Midterm Review: the midterm will be 100 multiple-choice questions covering topics from Unit 1 thru Unit 5. Below is a list of topics, concepts, scientists, and terms that you should be familiar with for the exam. Review your notes, EPs, quizzes, the website materials, and lab reports. Bring a #2 pencil and a calculator.

Metric System
Devices used to measure pressure and how they function: manometer, barometer.
Diffusion and Equilibrium
Particle Diagrams
Alloy
Cubic centimeter and milliliter
Dimensional Analysis and Conversion Factors (e.g. 1000 g = 1 kg)
Interpreting graphs (e.g. mass and volume, temperature and energy, pressure and volume)
$Q=mC\Delta T$ and $Q=mC$ (U4 EP3 & EP4)
Changes of State and Bose-Einstein condensates
Law of Conservation of Mass
Laws of Thermodynamics
Floating Ice and Volume
Kinetic Energy, Interaction Energy
Relationships between Pressure, Temperature, Volume, and Number of Particles
IFE tables
Extensive and Intensive Properties
Density
Mass and Change Labs and Histograms
Specific Heat, C
Δ
Significant Figures, and sig figs for calculations (+ - * /)
Reading Scales (taking measurements to the correct # of sig figs)
Precipitate
Thermal Expansion
Melting and Boiling Points
Matter – what is matter?
Hypothesis vs. Theory vs. Prediction vs. Observation
Heat vs. Temperature
Calorimetry
Absolute Zero
Phlogiston, Frigorific Particles, and Caloric Theory
Atmospheric Pressure (e.g. Crush Can Lab or how an airplane can fly?)
What makes for good experimental technique? (e.g. controls, repetition)
Discovery Science vs. Hypothesis Testing
Scientific Method
What is Science?
Accuracy vs. Precision
STP: mmHg to atm; Kelvin to Celsius; etc.
Mass and Volume
Graphing a line and forming an equation
Gas Laws: Gay-Lussac, Boyle, Charles
Intelligent Design: pseudoscience (e.g. FSM)
Pure Substances vs. mixtures
Identifying particle diagrams (e.g. mixture of compounds)