

<b>KS3 Science : Key Skills &amp; Concepts</b>	<b>Emerging</b>	<b>Developing</b>	<b>Securing</b>	<b>Mastering</b>
<p><b>Natural Phenomena</b> Scientists communicate their understanding of natural phenomena.</p>	<p>Identify natural phenomena using scientific words.</p>	<p>Describe natural phenomena using scientific language.</p>	<p>Explain natural phenomena using scientific terminology.</p>	<p>Describe natural phenomena in novel situations.</p>
<p><b>Science and Society</b> Scientists understand the relationship between humans and natural phenomena.</p>	<p>List ways humans use science or humans impact the natural world.</p>	<p>Describe how human activity impacts the natural world or a scientific phenomenon can be used in technology.</p>	<p>Describe, using scientific language, how human factors can impact the natural world, or a scientific phenomenon can be used in technology</p>	<p>Explain how several human factors can impact the natural world or a scientific phenomenon can be used in technology</p>
<p><b>Visualising Natural Phenomena</b> Scientists use equipment and models to visualise and simplify natural phenomena.</p>	<p>Follow simple instructions to visualise natural phenomena using equipment or models.</p>	<p>Use equipment or models to visualise natural phenomena. Identify structures and equipment. Describe how models can represent natural phenomena.</p>	<p>Describe in detail how a piece of equipment can be used to visualise scientific phenomenon.</p>	<p>Explain how a piece of equipment helps us visualise scientific phenomenon.</p>
<p><b>Experiments</b> Scientists carry out experiments to test hypotheses.</p>	<p>Ask a question about the natural world. Follow simple instructions to carry out an investigation, recording measurements.</p>	<p>Identify the variables from a scientific question. Make a prediction. Follow instructions to carry out an investigation recording measurements. Stating one risk or safety precaution</p>	<p>Write a scientific question, identifying its variables. Make a prediction explained using scientific language. Carry out an investigation recording observations appropriately. Identifying some hazards or safety precautions</p>	<p>Write a scientific question, identifying its variables and describe how to investigate it. Carry out an investigation with minimal prompting, recording results appropriately. Identify possible hazards and link these to safety precautions.</p>
<p><b>Data</b> Scientists use quantitative and qualitative methods to present, analyse and make conclusions about natural phenomena.</p>	<p>Name different types of graphs and plot data on axis. State a simple conclusion from data.</p>	<p>Plot data and label axes correctly. Describe patterns shown in graphs and state a conclusion using a piece of data. Calculate a mean.</p>	<p>Choose the correct type of graph explaining why the type of graph was chosen. Describe patterns shown in graphs and make a conclusion using a piece of data. Calculate the mean and range. Identify anomalies.</p>	<p>Draw the correct type of graph explaining why the type of graph was chosen. Describe data in detail. Make conclusions using data and explain them by linking to natural phenomena. Calculate the mean and range. Identify anomalies and suggest why they have arisen.</p>