

# Physical Science A: Introduction to Chemistry

Mrs. McCargar – 2008/2009

## 1. Scientific Tools and Measurement

- Tools of the scientist
- Measurement and estimations
- Metric system and conversions
- Significant figures
- Graphing

## 2. Matter and Atomic Structure

- Atomic models
- Atoms, molecules, and compounds
- Atomic number and atomic mass
- Properties of matter
- Ions and isotopes
- The periodic table

## 3. Formulas and Bonding

- Naming compounds
- Writing chemical formulas
- Ionic and covalent bonds
- Writing chemical equations

## 4. Chemical Reactions

- Types of chemical reactions
- Predicting products
- Balancing equations
- Introduction to the mole
- Introduction to stoichiometry

## 5. Nuclear Chemistry and Space Science

- Radioactivity and radioactive decay
- Half-life
- Fission and nuclear power
- Fusion and stars
- The universe and galaxies
- Solar system
- Eclipses