

9E Making Materials

Draw a ring around a number of stars for each statement. If you are very confident about a statement, draw your ring around all the stars. If you do not know anything about a statement do not draw a ring.

Topic	At the end of the unit:					
9Ea						
	Recall some examples of ceramics and explain how the properties of different ceramics make them useful.	*	*	*	*	*
	Explain how the crystal size depends on the speed of cooling.	*	*	*	*	*
	Explain how the properties of a ceramic depend on its bonding and structure.	*	*	*	*	*
9Eb						
	Recall examples of polymers and link properties to their uses.	*	*	*	*	*
	Describe how monomers polymerise.	*	*	*	*	*
	Classify changes as exothermic or endothermic.	*	*	*	*	*
	Explain how the properties of a polymer depend on its bonding and structure.	*	*	*	*	*
9Eb Wo	rking Scientifically					
	Describe the process of peer review.	*	*	*	*	*
	Explain the main advantages and disadvantages of peer review.	*	*	*	*	*
9Ec						
	Describe what a composite is, give some examples, and explain their properties and uses.	*	*	*	*	*
	Describe what happens in thermal decomposition reactions.	*	*	*	*	*
	Identify and explain exothermic and endothermic reactions in terms of energy transfer.	*	*	*	*	*
	Model chemical reactions using formulae and state symbols.	*	*	*	*	*
9Ed						
	Explain the causes and effects of acid rain and the greenhouse effect.	*	*	*	*	*
	Recall some problems with the disposal of synthetic non-biodegradable polymers.	*	*	*	*	*
	Explain how toxins can cause harm by biomagnification through food chains.	*	*	*	*	*
	Explain how some of the problems of making and using materials can be overcome.	*	*	*	*	*
9Ee						
	Explain some of the problems of landfill sites.	*	*	*	*	*
	Explain some of the advantages of recycling materials.	*	*	*	*	*
	Describe how polymers, metals, glass, concrete and paper can be recycled.	*	*	*	*	*