

# Curriculum Overview

Subject: Science

Year Group: 7



Pupils are introduced to the importance of Science in the world around them. Pupils will develop the powerful knowledge needed to go beyond the common understanding of science to a deeper, more rounded world view. With a focus on key concepts, Apparatus and Techniques pupils will develop the subject disciplinary knowledge needed to think, write, communicate and relate Scientific ideas to the wider world. Pupils will follow the national curriculum and have opportunities to undertake open ended investigations each term developing analytical and rational thought processes.

TERM 1	TERM 2	TERM 3
<p><b>KNOWLEDGE/SKILLS</b></p> <p><b>Biology:</b> Digestion, Aerobic respiration</p> <p><b>Chemistry:</b> Safety in the Laboratory, Drawing and Handling Apparatus, separating mixtures</p> <p><b>Physics:</b> Forces and motion</p> <p>Skills:</p> <ul style="list-style-type: none"> <li>• Development of scientific thinking (modelling).</li> <li>• Experimental skill and strategies (risks and variables)</li> <li>• Analysis and evaluation (graphing)</li> <li>• Use of scientific vocabulary, units and symbols.</li> </ul>	<p><b>KNOWLEDGE/SKILLS</b></p> <p><b>Biology:</b> Cells, Plants</p> <p><b>Chemistry:</b> experimental planning and procedures. Matter, Periodic table</p> <p><b>Physics:</b> Energy transfer, Sound</p> <p>Skills:</p> <ul style="list-style-type: none"> <li>• Development of scientific thinking (modelling).</li> <li>• Experimental skill and strategies (risks and variables)</li> <li>• Analysis and evaluation (graphing)</li> <li>• Use of scientific vocabulary, units and symbols.</li> </ul>	<p><b>KNOWLEDGE/SKILLS</b></p> <p><b>Biology:</b> Skelton, muscles, Comparing respiration.</p> <p><b>Chemistry:</b> Elements and compounds</p> <p><b>Physics:</b> n/a</p> <p>Skills:</p> <ul style="list-style-type: none"> <li>• Development of scientific thinking (modelling).</li> <li>• Experimental skill and strategies (risks and variables)</li> <li>• Analysis and evaluation (graphing)</li> <li>• Use of scientific vocabulary, units and symbols.</li> </ul>
<p><b>KEY ASSESSMENTS</b></p> <p>Half term 1: Baseline test, Bunsen Licence Investigation focus- graphing. Topic test</p> <p>Half term 2: Investigation focus – methods. EOT test</p>	<p><b>KEY ASSESSMENTS</b></p> <p>Half term 1: Model making, Extended writing, Sanky diagrams</p> <p>Half term 2: Open ended investigations and variables, EOT test</p>	<p><b>KEY ASSESSMENTS</b></p> <p>Half term 1: Extended writing, Personal QLA.</p> <p>Half term 2: EOY test.</p>

Extended reading suggestions and external resources:

KS3 Bitesize Science <https://www.bbc.co.uk/bitesize/subjects/zng4d2p>

Oak National Academy Lessons <https://classroom.thenational.academy/subjects-by-key-stage/key-stage-3/subjects/science>

Chase High Youtube Playlists <https://www.youtube.com/channel/UCSK4ImJfi5sPH4UBp7cZtyQ>

We actively encourage pupils to read and research about the wider Scientific world- Planet Earth and Perfect Planet both on BBC iPlayer are examples of where pupils can engage with Science from the safety and comfort of their own homes.