**Ions and Valency**

1. Which part of an atom can be gained or lost by the atom to form an ion?
2. If a neutral atom lost two electrons, what is the resulting charge?
3. Explain why an aluminium ion has a valency of 3+.
4. Explain why an oxide ion has a valency of 2-.
5. What are the names of the ions of the following elements?
   1. Sulfur
   2. Sodium
   3. Chlorine
   4. Magnesium
   5. Oxygen
   6. Bromine
6. State how many electrons have been gained or lost to form each of the ions.
   1. Zn2+
   2. S2-
   3. O2-
   4. Mg2+
   5. Al3+
   6. F-
7. Explain how the periodic table can be used to predict the valency of some ions.
8. Write the ion symbols for
   1. Iron (II) and Iron (III)
   2. Lead (II) and Lead (IV)
9. Write the symbol for each ion.
   1. Hydrogen
   2. Copper (II)
   3. Sulfide
   4. Iodide
   5. Lithium
   6. Potassium
   7. Tin (II)
   8. Magnesium
   9. Chloride
   10. Oxide
   11. Fluoride
   12. Calcium
   13. Aluminium
   14. Bromide
   15. Copper (I)
   16. Sodium
   17. Manganese
   18. Tin (IV)