The Orme Academy: Science Year 10 Learning Journey (Chemistry

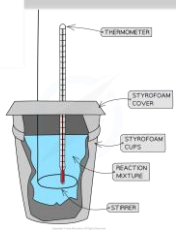
The Orme Academy
EMPOWERING LEARNERS FOR LIFE

Shaw Education Trust

Your journey continues onto Year 11 Science

Fuel cells

Cells and batteries

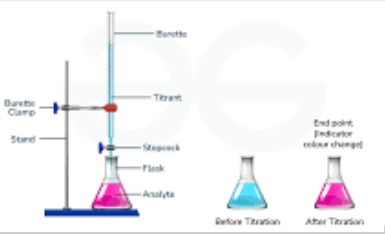


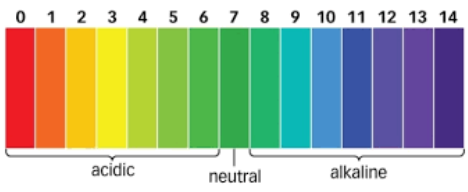
Investigating temperature change

$$\% \text{ ATOM ECONOMY} = \frac{\text{Mr OF DESIRED PRODUCT}}{\text{Mr OF TOTAL PRODUCTS}} \times 100$$

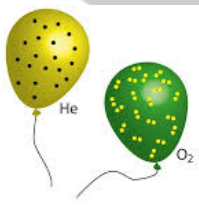
Percentage yield | Atom economy | Exothermic and endothermic | Bond energy (HT only)

C4.4 Energy changes





Volumes of gases | Strong and weak acids (HT only) | Titration | Acids, alkalis and neutralisation



Acid + Alkali → Salt + Water

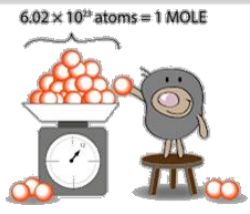
nitric acid	+	potassium hydroxide	→	potassium nitrate	+	Water

Limiting reactants (HT only)

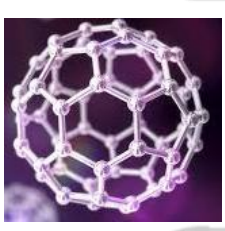
Concentration

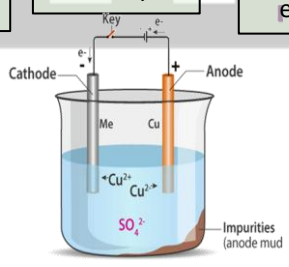
C4.3 Quantitative Chemistry

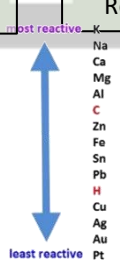
Obtaining raw materials | Recycling metals | Moles (HT only)



Corrosion | Electrolysis RP | Extracting metals by Electrolysis | Electrolysis | Half equations | Displacement Reactions | Ionic equations (HT only)





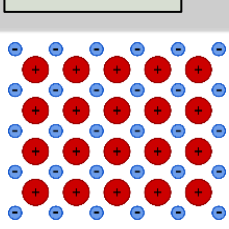


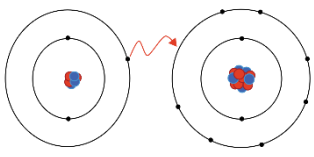
Extracting metals

C4.2 Extraction of metals

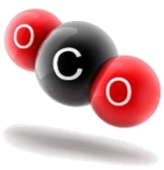
Polymers | Metallic Bonding | Alloys | Bonding models

Nanoparticles





Allotropes of Carbon



Your journey starts here!

Covalent substances | Covalent Bonding | Ionic substances | Ionic Bonding

C4.1 Structure and Bonding