



Subject: Science

Teacher in Charge of Subject: Dr S Moody

Year: Seven

**Organisation of the Subject**

Science is taught in form groups. The students have 3 lessons per week.

Key Concepts (The big ideas underpinning the subject)	Key 'Learning Capacities' in this subject
<ul style="list-style-type: none"> <li>Scientific Thinking – scientific ideas, models and theories</li> <li>Applications and implications of science</li> <li>Cultural understanding</li> <li>Collaboration</li> </ul>	<ul style="list-style-type: none"> <li>Interdependence – pair and group work is used regularly</li> <li>Listening and empathy } Discussion, sharing of ideas and opinions</li> <li>Learning from others } and exploring a range of views</li> <li>Revising and use of review sheets during every unit</li> <li>Applying past knowledge</li> </ul>

What will your daughter be learning?	How will your daughter be learning?
<p>The topics we will cover include:</p> <ul style="list-style-type: none"> <li>Safety</li> <li>Space</li> <li>Changing State</li> <li>Cells</li> <li>Forces</li> <li>Reproduction</li> <li>Separation</li> <li>Energy</li> <li>Chemical reactions</li> <li>Electricity</li> <li>Acids and Alkalis</li> <li>Food Webs</li> </ul>	<p>We try to use a wide range of strategies to help your daughter challenge her current thinking and build new models and understanding. Practical work develops investigation skills and encourages her to think about how to explain what she is observing. Discussion, reading, watching DVDs and engaging with computer tutorial programs all help her develop her understanding.</p> <p>Individual, pair and group work are used extensively. Although the teacher will mark a lot of her work we find that pupils also learn by marking their own work (self-assessment) and the work of others (peer assessment).</p>

How will learning be assessed?	What can you do to support your daughter?
<p>A variety of class and homework tasks are used to help the teacher gauge your daughter's understanding. Key tasks are marked by the teacher. A short formal test at the end of each unit provides a 'level of understanding' for that section of work. Many tasks, including investigations and assignments on 'how science works' are also given a level.</p>	<p>There are excellent science documentaries on the television. Watching these with your daughter can really help develop her interest and enthusiasm for the subject. Please encourage your daughter to try different 'active revision' techniques when preparing for tests.</p> <p>We cover new and difficult ideas. We do not expect your daughter to understand everything straight away. Please encourage her to ask for further explanation at an early stage. This can save a lot of upset and worry.</p>

Equipment needed for this subject	Extra-Curricular / Enrichment Opportunities
<p>Pen, pencil, 30 cm transparent ruler (not fold up type), calculator and a laboratory coat are essential. Additional safety equipment will be provided by the school.</p>	<ul style="list-style-type: none"> <li>Year 7 and 8 STEM club</li> <li>Trip to Spaceport</li> <li>Visiting speakers</li> </ul>

If you have any questions about this Learning Overview, please contact your daughter's subject teacher in the first instance.