

A decorative graphic on the left side of the slide consisting of white lines and circles on a blue gradient background, resembling a circuit board or a molecular structure.

# INTRODUCTION TO CHEMISTRY

Chapter 1.1, pages 6 – 11.

# WHAT IS CHEMISTRY?

- Chemistry is the study of the composition of “matter” — (matter is anything with mass and occupies space), its composition, properties, and the changes it undergoes.
- Has a definite affect on everyday life - taste of foods, grades of gasoline, etc.
- Living and nonliving things are made of matter.

- **Chemistry** is the study of the composition, structure, and properties of matter and the changes it undergoes – such as burning fuels.



# 5 MAJOR AREAS OF CHEMISTRY

- 1) Analytical Chemistry- concerned with the composition of substances.
- 2) Inorganic Chemistry- primarily deals with substances without carbon
- 3) Organic Chemistry- essentially all substances containing carbon
- 4) Biochemistry- Chemistry of living things
- 5) Physical Chemistry- describes the behavior of chemicals (ex. stretching); involves lots of math!

# WHAT IS CHEMISTRY?

- **Pure chemistry**- gathers knowledge for the *sake of knowledge*
- **Applied Chemistry**- is using chemistry to *attain certain goals*, in fields like medicine, agriculture, and manufacturing – leads to an application
  - \* Aspirin ( $\text{C}_9\text{H}_8\text{O}_4$ ) - to relieve pain
  - \* *Use of TECHNOLOGY*

# WHY STUDY CHEMISTRY?

- Everyone and everything around us involves chemistry – explains our world
- What in the world isn't Chemistry?
- Helps you make choices; helps make you a better informed citizen
- A possible career for your future
- Used to attain a specific goal
- What did we describe as “pure” and “applied” chemistry?

# REVIEW WORKSHEET

- Introduction to Chemistry worksheet pages 1 and 2.