

SCA Science 6 – Study Guide

Chapter 7

Name: _____

I. Fill in the Blank: Write the correct answer in the blank

atom	electron	neutron	nucleus	proton
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- nucleus 1. center part of an atom
- proton 2. has a positive charge; located in the nucleus
- electron 3. has a negative charge; travels around the nucleus
- atom 4. smallest piece of an element that can be recognized as that element
- neutron 5. has no charge; located in the nucleus
6. Atoms bond with other atoms to complete their outer shells.
7. The atoms share electrons in a covalent bond.
8. An ionic bond forms when positively and negatively charged ions attract each other.
9. The vertical columns in the Periodic Table of Elements are called groups.
10. Horizontal rows are called periods. The elements in a single period all have the same number of shells.
11. chemistry is the study of matter – what it is made of, what its unusual characteristics are, how it reacts to other matter.

II. Multiple Choice: Write the letter of the correct answer in the blank.

B 1. The number of protons plus neutrons is the atom's approximate ____.

- A. atomic number B. atomic mass C. atomic model

C 2. Dmitri Mendeleev develops the periodic table of elements, which ____ elements.

- A. weighs B. alphabetizes C. classifies

C 3. Abbreviations for the name of elements are chemical ____.

- A. shells B. periods C. symbols

C 4. A ____ is formed when atoms join with other atoms.

- A. compound B. ion C. molecule

B 5. A ____ is the process in which different types of atoms join and form a new substance

- A. chemical formula B. chemical change C. compound

B 6. ____ are molecules formed from two or more different elements

- A. chemical change B. compound C. ion

C 7. An atom that has gained or lost electrons in an ____.

- A. chemical change B. synthesis reaction C. ion

B 8. A ____ is a reaction in which molecules combine to form a new substance

- A. chemical change B. synthesis reaction C. ion

III. Identification: Identify each characteristic as belonging to an **acid (A)**, a **base (B)**, or **both (C)**.

A 1. can burn or corrode

C 2. changes colors of an indicator

B 3. bitter taste

A 4. sour taste

B 5. Slippery

IV. Short Answer

1. If the element copper has an atomic number of 29, how many protons does it have? 29. How many electrons does it have? 29

How do you know? the number of protons and electrons is the same in a balanced atom.