Make a Lewis dot sketch to show the ionic compound formed between the following elements.

* The metal will lose its valence electrons and become a cation.
* The non-metal will gain electrons to fill its valence shell (stable octet) and become an anion.
* The final molecule must be NEUTRAL:

Lithium and fluorine.

Magnesium and oxygen.

Beryllium and chlorine.

Sodium and nitrogen.

Magnesium and chlorine.

Calcium and bromine.

Aluminum and nitrogen.

Magnesium and nitrogen.

Aluminum and oxygen.

Write the formula and name for each of the compounds above.

Each of the following reactions fits into one of the following 5 classifications: Synthesis (S), Decomposition (D)

Single Replacement (SR), Double Replacement (DR) or Combustion of a Hydrocarbon (C). By inspection attempt to classify each.

\_\_ AgNO3 + \_\_ NaCl → \_\_ AgCl(s) + \_\_NaNO3

\_\_Mg(s) + \_\_O2(g) → \_\_MgO(s)

\_\_ NH3 → \_\_N2 + \_\_H2

\_\_ Pb + \_\_Cr2O3 → \_\_PbO2 + \_\_Cr

\_\_Na2CrO4+\_\_AgNO3→\_\_NaNO3+\_\_Ag2CrO4(s)

\_\_Na(s) + \_\_H2O(l) → \_\_NaOH + \_\_O2

\_\_ H2 + \_\_O2 → \_\_H2O

\_\_ AlCl3(aq) + \_\_ K(s) → \_\_Al(s) + \_\_KCl

\_\_KCl + \_\_O2 → \_\_K2O + \_\_ Cl2

\_\_PbO2 + \_\_MgCl2 → \_\_PbCl4 + \_\_ MgO

\_\_ C4H8 + \_\_ O2 → \_\_ CO2 + \_\_ H2O

Now go back and balance them all!