Chemistry Initial Assignment: Common ions and formulae

The essentials (you MUST research and learn the formula of these ions):

Sodium metal		Fluorine (molecule)	
Sodium ion		Fluoride ion	
Magnesium metal		Chlorine (molecule)	
Magnesium ion		Chloride ion	
Hydrogen ion		Hydroxide ion	
Hydride ion		Sulfate ion	
Aluminium metal		Carbonate ion	
Aluminium ion		Phosphate ion	
Iron (II) ion		Chlorate (I) ion	
Zinc (II) ion		Nitrate (V) ion	
Silver ion		Hydrochloric acid	
Carbon solid		Sulfuric acid	
Helium gas		Phosphoric acid	
Hydrogen gas		Nitric acid	
Nitrogen gas		Sodium hydroxide	
Nitride ion		Potassium hydroxide	
Oxide ion		Barium hydroxide	
Sulfide ion		Calcium carbonate	

Next Steps—Practise assembling ionic formulae

- Positive and negative ions can be combined to create ionic formulae.
- When assembling these, you should make sure that the overall charge is neutral and so you may need more of one ion than the other.

E.g. 1) Na^+ and Cl^- can combine to make NaCl

E.g. 2) Mg^{2+} and 2 x F^- can combine to make MgF_2

E.g. 3) Al^{3+} and 3 x NO_3^- can combine to make $Al(NO_3)_3$

- You may be asked to assemble an ionic formula using ions you are not familiar with!