GCSE Chemistry – Y9 Transition

"Equipped with his five senses, man explores the universe around him and calls the adventure Science."

- **Edwin Powell Hubble**

- Science is a wide-ranging subject, and we aim to support students to become inquisitive learners. At Key Stage Four we offer Combined Science and separate Biology, Chemistry and Physics GCSEs. Courses are offered to best meet the needs and ability of students.
- Students studying either pathway have 6 hours of Science each week (2 of these for Chemistry).
- Chemistry investigates the interaction of tiny particles on a sub-atomic scale and views the effects of these interactions in the real world. Throughout key stage four practical work is used to highlight how the observations we make links to the scientific models of what is happening on an atomic and sub-atomic scale.
- In Combined science (Chemistry), there are 7 modules to study, in Separate Chemistry there are an additional two modules to study across the two years.

<table>
<tr><td>Preparation</td><td colspan="2">✓ Keep interested in your studies – Where is the Chemistry you are currently learning about based? What else can you find out about it?
✓ Research – What Chemistry is happening in the news? How is Chemistry being used in political choices and local decisions?
✓ Revision – keep on top of key words and ideas. Skills learnt in Year 9 are used in GCSE, so make sure you can balance equations and calculate Relative Formula Mass.</td></tr>
<tr><td rowspan="2">Overview of course</td><td><u>Combined Science (Chemistry)</u></td><td><u>Separate Chemistry</u></td></tr>
<tr><td>✓ Exam Board: Edexcel
✓ External exams – Combined Science (Chemistry): Two exams, each 1 hour 10 minutes long.
✓ Paper 3 (1SC0/1CF or 1SC0/1CH)
✓ Paper 4 (1SC0/2CF or 1SC0/2CH)</td><td>✓ Exam Board: Edexcel
✓ External Exams – Separate Chemistry: Two exams, each 1 hour 45 minutes long
✓ Paper 1 (1CH0/1F or 1CH0/1H)
✓ Paper 2 (1CH0/2F or 1CH0/2H)</td></tr>
<tr><td>Short term focus: Term 1</td><td colspan="2">In the September of Y10 we start with Rates of Reaction – how chemical reactions happen and how we can control them and make them go faster or slower.
We consolidate and build on the work from year 9 on equations and use this to explain our reactions.</td></tr>
<tr><td>Careers & Suitability</td><td>Skills you will develop in this course:
✓ Development of scientific thinking
✓ Understanding of everyday and technological applications of science
✓ Experimental skills and strategies
✓ Communication of information
✓ Analysis of information
✓ Presenting explanations</td><td>Careers:
Healthcare – Medicine, nursing, veterinary science.
Engineering.
Research.
Oil and Petroleum
Geology
Water management
Food and flavour chemistry</td></tr>
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