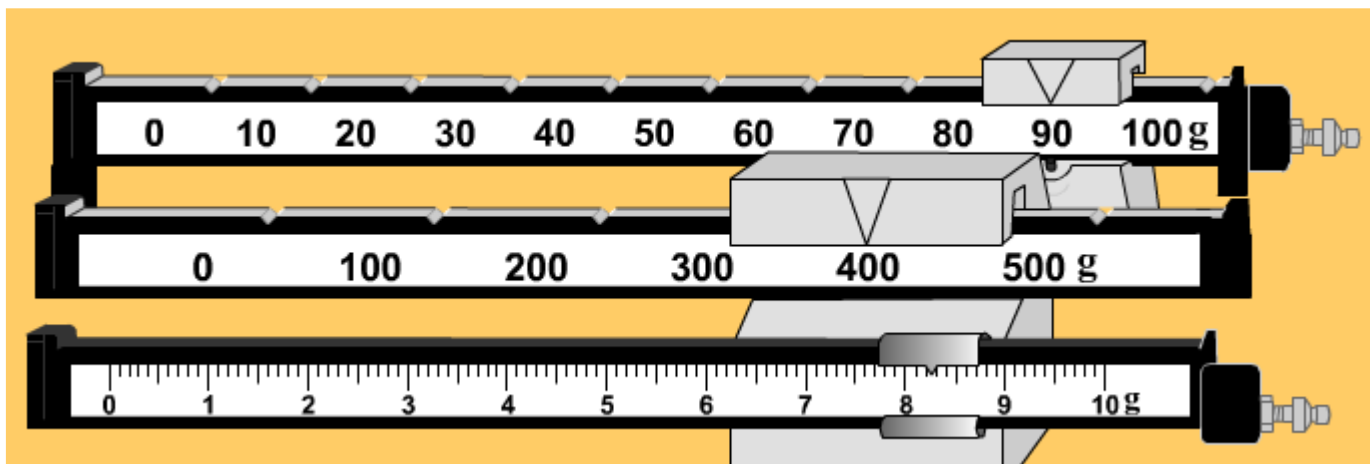
7. Here are some results from an experiment burning sugar. What is the % of the sugar that LEFT the test tube as part of the burning process?

	Mass
Test tube and holder	25.67 g
Test tube and holder and sugar	26.95 g
Sugar alone before burning	
Test tube and holder and sugar after burning (ash in tube)	26.45 g
Ash only	
Substance(s) which left the test tube as part of the burning process	
% of the substance(s) which left the test tube as part of the burning process	

- A. 47%
B. 28%
C. 61%
D. 87%
8. From Chapter 1 reading, ozone is a chemical molecule made up of three atoms of oxygen. Which of the following is true about ozone?
A. Ozone can cause cancer.
B. Ozone was first produced by G. Dobson in the 1920s.
C. Ozone is found in the stratosphere and protects us from some of the harmful effects of the sun.
D. Ozone is typically stored in large, fireproof tanks.
E. Ozone is found in especially high concentrations in Antarctica.
9. When you were in the lab, what is the meaning of the smallest “hash mark” on the lowest beam of the triple beam balance (we call this its calibration)?
A. 100 grams
B. 10 grams
C. 1 gram
D. 0.1 gram
E. 0.001 gram
10. When you were in the lab, in order to turn on the gas to your burner, the handle should be:
A. perpendicular to the outlet where the tubing is attached.
B. Straight in line with the outlet where the tubing is attached.
C. In between perpendicular and straight in line with the outlet where the tubing is attached.
11. From reading your student FAQ online, which of the following is *NOT* one of the three keys to success in taking chemistry?
A. study chemistry on the same day you have the class
B. never let yourself get behind
C. ask questions
D. work with one of your friends to share homework answers
12. From your Chapter 1 reading, which of the following is the BEST definition of chemistry?
A. Chemistry is the study of matter and the changes it undergoes.
B. Chemistry is divided into two distinct areas: organic chemistry and inorganic chemistry.
C. Chemistry is the study of life.
D. Chemistry is found all around us.

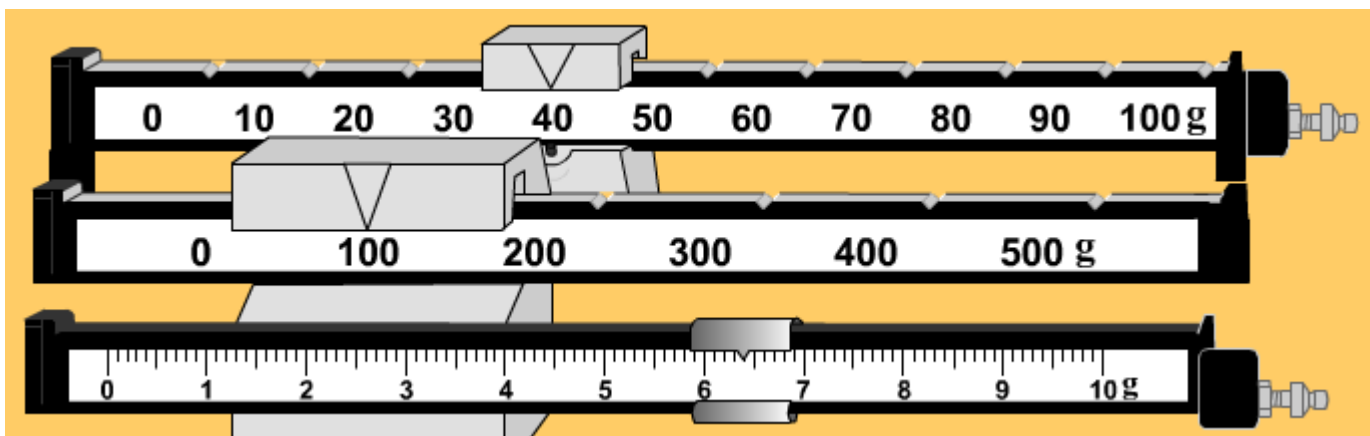
13. From your Chapter 1 reading, which of the following measurements does NOT depend on gravitational force?
- A. matter
 - B. mass
 - C. weight
 - D. air pressure

14. What is the mass of this object on a triple beam balance?



- A. 94.2 g
- B. 498.2 g
- C. 498.30 g
- D. 498.25 g
- E. 498.02 g

15. What is the mass of this object on a triple beam balance?



- A. 46 g
- B. 146 g
- C. 146.4 g
- D. 146.40 g
- E. 146.04 g