HW28, May 8th.

Bases

Let's remember how should we write structural formula of a substances and Lewis structure for ionic compounds. Sodium chloride, chemical formula NaCl, structural formula Na-Cl (one single bond between sodium and chlorine), Lewis structure:
When we write down Lewis structures for ionic compounds, you should remember the following: there are atoms that give away electron(s), and there are atoms that will accept electron(s), and we indicate corresponding charges on the atoms.
Sodium chloride formation looks like this:

Bases, metal hydroxides

Composed of metal atom(s) and hydroxyl group(s) e.g. NaOH, $Ca(OH)_2$

1. React with acidic oxides forming salt and water.
2. React with acids forming salt and water.
3. Can decompose upon heating into basic oxide and water.

Questions:

1. Write chemical equations for the following transformations:

   $Na \rightarrow NaOH \rightarrow Na_2O \rightarrow Na_2SO_4$

2. Write the structural formula and Lewis structure for NaOH and $Mg(OH)_2$