

CHM 102  
First Exam Topics

CHAPTER 12

States of matter

Phase changes

Calculate energy of phase changes and temperature changes

$$q = n \cdot \Delta H$$

$$q = n \cdot C \cdot \Delta T$$

Intermolecular interactions

dispersion forces

dipole-dipole interactions

hydrogen bonding

Surface tension

Viscosity

Polarity

CHAPTER 13

Solutions

Solubility

Concentration

mass percent

molarity

molality

Calculate concentrations, amounts, and volumes related to solutions

Dilution calculations

Solution stoichiometry and calculations

Colligative properties

freezing point depression

boiling point elevation

Calculate freezing point depression and boiling point elevation

$$q = m \cdot K_f$$

$$q = m \cdot K_b$$

Osmosis