

## Science

**Head of Department:** Mr P Hoskins (Head of Science)

**Teachers of Science:**

Dr S Watts  
 Ms Owen  
 Mrs E Gomersall  
 Mrs D Carr  
 Mr J Hind  
 A. Sefton (Science Technician)  
 E. Fisher (Science Teaching Assistant)

**How is the learning organised?**

Groups are mixed ability across Year 7, 8 and 9. In most instances, classes have a two science teachers, who teach across the sciences (Biology, Chemistry and Physics) in a balanced science course.

The Key Stage 3 science curriculum is arranged as a 'spiral', so key ideas are continually revisited to consolidate previous learning and extend abstract concepts further. The curriculum is designed to promote the acquisition and retention of scientific knowledge, through the use of retrieval practice, spaced learning and dual coding. Synoptic assessment is used to track the increasing breadth and depth of knowledge and understanding.

Homework is given every two weeks and involves pupil in retrieving prior learning through a Cornell notes structure.

**Key Stage 3 Content/Skills:**

| Year 7  | Year 8   | Year 9   |
|---|--|--|
| Topics which are covered include: <ul style="list-style-type: none"> <li>• Cells, tissues and organs</li> <li>• Mixtures and separating</li> <li>• Resultant force and speed</li> <li>• Food webs and extinction</li> <li>• pH scale and neutralisation</li> <li>• Energy transfer and efficiency</li> <li>• Human reproduction and variation</li> <li>• Atoms, elements and compounds</li> <li>• Current electricity</li> <li>• Plants and photosynthesis</li> <li>• Periodic table and Mendeleev</li> </ul> | Topics which are covered include: <ul style="list-style-type: none"> <li>• Gravity, Earth and the solar system</li> <li>• Diet and Digestion</li> <li>• Materials</li> <li>• Magnets and electromagnets</li> <li>• Respiration</li> <li>• Reactions and equations</li> <li>• Motion graphs, work done and Hooke's Law</li> <li>• DNA, evolution and adaptation</li> <li>• Earth and it's atmosphere</li> </ul> | Topics which are covered include: <ul style="list-style-type: none"> <li>• Ohms Law and static electricity</li> <li>• Reactivity Series</li> <li>• Electricity for the home</li> <li>• Light and sound waves</li> </ul> <p>Pupils begin their GCSE course in Spring Term</p> |

Useful Resources:

BBC Bitesize – KS3 Science

<http://www.bbc.co.uk/education/subjects/zng4d2p>

S-Cool Science website

<http://www.s-cool.co.uk/gcse/biology>

<http://www.s-cool.co.uk/gcse/chemistry>

<http://www.s-cool.co.uk/gcse/physics>

Revision Guides from:

[https://www.cgpbooks.co.uk/Parent/books\\_ks3\\_science](https://www.cgpbooks.co.uk/Parent/books_ks3_science)

<http://www.letts-revision.co.uk/category/Ages+11-14/Science/Letts+KS3+Revision+Success+-+New+Curriculum>

How you can support your child:

Check that homework tasks are completed to the given deadlines.

Encourage pupils to watch science documentaries, and read general books on science and science articles in print and online.

Purchase an appropriate Key Stage 3 Science revision guide.