

## Year 7 Science Scheme of Learning overview 2022-2023

Term	Unit	Content covered within unit
<b>Autumn 1</b>	Introduction to science lesson (1hour)	<ul style="list-style-type: none"> <li>• Introduction to teacher</li> <li>• Get to know classmates</li> <li>• Lab rules and safety</li> </ul>
	<b>Baseline test –all classes on the same day</b>	
	Introduction to science	<ul style="list-style-type: none"> <li>• Safety</li> <li>• Asking scientific questions</li> <li>• Planning investigation</li> <li>• Recording data</li> <li>• Analysing data</li> <li>• Evaluating data</li> <li>• Bunsen burner use</li> </ul>
	<b>Introduction to science assessment</b>	
	Cells	<ul style="list-style-type: none"> <li>• Microscopes</li> <li>• Animal and plant cells</li> <li>• Specialised cells</li> <li>• Movement of substances</li> <li>• Unicellular organisms</li> </ul>
<b>Autumn 2</b>	Particles and their behaviour	<ul style="list-style-type: none"> <li>• The particle model</li> <li>• States of matter</li> <li>• Melting and freezing</li> <li>• Boiling</li> <li>• More changes of state</li> <li>• Diffusion</li> </ul>
	<b>Complete Topics Cells and Particles and their behaviour prior to Assessment 1</b>	
	<b>Assessment 1</b>	
	Forces	<ul style="list-style-type: none"> <li>• Introduction to forces</li> <li>• Squashing and stretching</li> <li>• Drag and friction</li> <li>• Forces at a distance</li> <li>• Balanced and unbalanced</li> </ul>
<b>Spring 1</b>	Structure and function of body systems	<ul style="list-style-type: none"> <li>• Levels of organisation</li> <li>• Gas exchange</li> <li>• Breathing</li> <li>• Skeleton</li> <li>• Movement: joints</li> <li>• Movement: Muscles</li> </ul>
	Elements, atoms and Compounds	<ul style="list-style-type: none"> <li>• Elements</li> <li>• Atoms</li> <li>• Compounds</li> <li>• Chemical formulae</li> </ul>
<b>Complete Topics Forces, Structure and function of body systems prior to Assessment 2</b>		
<b>Spring 2</b>	<b>Assessment 2</b>	
	Sound	<ul style="list-style-type: none"> <li>• Waves</li> </ul>

		<ul style="list-style-type: none"> <li>• Sound and energy transfer</li> <li>• Loudness and pitch</li> <li>• Detecting sound</li> <li>• Echoes and ultrasound</li> </ul>
<b>Summer 1</b>	Reproduction	<ul style="list-style-type: none"> <li>• Adolescence</li> <li>• Reproductive systems</li> <li>• Fertilisation and implantation</li> <li>• Development of the foetus</li> <li>• The menstrual cycle</li> <li>• Flowers and pollination</li> <li>• Fertilisation and germination</li> <li>• Seed dispersal</li> </ul>
	Light	<ul style="list-style-type: none"> <li>• Light</li> <li>• Reflection</li> <li>• Refraction</li> <li>• The eye and the camera</li> <li>• Colour</li> </ul>
<b>Summer 2</b>	<b>Complete Topics Sound, Reproduction and Light prior to Assessment 3</b>	
	<b>Assessment 3</b>	
	Revision for end of year test	<ul style="list-style-type: none"> <li>• Working Scientifically</li> <li>• Cells particles and their behaviour</li> <li>• Forces</li> <li>• Structure and function of body systems</li> <li>• Elements, atoms and compounds</li> <li>• Sound</li> <li>• Reproduction</li> <li>• Light</li> </ul>
	<b>End of Year 7 Test</b>	
	Investigation Skills	<ul style="list-style-type: none"> <li>• Practical planning,</li> <li>• Carrying out investigations,</li> <li>• Analysis and conclusions</li> <li>• Evaluations</li> </ul>
	Project Work	<ul style="list-style-type: none"> <li>• Independent learning project</li> <li>• Research skills</li> <li>• Demonstration of communication skills</li> </ul>

Topics are covered in different orders by staff to avoid issues with practical requisitions.

A summary lesson, quality of written communication 6 mark question practice and a knowledge test accompany each topic.