

Sharyland ISD Study Guide

I.P.C. Semester B



Student Name: _____
Student ID: _____

IPC Credit by Exam Study Guide Semester II

The Science Department recommends that the student taking the credit by exam check out an I.P.C. book from the head counselor. Use the book as a resource to study for the exam. The exam will have 25 questions covering the following topics:

Chemistry: the branch of science that deals with the identification of the substances of which matter is composed; the investigation of their properties and the ways in which they interact, combine, and change; and the use of these processes to form new substances.

Chapter 14 Solids, Liquids, and Gases

- 1) What is the kinetic theory of matter?
- 2) How do particles move in the different states of matter?
- 3) What is Archimedes' principle?
- 4) What is Pascal's principle?

Chapter 15 Classification of Matter

- 1) What are the differences between substances and mixtures?
- 2) How are suspensions, solutions, and colloids related?
- 3) How does the law of conservation of mass apply to chemical changes?
- 4) What are physical and chemical properties?

Chapter 16 Properties of Atoms and the Periodic Table

- 1) What is the structure of the atom?
- 2) How do you determine the atomic mass and mass number of an atom?
- 3) What are the properties of metals, nonmetals, and metalloids?
- 4) How is the periodic table organized?
- 5) How do you determine the average atomic mass of an element?

Chapter 17 Elements and Their Properties

- 1) Why are noble gases unreactive?
- 2) Define: Halogen
- 3) Why are metals used to make wires?
- 4) How do atoms bond in metallic bonding?
- 5) What properties of hydrogen make it a nonmetal?

Chapter 18 chemical Bonds

- 1) What are ionic bonds and covalent bonds?
- 2) Why does chemical bonding occur?
- 3) Define: chemical formula
- 4) Define: chemical bond

Chapter 19 Chemical Reactions

- 1) What are the five general types of chemical reactions?
- 2) How do exothermic and endothermic reactions compare?
- 3) Define: coefficient