

Lesson Number	AQA Spec	Title	Content	Assessment/ Homework
Prior Learning		<ul style="list-style-type: none"> • Particles • Separation techniques • Mixtures • C2 covalent bonding • C7a Hydrocarbons 		
1	4.7.2.1	Structure and formulae of alkenes	<ul style="list-style-type: none"> • Describe the difference between an alkane and an alkene. • Draw the displayed structural formulae for the first four members of the alkenes. • Explain why alkenes are called unsaturated molecules. 	
2.	4.7.3.1	Addition polymerisation	<ul style="list-style-type: none"> • Recognise addition polymers and monomers from diagrams. • Draw diagrams of the formation of a polymer from an alkene. • Relate the repeating unit of the polymer to the monomer. 	
3	4.7.3.2	Condensation polymerisation	<ul style="list-style-type: none"> • Explain the basic principles of condensation polymerisation. • Explain the role of functional groups in producing a condensation polymer. • Explain the structure of the repeating units in a condensation polymer. 	
4	4.7.2.3	Alcohols	<ul style="list-style-type: none"> • Recognise alcohols from their name or from given formulae. • Describe the conditions used for the fermentation of sugar using yeast. • Write balanced chemical equations for the combustion of alcohols. 	

5	4.7.2.4	Carboxylic acids	<ul style="list-style-type: none"> Describe the reactions of carboxylic acids. Recognise carboxylic acids from their formulae. Explain the reaction of ethanoic acid with an alcohol. 	
6	4.7.3.3	Amino acids	<ul style="list-style-type: none"> Describe the functional group of an amine. Identify the two functional groups of an amino acid. Explain how different amino acids build proteins. 	
	4.7.3.4	DNA and other naturally occurring polymers	<ul style="list-style-type: none"> Describe the components of natural polymers. Explain the structure of proteins and carbohydrates. Explain how a molecule of DNA is constructed. 	
7	4.10.3.3	Ceramics, polymers and composites	<ul style="list-style-type: none"> Compare quantitatively properties of materials. Compare glass, ceramics, polymers, composites and metals. Select materials by relating their properties to uses. 	
8		Key concept: Intermolecular forces	<ul style="list-style-type: none"> Identify the bonds within a molecule and the forces between molecules. Explain changes of state. Explain how polymer structure determines its ability to stretch. Use three-dimensional (3D) models to represent hydrocarbons, polymers and large biological molecules. 	
		Maths skills: Visualise and represent 3D models		
End of Unit test				
Where we will use these ideas again	<ul style="list-style-type: none"> C6 rates C10 Sustainable development 			