Chemistry Unit Review Name:

Structure of an atom

Particle name	Charge	Comprised of	Where it is found

What is the outer most shell called? _____

How many electrons can each shell hold?

1st _____ 2nd _____ 3rd _____ 4th _____

What are the 2 main measurements of atoms?

How do you find the mass of an atom?

How do you determine the total charge of an atom/ion?

Bohr models

What is the purpose of the Bohr model?

Draw Bohr models for the following elements:

a) Nitrogen b) Helium c) Potassium

Valence electrons? Valence electrons? Valence electrons?

For each of the given numbers of subatomic particles, find the total mass of the atom, and the total charge: 14p , 18n, 15e & 25p, 22n, 25e

Draw the ions Bohr models for the first 10 elements on the Periodic Table and say what family they are in:

Naming Compounds

There are two types of compounds:_____

What is the difference between the two compounds?

Name the following covalent compounds:

a) NO_2 b) P_2O_5 c) CF_4 d) TeO

Write the formulas for the following covalent compounds:

a) Diphosphorous trioxide

b) Trisilicon dinitride

c) Selenium hexafluoride

d) Dinitrogen monoxide

Name the following ionic compounds:

a) Al_2O_3 b) $Mn(CrO_4)_2$ c) AgCl

Write the formulas for the following ionic compounds:

a) Maganese (IV) Oxide b) Calcium Phosphate c) Osmium (III) Sulphate

What is the difference between a Chemical Change and a Physical Change?

Chemical or Physical?

a) Snow becoming slush

b) Leaves changing colour in the fall

For the following: name each of the atoms involved, the number of each atoms and the total number of atoms in the formula: $(NH_4)_2SO_4$ & CrF_2

Scientific Method

What is science?

What is the scientific method?

List 3 pieces of lab safety equipment in the science room.

Design a controlled experiment and give examples of **two types** of data you would collect. Include a hypothesis for this experiment that uses the word because!