

Subject area – Science – Year 9

| | Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 | Summer 2 | | |
|--|---|--|--|--|---|--|--|--|
| Topics | Cell biology, Energy | Atomic structure, Bioenergetics | Chemistry of the atmosphere, Particle model of matter | Organisation, Waves | Structure and bonding | Review and reflection of year 9 topics | | |
| Assessment | End of unit tests for Cell biology and Energy. | End of unit tests for Atomic structure and bioenergetics. Year 9 exam. | End of unit tests for Chemistry of the atmosphere and Particle model of matter. | End of unit tests for Organisation and Waves. | End of unit test for Structure and bonding. | End of year 9 exam. | | |
| Homework | Model cells, exam questions from each topic. | Exam questions from each topic. Focus website. | Exam questions from each topic. Focus website. | Exam questions from each topic. Focus website. | Exam questions | Exam questions from each topic. Focus website. | | |
| Arts Mark | Use of salt dough to model cells. | Modelling structure of atoms. | Role play particles and changes of state. | | | | | |
| Building on prior learning | | | Knowledge gained at KS3 is the foundation of the KS4 curriculum. We build upon this knowledge, revisit and expand in key concepts. Pupils start preparing for GCSE Science qualifications in Year 9. | | | | | |
| Enrichment within the Curriculum | | | We have ensured that practical lessons are at the centre of our curriculum. Making real life links between science in lessons and the outside world. | | | | | |
| Extracurricular opportunities | | | We have scientist of the fortnight competition for all year groups. We will be running science trips throughout the year – details to be confirmed. National science week activities take place in lessons and at lunchtime. | | | | | |
| Positive impacting on personal development (SMSC) | | | Spiritual understanding – science is the study of nature and the curriculum aims to be about the awe and wonder of the natural world. Social development – working together in groups to investigate science practically and understand the effects of science on society. | | | | | |
| Preparing for the next stage of education | | | We start GCSE Science in Year 9. The courses prepare students to be able to follow careers in medicine, engineering, health care, sports science, computer science and the world of finance to name but a few pathways available to scientists. | | | | | |
| Ways to support your child's learning | | | Praise for effort rather than being 'clever' shows them that by working hard they can always improve | | | | | |
| Visits and trips Websites / books /papers / magazines TV/Films Blogs/ podcasts | | | Watch Science documentaries on TV – such as those by David Attenborough and Brain Cox. Visit Science museums – Thinktank in Birmingham, Lapworth Museum at Birmingham University (free entry all year round) and Space centre in Leicester. Go to the library to take out some popular science books. Try googling and doing some 'simple experiments at home' – lots of videos of experiments to watch on YouTube. Watch YouTube channels such as mygcsescience, freesciencelessons, minutephysics, crashcourse in biology / chemistry / physics. Look at the GCSE specifications on the AQA website. We follow AQA Trilogy Science in Year 9. | | | | | |



Subject area – Science – Year 9

| | Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 | Summer 2 | | |
|--|---|--|--|---|---|--|--|--|
| Topics | Cell biology, Energy | Atomic structure, Bioenergetics | Chemistry of the atmosphere, Particle model of matter | Organisation, Waves | Structure and bonding | Review and reflection of year 9 topics | | |
| Assessment | End of unit tests for Cell biology and Energy. | End of unit tests for Atomic structure and bioenergetics. Year 9 exam. | End of unit tests for Chemistry of the atmosphere and Particle model of matter. | End of unit tests for Organisation and Waves. | End of unit test for Structure and bonding. | End of year 9 exam. | | |
| Homework | Model cells, exam questions from each topic. | Exam questions from each topic. Focus website. | Exam questions from each topic. Focus website. | Exam questions from each topic. Focus website. | Exam questions | Exam questions from each topic. Focus website. | | |
| Arts Mark | Use of salt dough to model cells. | Modelling structure of atoms. | Role play particles and changes of state. | | | | | |
| Building on prior learning | | | Knowledge gained at KS3 is the foundation of the KS4 curriculum. We build upon this knowledge, revisit and expand in key concepts. Pupils start preparing for GCSE Science qualifications in Year 9. | | | | | |
| Enrichment within the Curriculum | | | We have ensured that practical lessons are at the centre of our curriculum. Making real life links between science in lessons and the outside world. | | | | | |
| Extracurricular opportunities | | | We have scientist of the fortnight competition for all year groups. We will be running science trips throughout the year – details to be confirmed. National science week activities take place in lessons and at lunchtime. | | | | | |
| Positive impacting on personal development (SMSC) | | | Spiritual understanding – science is the study of nature and the curriculum aims to be about the awe and wonder of the natural world. Social development – working together in groups to investigate science practically and understand the effects of science on society. | | | | | |
| Preparing for the next stage of education | | | We start GCSE Science in Year 9. The courses prepare students to be able to follow careers in medicine, engineering, health care, sports science, computer science and the world of finance to name but a few pathways available to scientists. | | | | | |
| Ways to support your child's learning | | | Praise for effort rather than being 'clever' shows them that by working hard they can always improve | | | | | |
| Visits and trips Websites / books /papers / magazines TV/Films Blogs/ podcasts | | | Watch Science documentaries on TV – such as those by David Attenborough and Brain Cox. Visit Science museums – Thinktank in Birmingham, Lapworth Museum at Birmingham University (free entry all year round) and Space centre in Leicester. Go to the library to take out some popular science books. Try googling and doing some 'simple experiments at home' – lots of videos of experiments to watch on YouTube. Watch YouTube channels such as mygcsescience, freesciencelessons, minutephysics, crashcourse in biology / chemistry / physics. Look at the GCSE specifications on the AQA website. We follow AQA Trilogy Science in Year 9. | | | | | |