PiXL Partners in excellence			Natural resources and	resources	_	Sterilising agents include chlorine, ozone and UV light.		able ater	approp	ter of an riate quality ntial for life	low le	vels of dissolutes. This is ca	ater should have lved salts and alled potable	PiXL
Earth's resource	Used to provide warmth, shelter, food and transport		from agriculture provide: timber, food, clothing and fuels.  Finite resources from the Earth,			sns osau Buisn water		UK water		Rain provides water with low levels of dissolved		This water collects in the ground/lakes/rivers. To make potable water an appropriate source is		
	<del>-</del>	humans	oceans and atmosphere are processed to provide energy and materials.			Sing the Earth's resources and shape below by the barbard by the Earth's by the barbard by the b				substances  Needs to occur is		chosen, which is then passed through filter beds and then sterilised.		
Chemistry and resources  Research and techniques improve agricultural and		These improvements provide new products and improve sustainability.			Using the Earth's	Desalination		on limi salty/s	fresh water is limited and salty/sea water is needed for drinking		This can be achieved by distillation o by using large membranes e.g. reverse osmosis. These processes require large amounts of energy.			
	industrial process		However, the raw mat	terial ethene	-	resources and				Waste w	ater tr	eatment		
Plastics using e		nally made ethene from rude oil	can also be obtained f ethanol, which can be during fermentation. I are now starting to us renewable crop for th	from e produced Industries se a		obtaining potable water  AQA GCSE Using	thods of	als (HT)	Waste water	Produced j urban lifes and indus processe	the environment. Sewage needs organic matter and harmful micro		the	
LCAS  assess the environmental  LISE and operation during		Life cycle ass		resources 1  Life cycle assessment and recycling	Alternative methods of	extracting metals	Sewage treatment	Includes m stages	· 1	<ul><li>Sediment effluent (</li><li>Anaerobi</li></ul>	g and grit removal tation to produce slud liquid waste or sewag c digestion of sludge biological treatment o	ge).		
Values	Allocatin numerical vo to polluta	<i>products</i> - Disposal  Allocating merical values to pollutant  Value judgments are allocated to the effects of pollutants so LCA is		A is	Ways of reducing the	`	М	etals ores		hese resources are limited		Copper ores especially are becoming sparse. New ways of extracting copper from low-grade ores are being developed.		
effects is not a purely obj					use of resources , reduces energy sources being		Ph	ytomining	Plants abso		and bu	plants are then harve Irned; their ash conta compounds.		
Reduce, reuse and recycle		nd I linis strateav realices the lise at I		ces v	s waste (landfill) and reduces				Bacteria is used to		) I	The metal compounds can be processed to obtain the metal		
Limited raw materials		materials, plastics and clay  ceramics  ceramics  comes from materials from		n lim	energy required for these processes limited resources. Obtaining raw om the Earth by quarrying and mining		Bi	oleaching	produce le solutions the metal com	it conta	from it obtain	te.g. copper can be ed from its compound cement or electrolysis	ds by	
Religing and recycling		be recycled by melting casting/reforming	Glass bottles melted to ma		es can be reused. They are crushed and nake different glass products. Products be reused are recycled.									

Partners in excellence		Natural resources and	1	Sterilising agents include chlorine, ozone and UV light.			appropri	er of an iate quality tial for life	low levels	inking water should have of dissolved salts and This is called potable	PIXL
warn food a	l to provide nth, shelter, and transport r humans	from agriculture provide: timber, food, clothing and fuels.  Finite resources from the Earth, oceans and atmosphere are processed to provide energy and materials.  These improvements provide new products and improve sustainability.		Using the Earth's resources and solutions by the Barth's Potable water	witi		with low	ain provides water with low levels of dissolved substances		r collects in the kes/rivers. To make potable appropriate source is which is then passed through and then sterilised.	
technic agric	earch and ques improve cultural and rial processes			Using the Earth's			Needs to occur is fresh water is limited and salty/sea water is needed for drinking		This can be achieved by distillation by using large membranes e.g. reverse osmosis. These processe require large amounts of energy.		
Normally made using ethene from crude oil  Howe can a ethan durin are n		However, the raw mat can also be obtained for ethanol, which can be during fermentation. It are now starting to use renewable crop for this	rom produced ndustries e a	resources and obtaining potable water  AQA GCSE Using	thods of	metals (n.)		Produced for urban lifest and indust processe	rom The yles the rial orga	ese require treatment before usenvironment. Sewage needs anic matter and harmful micronoved.	the
assessment carried ou assess th environme impact	Life cycle assessments are carried out to assess the environmental impact of  Life cycle assessed at t - Extraction and proc materials - Manufacturing and lifetime		Life cycle ass	resources 1  Life cycle assessment and recycling	Alternative methods of	באנומרוווו ווווווווווווווווווווווווווווווו		Includes m stages	any - S - A - A	Screening and grit removal Sedimentation to produce sluce fluent (liquid waste or sewage Anaerobic digestion of sludge Aerobic biological treatment of fluent.	ge).
Allocation numerical vote to pollute effects.	ng Value j	udgments are allocated ects of pollutants so LCA urely objective process.	A is	Ways of reducing the				These resou limite		Copper ores especially are becoming sparse. New ways extracting copper from low-ores are being developed.	
difficul	This strategy reduces the use of limited resources  Used for metals, glass, building materials, plastics and clay  Ceramics		This, therefo	re, reduces energy sources being				Plants absorb metal compounds		These plants are then harvested and burned; their ash contains t metal compounds.	
			environment	uces waste (landfill) and reduces ental impacts.  he energy required for these processes				Bacteria is used to produce leachate		The metal compounds can be processed to obtain the metal from it e.g. copper can be	
			comes from I materials fro	limited resources. Obtaining raw m the Earth by quarrying and minir onmental impacts.				solutions tha metal comp		obtained from its compoun displacement or electrolysis	-
		e recycled by melting asting/reforming	melted to ma	can be reused. They are crushed a ake different glass products. Produc be reused are recycled.							

PiXL Partners in excellence	•e		National		Sterilising agents in chlorine, ozone and light.			able iter			low leve microbe	drinking water should have els of dissolved salts and es. This is called potable	PIXL
Earth's resources		Natural resources and re from agriculture provide food, clothing and fuels.  Finite resources from the		de: timber, s.	dolevep uietsns sources aut Buisn	UK w	JK water		water.  This water collects in the ground/lakes/rivers. To make potable water an appropriate source is chosen, which is then passed through				
			oceans and atmosphere are processed to provide energy and materials.		sestainable and beat beat beat beat beat beat beat beat						filter bed	ds and then sterilised.  be achieved by distillation or	
Chemistry and resources			These improvements provide new products and improve sustainability.		Using the Earth's	Desalination				reverse	everse osmosis. These processes equire large amounts of energy.		
1		However, the raw material ethe		erial ethene	resources and obtaining potable water				Waste water treatment				
Plastics			can also be obtained from ethanol, which can be produced during fermentation. Industries are now starting to use a renewable crop for this process.				methods of metals (HT)	tals (HI)	Waste water		th or	nese require treatment before use environment. Sewage needs to rganic matter and harmful microsemoved.	the
LCAS		- Exti mai - Ma - Use	are assessed at these stag raction and processing ra terials nufacturing and packagin e and operation during time	Life cycle ass	Life cycle assessment and recycling  Ways of reducing the	cle nt and	Alternative methods of	Cting	Sewage treatment		-	Screening and grit removal Sedimentation to produce sluce effluent (liquid waste or sewage Anaerobic digestion of sludge Aerobic biological treatment of effluent.	ge).
Values		Value the eff	judgments are allocated fects of pollutants so LCA purely objective process.	is i			Meta	ils ores			Copper ores especially are becoming sparse. New ways extracting copper from lowores are being developed.		
			Surery objective process.		use of resource	ces		Phyto	omining			These plants are then harve and burned; their ash conta metal compounds.	I .
Reduce, reuse and recycle				re, reduces energy sources being es waste (landfill) and reduces eal impacts.							The metal compounds can be processed to obtain the me		
Limited raw materials		comes from materials fro		energy required for these processes limited resources. Obtaining raw m the Earth by quarrying and mining onmental impacts.			Biole	aching			from it e.g. copper can be obtained from its compound displacement or electrolysis	· ·	
Reusing and recycling		Glass bottles melted to ma		can be reused. They are crushed and ake different glass products. Products be reused are recycled.									

