



Learning Journey Map

Year 10 – Chemistry Separates



OCR

Oxford Cambridge and RSA

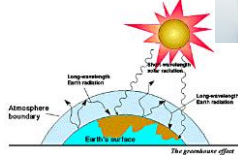

Move on to Year 11



Year 10 Survival Top Tips	
Tip 1	Learn and revise vocabulary weekly, use glossaries given and - Quizlet/Seneca/Educake
Tip 2	Use ' Youtube- e.g. myGCSE, MrExam to help review key skills and concepts
Tip 3	Use GCSE Bitesize/Kerboodle resources/past OCR questions
Tip 4	Use the Pixl Resources on Firefly & therapy questions
Tip 5	Read online science news, watch science documentaries

C6 Global challenges:
C6.3 Interpreting and interacting with earth systems
(Summer home learning)


- Forming the atmosphere
- Pollution and the atmosphere
- Climate change
- Water for drinking



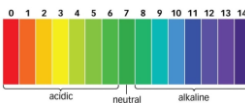
C3 Chemical reactions:
C3.2 Energetics

- Exothermic and endothermic reactions
- Reaction profiles
- Calculating energy changes



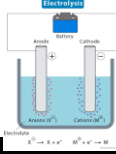
C3 Chemical reactions:
C3.3 Types of chemical reaction

- Redox reactions
- The pH scale
- Neutralisation
- Reactions of acids
- Hydrogen ions and pH



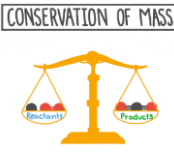
C3 Chemical reactions:
C3.4 Electrolysis

- Electrolysis of molten salts
- Electrolysis of solutions
- Electroplating



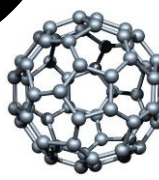
C3 Chemical reactions:
C3.1 Introducing chemical reactions

- Formulae of elements and molecules
- Formulae of ionic compounds
- Conservation of mass
- Chemical equations
- Half equations and ionic equations
- The mole
- Mole calculations



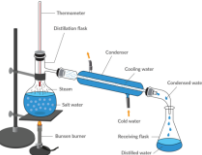

C2 Elements, compounds and mixtures:
C2.3 Properties of materials

- Carbon
- Changing state
- Bulk properties of materials
- Nanoparticles



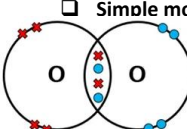

C2 Elements, compounds and mixtures:
C2.1 Purity and separating

- Relative formula mass
- Empirical formula
- Pure and impure substances
- Filtration and crystallisation
- Distillation
- Chromatography
- Purification and checking purity



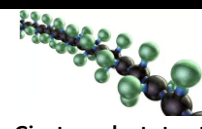
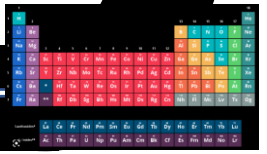
C2 Elements, compounds and mixtures:
C2.2 Bonding

- Metals and non-metals
- Electronic structures
- Forming ions
- Ionic compounds
- Simple molecules



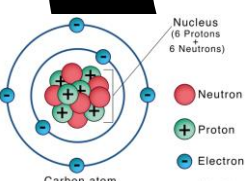
C2 Elements, compounds and mixtures:
C2.3 Properties of materials

- Giant covalent structures
- Polymer molecules
- Structure of metals
- Developing the Periodic Table
- Atomic structure and the Periodic Table

C1 Particles:
C1.2 Atomic structure

- Atomic structure
- Isotopes
- Developing the atomic model




Review of prior knowledge
C1 Particles:
C1.1 The particle model

- Introducing particles
- Chemical and physical changes
- Limitations of the particle model



CURRICULUM OVERVIEW

Development of key scientific skills: planning valid experiments, carrying out practicals safely, displaying & processing data, as well as analysing & evaluating results

Possible careers
Research scientist Biologist Doctor Nurse Forensic scientist Ecologist Farmer Nutritionist Sports scientist Personal trainer Biochemical engineer Civil Engineer Paramedic CSI Pharmacist Police officer Geologist and many more!!

CURRICULUM OVERVIEW