



KS3 - Year 8 Science – Curriculum overview document

	Key content (knowledge)	Key skills	Assessments	Challenge and enrichment
Autumn half term 1	<p>1. Breathing and Digestion.</p> <p>2. Matter.</p>	<p>Plan a valid experiment to compare lung capacity.</p> <p>Identify hazards and risks before completing practical tasks.</p> <p>Identifying variables when investigating rate of an enzyme-controlled reaction and making conclusions.</p> <p>Use chemical formulae.</p>		See the Key Stage 3 science reading lists.
Autumn half term 2	<p>3. Waves.</p> <p>4. Chemical Reactions.</p>	<p>Making accurate measurements and recording data appropriately.</p> <p>Carry out investigations of conservation of mass, make conclusions and evaluate the method used.</p>	Test 1 – Breathing, Digestion & Matter.	

Spring half term 1	<p>Chemical Reactions continued.</p> <p>5. Forces.</p> <p>6. Respiration and Photosynthesis</p>	<p>Process and display data appropriately.</p> <p>Making predictions.</p> <p>Interpreting secondary data related to respiration rates and exercise.</p>	Test 2 – Waves and Chemical Reactions	Microbiology in Schools Advisory Committee (MiSAC) annual poster competition.
Spring half term 2	<p>Respiration and Photosynthesis continued.</p> <p>7. Energy.</p>	<p>Looking at data showing evidence of photosynthesis and respiration occurring and identifying compensation point.</p> <p>Plan a valid experiment to compare insulation with different materials.</p>	Test 3 – Forces and Respiration & Photosynthesis.	
Summer half term 1	<p>8. Earth.</p> <p>9. Evolution and Inheritance</p>	<p>Consider the importance of peer review in the scientific community.</p> <p>Revisit use of microscopes.</p>	Test 4 – Energy & Earth	

Summer half term 2	<p>Evolution and Inheritance continued.</p> <p>10. Electromagnets.</p>	<p>Plan, complete and analyse an investigation of solar panels in varying light intensities. Evaluate the method and data collected.</p>	<p>Test 5 – Evolution and Inheritance & Electromagnets.</p>	<ul style="list-style-type: none"> • Newstead Science Expo competition. • Royal Society of Biology Nancy Rothwell Prize biological drawing competition.
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