

## **QPHS Year 10 Chemistry Curriculum Map**

Half term	Title	Unit summary	Assessment
1	C2 Structure and Bonding	<ul> <li>Chemical bonds; ionic covalent and metallic</li> <li>Bonding and structure of substances including; ionic compounds, small molecules, polymers, giant covalent structures, metals, alloys and nanoparticles</li> <li>Structure and bonding of carbon;</li> </ul>	<ul> <li>Mid-point test with cumulative content from year 9 chemistry 2.</li> <li>End of topic test with cumulative content from year 9 chemistry 1 and 2.</li> </ul>
2		diamond, graphite, graphene and fullerenes.	
3	C3 Quantitative Chemistry	<ul> <li>Conservation of mass and relative formula mass</li> <li>Moles and amount of substance (HT) and concentration of solutions</li> <li>Yield and atom economy of chemical reactions.</li> </ul>	End of topic test with cumulative content from year 10 chemistry.
4	C4 Chemical reactions	<ul> <li>Reactivity of metals.</li> <li>Reactions of acids and titrations.</li> <li>Electrolysis.</li> </ul>	<ul> <li>Required practical – preparation of a pure, dry sample of a soluble salt.</li> <li>Required practical – investigate what happens when aqueous solutions are electrolysed.</li> <li>Required practical – determination of the reacting volumes of solutions of a strong acid and a strong alkali by titration.</li> <li>End of topic test with cumulative knowledge from year 9 chemistry 1.</li> </ul>
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6	C5 Energy Changes	<ul> <li>Exothermic and endothermic.         reactions and reaction profiles</li> <li>Energy changes in reactions (HT).</li> <li>Chemical cells and fuel cells.</li> </ul>	<ul> <li>Required practical – investigate the variables that affect temperature changes in reacting solutions.</li> <li>End of topic test with cumulative knowledge from year 10 chemistry.</li> </ul>
	Revision		