





Year 8: ASK Yourself!

Subject: Science

Unit 8.9: Using our Earth sustainably

| | Launching | Developing | Progressing | Mastering |
|--|--|---|---|--|
|  S skills |  | | | |
| | <p>I can construct a labelled diagram to identify the processes of the rock cycle. I can identify the causes of weathering and erosion and describe how they occur.</p> | <p>I can confidently use a diagram to show how carbon is recycled in the environment and through living things.</p> <p>I can partially identify circumstances that indicate fast processes of change on Earth and those that indicate slower processes.</p> | <p>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. I understand a range of solutions to climate change</p> | <p>I can expertly evaluate claims that human activity is causing global warming or climate change.</p> <p>I can expertly evaluate solutions to climate change including recycling and responsible consumption.</p> |
|  K 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, <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> |