Chemistry

Chapter 4 Acid and bases

The pH scale

- The pH scale measures how acidic or alkaline a solution is
- low pH means more acidic
- high pH means less acidic
- Neutral substances like pure water has pH of 7
- PH scale goes from 0 to 14

Measuring pH

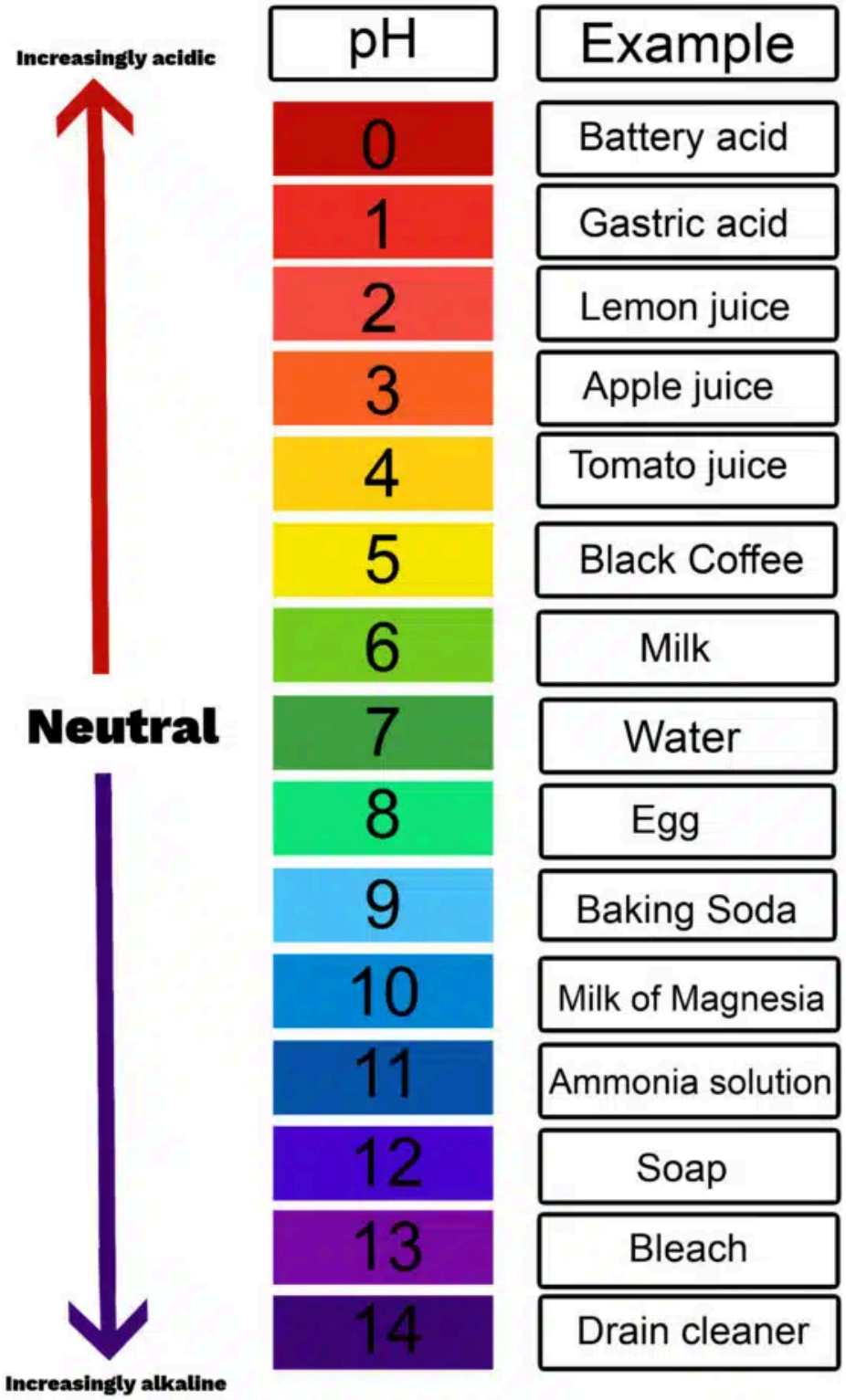
- Indicator, a dye that changes colour depending on the pH
- Wide range indicators, mix of dies that changes gradually over range of PH example universal indicator
- pH probe, Attached to pH metre measures pH electronically more accurate than the indicator

Neautralization

- Acid forms H+ ion in the water
- base reacts with an acid to form the salt
- alkali is the base that dissolve in water and it forms OH-
- neutral products have pH7

- **Indicator can show when neutralization is complete**
- **Your skin is slightly acidic pH is around 5.5**
- **When I said reacts with alkali positive ions react with negative Minds and their is formation of water**
- **Acid + Alkali = Water + Salt**
- **H+ + OH- = H20 + Nacl**

pH Scale - Universal Indicator Colours



Strong acids weak acids and their reaction

- Acid produce protons
- acid ionizes in water and their produce each H+
- hydrogen chloride gas is not acidic until it is in the water

Strong acids versus weak acids

- strong acids are HCL H_2SO_4 HNO_3 that ionizes completely
- Weak acids are CH_3COOH Citric carbonic it ionizes partially
- Weak acid ionization is reversible