

## KS3 Science

<b>Learning intentions National Curriculum Key Stage 3</b>	<b>Learning outcomes</b>	<b>Key knowledge, skills and learning experience specific to the Lulworth visit</b>
<p><u>Geological Changes</u></p> <ol style="list-style-type: none"> <li>1. How forces generated by expansion, contraction and the freezing of water can lead to physical weathering of rocks.</li> <li>2. About the formation of rocks by processes that take place over different timescales, and that the mode of formation determines their texture and the minerals they contain.</li> <li>3. How sedimentary rocks are formed by processes including the deposition of rock fragments or organic material, or as a result of evaporation.</li> </ol>	<ol style="list-style-type: none"> <li>1. Students are encouraged to formulate ideas how and why freeze thaw may occur in the rocks.</li> <li>2. Students will be able to identify the different rock types by their specific characteristics and understand how a changing environment will determine the rock type.</li> <li>3. Students will understand the processes that are used to create sedimentary rocks.</li> </ol>	<ol style="list-style-type: none"> <li>1. Looking closely at the 5 rocks, the students will be able to see how freeze thaw affects the sandstone and chalk specifically.</li> <li>2. A timescale of the changing environment will be built up so that students can formulate how the different rocks at Lulworth have been formed. E.g. brackish environments, freshwater etc.</li> <li>3. Students are shown animations about the sedimentary nature of the Jurassic Coast with specific reference to the geology of Lulworth.</li> </ol>
<p><u>Breadth of study</u></p> <ol style="list-style-type: none"> <li>1. During the key stage, pupils should be taught Knowledge Skills and Understanding through a range of domestic, industrial and environmental contexts</li> <li>2. Communication; Use scientific language</li> <li>3. Health and Safety; recognise that there are hazards and take action to reduce risks to themselves and others.</li> </ol>	<ol style="list-style-type: none"> <li>1. Students will be taught in a different environment than their normal classroom setting. This will enable different learning styles to be supported.</li> <li>2. Students will learn new scientific terms and reinforce terms used in the classroom.</li> <li>3. Students will be able to assess risks present and identify appropriate methods to reduce those risks.</li> </ol>	<ol style="list-style-type: none"> <li>1. Lulworth Cove and surrounding areas provide an awe inspiring and memorable setting for students to be much more engaged in the environment that they are being taught about.</li> <li>2. Terms will be used such as; Triassic, Jurassic, Cretaceous, Mesozoic, plate tectonics, calcium carbonate etc.</li> <li>3. A Health and Safety talk with the students is used to initiate what they believe is an appropriate way to behave around the site.</li> </ol>