

<b>Subject: KS3 Science</b> <i>In Year 8 KS3 science classes rotate around 6 units. The rotation is necessary in relation to lab technicians workload planning and resources.</i>		<b>Year Group: 8</b>
<b>Term 1 Key Focus/Topic(s)</b> <b>Studio Magic (Physics)</b> <ul style="list-style-type: none"> <li>• Sound waves</li> <li>• Light waves</li> <li>• Reflection and refraction</li> </ul>	<b>Term 2 Key Focus/Topic(s)</b> <b>Catastrophe (Chemistry)</b> <ul style="list-style-type: none"> <li>• Rock cycle</li> <li>• Igneous, metamorphic, sedimentary rocks</li> <li>• Weathering and erosion</li> </ul>	<b>Term 3 Key Focus/Topic(s)</b> <b>A Live and Kicking (Biology)</b> <ul style="list-style-type: none"> <li>• Respiration</li> <li>• Digestive and circulatory systems</li> <li>• Nutrition</li> <li>• Drugs</li> </ul>
<b>Term 1 Assessment Opportunities:</b> <ul style="list-style-type: none"> <li>• Classwork with a particular focus on core skills (see rationale section).</li> <li>• Extended writing task.</li> <li>• End of unit test.</li> </ul>	<b>Term 2 Assessment Opportunities:</b> <ul style="list-style-type: none"> <li>• Classwork with a particular focus on core skills (see rationale section).</li> <li>• Extended writing task.</li> <li>• End of unit test.</li> </ul>	<b>Term 3 Assessment Opportunities:</b> <ul style="list-style-type: none"> <li>• Classwork with a particular focus on core skills (see rationale section).</li> <li>• Extended writing task.</li> <li>• End of unit test.</li> </ul>
<b>Term 4 Key Focus/Topic(s)</b> <b>Pyrotechnics (Chemistry)</b> <ul style="list-style-type: none"> <li>• Chemical reactions</li> <li>• Atoms, elements and compounds</li> <li>• Periodic Table</li> <li>• Combustion and the fire triangle</li> </ul>	<b>Term 5 Key Focus/Topic(s)</b> <b>Species at War (Biology)</b> <ul style="list-style-type: none"> <li>• Acids and Alkalis</li> <li>• Gas Tests</li> <li>• Metals and Non-metals</li> <li>• Making Compounds</li> <li>• Chemical Reactions</li> </ul>	<b>Term 6 Key Focus/Topic(s)</b> <b>nViz (Physics)</b> <ul style="list-style-type: none"> <li>• Energy</li> <li>• Energy transfer diagrams to model energy transfers</li> <li>• Energy efficiency</li> <li>• Renewable and non-renewable energy sources</li> </ul>
<b>Term 4 Assessment Opportunities</b> <ul style="list-style-type: none"> <li>• Classwork with a particular focus on core skills (see rationale section).</li> <li>• Extended writing task.</li> <li>• End of unit test.</li> </ul>	<b>Term 6 Assessment Opportunities</b> <ul style="list-style-type: none"> <li>• Classwork with a particular focus on core skills (see rationale section).</li> <li>• Extended writing task.</li> <li>• End of unit test.</li> </ul>	<b>Term 6 Assessment Opportunities</b> <ul style="list-style-type: none"> <li>• Classwork with a particular focus on core skills (see rationale section).</li> <li>• Extended writing task.</li> <li>• End of unit test.</li> </ul>

Rationale:

The topics covered in Year 8 complete the core scientific areas that pupils started to develop in Year 7.

The development and application of key scientific skills are the central focus of KS3 Science, these include:

Practical skills – working safely in a lab, making observations, recording data, using data to form conclusions

Literacy skills – using key terminology, writing scientific descriptions, writing scientific explanations, adding extra detail to scientific explanations

Numeracy skills – recording data, making measurements, basic calculations and averaging results, plotting and reading basic graphs

Evaluation:

Assessments opportunities will involve teacher, self and peer assessment. The assessment will focus around work produced in lessons where the students are required to demonstrate their literacy and/or numeracy skills as well as their scientific knowledge. Each unit of work finishes with an End of Unit Test and some topics have level assessed tasks.

A review of test papers and student work should show that the students are developing the scientific knowledge, plus the literacy and numeracy skills expected in Year 8.

Book scrutiny, lesson observations and collegial discussions will be used to quality assure teaching and learning. Qualitative observations will be made on students during the term 6 projects.