

## **Properties of Acids and Bases**

### Acids

- sour tasting
- water soluble
- react with some metals to produce  $H_2$  gas
- react with some carbonate groups to produce carbon dioxide gas
- good conductors of electricity
- important in industry
- very corrosive and can burn skin
- can cause serious environmental damage

ALWAYS contain a  $H^+$  ion when in solution

### Bases

- bitter tasting
- feel slippery when dissolved in water
- good conductors of electricity
- react with proteins to break down
- called '*alkaline*'

ALWAYS contain an  $OH^-$  ion when in solution

## pH Scale

- pH is a logarithmic scale, ranges from 1-14
- each increase of one unit is a ten times change in acidity or alkalinity
- as pH decreases the solution becomes more acidic
- example, a pH of 4 is ten times more acidic than pH 5 and 100 times more acidic than pH 6

