

# Combined Science

(GCSE)



**Teacher Contact**: Ms Forster (Curriculum Leader for Science) or Miss Briggs (Second in Science/Key Stage 4 Coordinator)

# Why study Combined Science?

This pathway provides the foundation for understanding the material world. Scientific understanding is changing our lives and is vital to the world's future prosperity.

#### What key Skills will I learn?

Science engages students in a wide range of activities and learning styles:

- practical work developing laboratory skills;
- independent research and analysing reports critically;
- small group and class discussions;
- modelling and understanding key scientific concepts;
- discussing and making scientific and/or ethical judgements;
- data handling and analysis constructing and reading tables, graphs etc.

# What knowledge and concepts will I learn about?

You will achieve two GCSE's in Combined Science. Within Science lessons you will study concepts from Biology, Chemistry and Physics.

**Biology** - explores how living things function, adapt and relate to their natural environment. It covers the topics of Cells and control, Genetics, natural selection and genetic modification, Plant structures and their functions, Exchange and transport in animals, Ecosystems and material cycles.

**Chemistry** - explores the composition of substances, their properties and reactions. It covers the topics of Atomic Structure, Purifying substances and Ionic and Covalent Bonding, Acids, Fuels and Earth Sciences.

**Physics** - explores the mechanics of our Universe, looking at matter, energy and movement. It covers the topics of Radioactivity, Waves, Forces, Magnetism and Electromagnetic Induction.

# What attitudes and qualities are required to do well?

"To create and maintain curiosity through an innovative curriculum where scientific discovery and excitement is at the heart of teaching." Students should study the sciences in ways that help them to develop curiosity about the natural world, that give them an insight into how science works and that enable them to appreciate its relevance to their everyday lives.



The scope and nature of the study is broad, coherent, practical and satisfying.

#### How will I be assessed?

100% examination all taken at the end of Year 11 There will be two written papers for each Science, totalling 6 exams. All exams are 1 hour 10 minutes long.



# Which other subjects link into this course?

The Combined Science course links with mathematics and shares the development of similar skills.

# What career options are open to me?

Combined Science offers a broad, balanced curriculum which provides a sound foundation for many future careers or future study. If you are interested in a career in Science, consider studying Triple Science.

For more information you might like to visit

http://www.edexcel.com/quals/gcse/GCSE-science-2011/Pages/specifications.aspx