



## Year 11: Chemistry

**Curriculum Intent:** in year 11 combined science Chemistry the aim is to build on students knowledge learned from year 7-10 to being able to apply this knowledge. Exam skills will be taught through recapping the knowledge the students have developed in the following topics:

- Particles and atoms
- Elements, compounds and mixtures
- Chemical reactions
- Predicting chemical reactions
- Monitoring and controlling chemical reactions
- Global challenges

	<b>Topic 1</b> Particles and atoms	<b>Topic 2</b> Elements, compounds and mixtures	<b>Topic 3</b> Chemical reactions	<b>Topic 4</b> Predicting chemical reactions	<b>Topic 5</b> Monitoring and controlling chemical reactions	<b>Topic 6</b> Global challenges
<b>Key ideas</b>	<ul style="list-style-type: none"> <li>• Particles</li> <li>• Atomic structure</li> <li>• Developing the atom</li> </ul>	<ul style="list-style-type: none"> <li>• Formula</li> <li>• Purity</li> <li>• Separating mixtures</li> <li>• Metals</li> <li>• Ions</li> <li>• Compounds</li> <li>• Periodic table</li> <li>• Properties</li> </ul>	<ul style="list-style-type: none"> <li>• Balancing equations</li> <li>• Detecting gases</li> <li>• Moles</li> <li>• Endothermic and exothermic reactions</li> <li>• Acid and alkali reactions</li> <li>• Electrolysis reactions</li> </ul>	<ul style="list-style-type: none"> <li>• Group 1, 7 and 0</li> <li>• Reactivity of metals</li> </ul>	<ul style="list-style-type: none"> <li>• Rates of reactions</li> <li>• reversible reactions</li> <li>• equilibrium</li> </ul>	<ul style="list-style-type: none"> <li>• extracting metals</li> <li>• life cycle assessments</li> <li>• alkanes and crude oil</li> <li>• atmosphere</li> <li>• climate change</li> </ul>
<b>Sequence of Learning - Key Questions</b>	All questions will be covered from years 7-10 topics					
<b>Vocabulary</b>	All vocabulary will be covered from years 7-10 topics					
<b>Practical Skills</b>	All practical skills will be recapped from years 7 – 10 topics					

<b>Assessment (Related to mastery grids)</b>	AO1 - Tassomai AO2 – applying knowledge – exam style questions	AO1 - Tassomai AO2 – applying knowledge – exam style questions	AO1 - Tassomai AO2 – applying knowledge – exam style questions	AO1 - Tassomai AO2 – applying knowledge – exam style questions	AO1 - Tassomai AO2 – applying knowledge – exam style questions	AO1 - Tassomai AO2 – applying knowledge – exam style questions
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