Study Guide for \*\*NEW MATERIAL\*\* on the 9 Weeks Test

In addition to the material on this page, please make sure to study the study guides that are glued in your notebook on pages 18, 30, and 44. You will be responsible for ALL of this information during your 9 weeks test. This study guide is due before the test which will be Thursday, March 6th!

1. What are elements and how are they grouped? What are some differences between metals, nonmetals and metalloids?

2. Who were all of the contributors to the atomic theory? What important discovery did each person add? (Know what each person is known for!)

3. Draw and label a diagram of an atom. Be sure to include the nucleus, protons, neutrons, and electrons.

4. How are protons, neutrons, and electrons alike and different?

5. Draw and label a lithium atom (3 P, 3N, and 3 e)

6. What are the differences between atomic number, mass number, atomic mass, and isotopes?

7. What forces help atoms? What does each force do for the atom?

8. Using your knowledge of atomic mass, mass number, protons, and neutrons, answer the following questions:

a. Lithium’s atomic mass is 7. It contains 3 protons. How many neutrons does lithium have?  
b. Calcium’s atomic mass is 40. It contains 20 protons. How many electrons does calcium have?  
c. Lead has an 82 protons and 105 neutrons. What is its mass number?  
d. Sulfur has 16 protons and 16 neutrons. What is the mass number?

Study Guide for \*\*NEW MATERIAL\*\* on the 9 Weeks Test

In addition to the material on this page, please make sure to study the study guides that are glued in your notebook on pages 18, 30, and 44. You will be responsible for ALL of this information during your 9 weeks test. This study guide is due before the test which will be Thursday, March 6th!

1. What are elements and how are they grouped? What are some differences between metals, nonmetals and metalloids?

2. Who were all of the contributors to the atomic theory? What important discovery did each person add? (Know what each person is known for!)

3. Draw and label a diagram of an atom. Be sure to include the nucleus, protons, neutrons, and electrons.

4. How are protons, neutrons, and electrons alike and different?

5. Draw and label a lithium atom (3 P, 3N, and 3 e)

6. What are the differences between atomic number, mass number, atomic mass, and isotopes?

7. What forces help atoms? What does each force do for the atom?

8. Using your knowledge of atomic mass, mass number, protons, and neutrons, answer the following questions:

a. Lithium’s atomic mass is 7. It contains 3 protons. How many neutrons does lithium have?  
b. Calcium’s atomic mass is 40. It contains 20 protons. How many electrons does calcium have?  
c. Lead has an 82 protons and 105 neutrons. What is its mass number?  
d. Sulfur has 16 protons and 16 neutrons. What is the mass number?