



# Learning Journey Map

## Year 10 – Combined Chemistry



# OCR

Oxford Cambridge and RSA

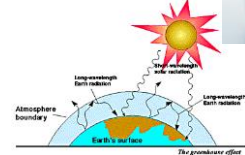

Move on to Year 11



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

**C6 Global challenges:**  
**C6.2 Interpreting and interacting with earth systems**  
**(Summer home learning)**

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

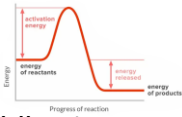





**C3 Chemical reactions:**

**C3.2 Energetics**

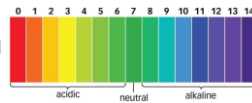
- Exothermic and endothermic reactions
- Reaction profiles
- Calculating energy changes



**C3 Chemical reactions:**

**C3.3 Types of chemical reaction**

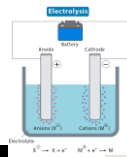
- Redox reactions
- The pH scale
- Neutralisation
- Reactions of acids
- Hydrogen ions and pH



**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
- Detecting gases
- The mole
- Mole calculations

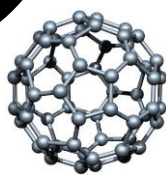
**CONSERVATION OF MASS**



**C2 Elements, compounds and mixtures:**

**C2.3 Properties of materials**

- Carbon
- Changing state
- Bulk properties of materials



**YEAR 10**

**C2 Elements, compounds and mixtures:**

**C2.1 Purity and separating**

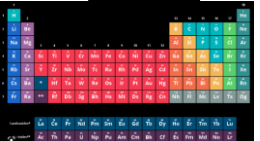
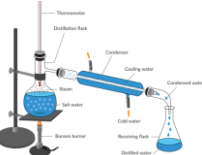
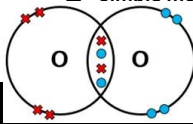
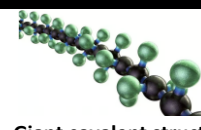
- Relative formula mass
- Empirical formula
- Pure and impure substances
- Filtration and crystallisation
- Distillation
- Chromatography
- Purification and checking purity

**C2 Elements, compounds and mixtures:**

**C2.2 Bonding**

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

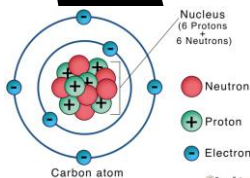
- Giant covalent structures
- Polymer molecules
- Structure of metals
- Developing the Periodic Table
- Atomic structure and the Periodic Table



**C1 Particles:**

**C1.2 Atomic structure**

- Atomic structure
- Isotopes
- Developing the atomic model



**Review of prior knowledge**

**C1.1 The particle model**

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

**YEAR 10**

**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**