

<b>Subject</b>	<b>A-level Environmental Science</b>	<b>Year Group:</b>	<b>12</b>	
<b>Unit/Topic</b>	<b>The Living Environment</b>	<b>The Physical Environment</b>	<b>Sustainability</b>	
<b>Skills</b>	Independent thinking Use and application of scientific methods and practices Numeracy and the application of mathematical concepts in a practical context Instruments and equipment Planning for representative data	Independent thinking Use and application of scientific methods and practices Numeracy and the application of mathematical concepts in a practical context Instruments and equipment Planning for representative data	Independent thinking Numeracy and the application of mathematical concepts in a practical context	
<b>Knowledge</b>	Conditions for life on Earth Conservation of biodiversity Life processes in the biosphere and conservation planning	The atmosphere The hydrosphere Mineral resources Biogeochemical cycles Soils	Dynamic equilibria Material cycles	
<b>Recall/review from previous learning</b>	Levels of organisation within an ecosystem Biodiversity The genome Variation and evolution Selective breeding and gene technology	Osmosis The principles of material cycling Chemical symbols, formulae and equations, including reaction stoichiometry and masses of reactants and products LCA and recycling Different methods of extracting and purifying metals The composition and evolution of the Earth's atmosphere since its formation Carbon dioxide and methane as greenhouse gases The Earth's water resources and obtaining potable water	The principles of material cycling Biodiversity	
<b>Assessment</b>	Formative assessments – end of topic tests Summative assessments – mock exams In class questioning Exam question homework tasks	Formative assessments – end of topic tests Summative assessments – mock exams In class questioning Exam question homework tasks	Formative assessments – end of topic tests Summative assessments – mock exams In class questioning Exam question homework tasks	
<b>Cultural Capital</b>	Job link each lesson University course links University visits	Job link each lesson University course links University visits	Job link each lesson University course links University visits	

	National Field work week British science week	National Field work week British science week	National Field work week British science week
<b>Literacy/Numeracy</b>	Arithmetic and numerical computation Handling data Algebra Graphs Geometry and trigonometry	Arithmetic and numerical computation Handling data Algebra Graphs Geometry and trigonometry	Arithmetic and numerical computation Handling data Algebra Graphs Geometry and trigonometry

<b>Subject</b>	<b>A-level Environmental Science</b>	<b>Year Group:</b>	<b>13</b>	
<b>Unit/Topic</b>	<b>Energy Resources</b>	<b>Pollution</b>	<b>Biological Resources</b>	
<b>Skills</b>	Independent thinking Numeracy and the application of mathematical concepts in a practical context Instruments and equipment Planning for representative data	Independent thinking Instruments and equipment Planning for representative data	Numeracy and the application of mathematical concepts in a practical context Instruments and equipment Planning for representative data	
<b>Knowledge</b>	The importance of energy supplies in the development of society The impact of the features of energy resources on their use The sustainability of current energy resource exploitation Strategies to secure future energy supplies	The properties of pollutants How environmental features affect the severity of pollution Strategies to control pollutants based on their properties and features of the environment	Agriculture Aquatic food production systems Forest resources	
<b>Recall/review from previous learning</b>	Chemical symbols, formulae and equations, including reaction stoichiometry and masses of reactants and products Electrolysis Exothermic and endothermic reactions Carbon compounds Fractional distillation of fossil fuels and cracking Atomic structure Conservation, dissipation and national energy	Chemical symbols, formulae and equations, including reaction stoichiometry and masses of reactants and products The chemistry of acids Common atmospheric pollutants and their sources Atomic structure	Variation and evolution The genome Selective breeding and gene technology	
<b>Assessment</b>	Formative assessments – end of topic tests Summative assessments – mock exams In class questioning Exam question homework tasks	Formative assessments – end of topic tests Summative assessments – mock exams In class questioning Exam question homework tasks	Formative assessments – end of topic tests Summative assessments – mock exams In class questioning Exam question homework tasks	
<b>Cultural Capital</b>	Job link each lesson University course links University visits National Field work week British science week	Job link each lesson University course links University visits National Field work week British science week	Job link each lesson University course links University visits National Field work week British science week	
<b>Literacy/Numeracy</b>	Arithmetic and numerical computation	Arithmetic and numerical computation	Arithmetic and numerical computation	

	Handling data Algebra Graphs Geometry and trigonometry	Handling data Algebra Graphs	Handling data Algebra Graphs
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<b>Subject</b>	<b>A-level Environmental Science</b>	<b>Year Group:</b>	<b>13</b>	
<b>Unit/Topic</b>	<b>Sustainability</b>	<b>Research methods</b>		
<b>Skills</b>	Independent thinking Numeracy and the application of mathematical concepts in a practical context			
<b>Knowledge</b>	Energy The circular economy	Scientific methodologies Sampling techniques		
<b>Recall/review from previous learning</b>	Biodiversity Exothermic and endothermic reactions Carbon compounds LCA and recycling Different methods of extracting and purifying metals Carbon dioxide and methane as greenhouse gases			
<b>Assessment</b>	Formative assessments – end of topic tests Summative assessments – mock exams In class questioning Exam question homework tasks	Formative assessments – end of topic tests Summative assessments – mock exams In class questioning Exam question homework tasks		
<b>Cultural Capital</b>	Job link each lesson University course links University visits National Field work week British science week	Job link each lesson University course links University visits National Field work week British science week		
<b>Literacy/Numeracy</b>	Handling data Algebra Graphs	Arithmetic and numerical computation Handling data Algebra		

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