Practice Exercises – Acids, Bases, Salts

1.) Three differences between acids and bases are:

Acid	Bases
corrodes metals	slippery
is sour	tastes bitter
blue litmus to red	red litmus to blue

2.) The pH range of an acid is from $0 - 7$.

3.) A pH of 9 will result in red litmus turning blue because bases turn litmus blue.

4a.) $HNO_{3\,(aq)}$ is an acid (ionic compound and it starts with H).

4b.) $NaOH_{\,(aq)}$ is a base (ionic compound and it contains OH).

4c.) $KOH_{\,(aq)}$ is a salt (ionic and no H or OH).

5a.) HBr is called hydrobromic acid.

5b.) HBr is called nitric acid.

5c.) HBr is called Hydroiodic acid.

6.) An indicator is a chemical that changes colour in the presence of an acid or a base.

7.) When hydrobromic acid and sodium hydroxide react both water and sodium bromide are produced.

8.) A change of pH from $5\ to\ 3$ results in a 100 fold increase in the acidity as the pH scale is logarithmic and so a value change of one equates to a change in the H^+ or OH^- by a factor of 10!