





# Year 8: ASK Yourself!

Subject: Science

Unit 8.9: Using our Earth sustainably

	Launching	Developing	Progressing	Mastering
 <b>S</b> skills				
	<p>I need to construct a labelled diagram to identify the processes of the rock cycle. I need to identify the causes of weathering and erosion and describe how they occur.</p>	<p>I can partially explain why a rock has a particular property based on how it was formed. I can partially identify circumstances that indicate fast processes of change on Earth and those that indicate slower processes.</p>	<p>I can confidently use a diagram to show how carbon is recycled in the environment and through living things. I can confidently describe how human activities affect the carbon cycle. I can confidently describe how global warming can impact on climate and local weather patterns.</p>	<p>I can expertly evaluate claims that human activity is causing global warming or climate change. I can expertly compare the relative effects of human-produced and natural global warming.</p>
 <b>K</b> knowledge				
	<p>I need to know the three rock layers inside Earth are the crust, the mantle and the core. I need to know that Earth's atmosphere contains around 78 % nitrogen, 21 % oxygen, &lt;1 % carbon dioxide, plus small amounts of other gases.</p>	<p>I partially know that sedimentary, igneous and metamorphic rocks can be inter-converted over millions of years through weathering and erosion, heat and pressure, and melting and cooling.</p>	<p>I confidently know that carbon is recycled through natural processes in the atmosphere, ecosystems, oceans and the Earth's crust (such as photosynthesis and respiration) as well as human activities (burning fuels).</p>	<p>I understand and can apply evidence that global warming caused by human activity is causing changes in climate.</p>