Hints for lecture test 1.

27 short items. These include:

Identifying an element from its symbol. (listed in first chapter)

Dividing one measurement by another to the correct sig figs

Converting mL to L or vice versa

Mass number, given protons, neutrons and electrons

Symbol for an isotope, given the numbers of the particles.

Formula mass, given the formula

grams to moles

moles to grams

moles from number of molecules

mass from number of molecules and molar mass

empirical formula from % comp.

Molecular formula from % comp and molar mass

A mass -mass problem in which you need to write the balanced equation but I don't tell you that.

Possible molar mass given an empirical formula

Limiting factor problem in moles

Limiting factor problem in grams

% yield

Name of compound from formula

Balancing, given formulas

Purpose of one of the experiments we discussed (Thomson, Rutherford, Millikan...)

Extensive vs. intensive properties

True substances.

Four questions about properties and locations of protons, electrons and neutrons.

Empirical formula FROM actual formula.

Problems: % Composition.

Stoichiometry, given balanced equation, moles to moles and moles to grams

Two balancing equation problems, that include formula writing

Empirical and molecular formula from % comp and molar mass

Limiting factor problem that includes calculating grams of left over reactant.

% yield problem.