

PH Physical Science Chemistry Final review

For each test, review the Study guide and Assessment problems at the end of the chapters
Review all vocabulary and compare and contrast definitions.
Provide examples of all concepts.

Ch 2

Compare and contrast: solutions, suspensions, colloids
Solutions, compounds, and mixtures
Physical and chemical changes
Methods of separating mixtures
Identifying whether a chemical or physical change has occurred.

Ch 4

Compare and contrast: protons, neutrons, electrons
Atomic number and mass
Electron configuration
Isotopes of elements
Dalton, Rutherford, and Thomson's experiments

Ch 5

Know how the periodic table is arranged!

Describe Mendeleev's process for organizing the periodic table in its present form.

What is the difference between a period and a group?

What is "Atomic Mass"?

What is the "weighted average"?

Describe an isotope.

Compare and contrast: Metals and nonmetals
alkali metals, transition metals, non metals, metalloids
Halogens and noble gases
Reactivity of elements by their arrangement on the periodic table.

Valence electrons elements in a group have similar properties

Ch 6

Compare and give examples: Ionic and covalent bonding, Polar molecules

Properties of Ionic compounds

Electron configuration

Cations and anions

Polyatomic ions, metallic bonds

Know how to write molecular formulas for ionic compounds.

Know atomic symbols for most elements, especially 1-35.

Ch 7

Learn how to balance simple equations.

You do not need to know how to count with moles.

Know what a mole is, however.

What are single and double replacement reactions?

Compare endothermic and exothermic reactions.

What is a catalyst and how does it affect reaction rates?

What is equilibrium and how is it influenced?

Ch 8

Learn how to balance simple equations.

What constitutes an acid and a base, give examples and know the pH scale.

You do not need to calculate molarity.