Making and Testing Carbon Dioxide, CO <sub>2</sub> Name:
Aim: To produce carbon dioxide in a chemical reaction and to test its effect on fire.
<b>Equipment:</b> gas jar, tongs, heat proof mat, icy-pole sticks, matches, marble chips (crushed limestone, calcium carbonate, CaCO <sub>3</sub> ), 1M hydrochloric acid (HCl)
<ol> <li>Method:</li> <li>Place a small amount of limestone into the gas jar (enough to cover the bottom).</li> <li>Pour in some hydrochloric acid to a depth of about 1 cm.</li> <li>Set an icy-pole stick on fire and then hold it in the gas jar.</li> </ol>
Questions:  1. Label the diagram above.  2. Draw in the limestone and the acid and label these two things as well.  3. Describe the chemical reaction between the limestone and the acid.
4. What happened to the burning wood when it was placed in the gas jar?
5. When calcium carbonate chemically reacts with hydrochloric acid, carbon dioxide, water (H <sub>2</sub> O), and calcium chloride (CaCl <sub>2</sub> ) are produced. Use this information to write down the chemical equation for the reaction.  (Word Equation)
(Balanced Symbol Equation)