



## Science handbook...Curriculum key stage 4

### AQA Core and Additional Science (4461 & 4462)

#### Introduction:

Key stage 4 students who achieved level 5+ at key stage 3 (SATs) follow AQA syllabus for Core and Additional science (AQA 4461 & 4462). Students who achieve level 4 and below will study AQA Core science (4461) over two years. Core science will be studied, completed and examined by the end of year 10. Core and additional science is supported by department schemes of work and commercially produced text books written specifically for the AQA science specifications. The department intends to add to the teacher resource packs, and schemes of work over the next three years. Existing schemes of work and additional resources for extension work, literacy, numeracy, as well as material for pupils with SEN and EAL issues allow for a comprehensive delivery of the National Curriculum within the department. Differentiation for pupils with different abilities, prior attainment, behaviour and language skills is made possible using these resources. Differentiated printed homework tasks are also available to staff. The current KS4 course also places a strong emphasis on the inclusion of ICT. The department has adequate materials for investigations where appropriate.

#### Assessment and progression:

During year 10 for AQA core science, pupils are tested at the end of each module (B1, B2, C1, C2, P1, P2 & coursework) on seven occasions by multiple choice external exam (Year 10.) Levels generated by module tests and final examination will be stored electronically by teaching staff and held in a shared area. These levels will track progression, attainment and aid intervention for those pupils who are attaining less well than predicted or those who are performing sub level C at GCSE

The AQA Core Science modular GCSE has two levels

- Foundation
- Higher

During year 10, pupils sit six papers (multiple choice) and complete a centre assessed SC1 paper for coursework/practical skills.

Core science: (Year 10 or Year 10 & 11)

This specification is one of a suite of GCSE Science specifications offered by AQA. The specification leads to a single award GCSE Science A. The award has seven assessment units. There are two tiers of assessment for the units which are objective tests: Foundation (G-C) and Higher (D-A\*). The centre-assessed unit is not tiered.

Module		Value	Comments
Biology	1A	12.5%	Multiple choice 36 questions
Biology	1B	12.5%	Multiple choice 36 questions
Chemistry	1B	12.5%	Multiple choice 36 questions
Chemistry	1A	12.5%	Multiple choice 36 questions
Physics	1A	12.5%	Multiple choice 36 questions
Physics	1B	12.5%	Multiple choice 36 questions
Science Investigations		25%	Coursework

Year 10 Core science: (Over ONE year only)

Year 10 Core Science AQA Specification A (4461)					
YEAR 10	UNIT	TOPICS	ORDER	TIMINGS & NO OF LESSONS	DATES
	CODE				
YEAR 10	BLY1A	Human biology Chapters 1 & 2 from AQA book	1	25	Sep-year 1-2006
2006-2007	CHY1A	Products from rocks Chapters 5 & 6 from AQA book	2	25	Nov-year 1 (EXAM 2 modules)
	PHY1A	Energy and electricity Chapters 9 & 10 from AQA book	3	25	Jan-year 1-2007
	BLY1B	Evolution and the environment Chapters 3 & 4 from AQA book	4	25	Mar-year 1 (EXAM 2 modules)
	CHY1B	Oils, earth and the Atmosphere	5	25	Apr-year 1-2007

		Chapters 7 & 8 from AQA book			
	PHY1	Radiation and the Universe Chapters 11 & 12 from AQA book	6	25	Jun-year 1 (EXAM 2 modules)
<b>C*WORK</b>	SC01		1	10	June until end of year 1
TOTAL LESSONS (end of June for Year 10) there are 160 lessons over 33 weeks. Work experience has been taken out. There are therefore 150 lessons for all modules and 10 lessons for coursework. The first 6 modules must be finished by 25.06.07. Coursework's must be finished by 04.07)				160	NB: Each module may take between 22 to 25 lessons to teach with 3 lessons revision time.

Those who opt for core and additional will study Core science (4461) in year 10 and additional in year 11 (4462) Those who opt for Core science only will do Core over 2 years (Y 10 & 11)

Year 10 & 11 Core science: (over TWO years)

Those who opt for core and additional will study Core science (4461) in year 10 and additional in year 11 (4462) Those who opt for Core science only will do Core over 2 years (Y 10 & 11)

Additional science (Year 11)

This specification is one of a suite of GCSE Science specifications offered by AQA. The specification leads to a single award GCSE Additional Science. The award has four assessment units. There are two tiers of assessment: Foundation (G.C) and Higher (D.A\*). The centre-assessed unit is not tiered.

Year 10 & 11 Core Science AQA Specification A (4461)					
YEAR 10 YEAR 11	UNIT CODE	TOPICS	ORDER	TIMINGS & NO OF LESSONS	DATES
YEAR 10	BLY1A	Human biology Chapters 1 & 2 from AQA book	1	33	Nov-year 1 (EXAM 1 modules) 2006
2006-2008	CHY1A	Products from rocks Chapters 5 & 6 from AQA book	2	33	Mar-year 1 (EXAM 1 modules) 2007
	PHY1A	Energy and electricity Chapters 9 & 10 from AQA book	3	33	Jun-year 1 (EXAM 1 modules) 2007
	BLY1B	Evolution and the environment Chapters 3 & 4 from AQA book	4	33	Nov-year 1 (EXAM 1 modules) 2007
	CHY1B	Oils, earth and the Atmosphere Chapters 7 & 8 from AQA book	5	33	Mar-year 1 (EXAM 1 modules) 2008
	PHY1	Radiation and the Universe Chapters 11 & 12 from AQA book	6	33	Jun-year 1 (EXAM 1 modules) 2008

<b>C'WORK</b>	<b>SC01</b>		<b>1</b>	<b>10</b>	<b>June until end of year 1 2007</b>
TOTAL LESSONS (end of June for Year 11) there are <b>200</b> lessons over Year 10 & 11. Work experience has been taken out. There are therefore <b>180</b> lessons for all modules and 20 lessons for coursework. The 6 modules must be finished by <b>25.06.08</b> . Coursework's must be finished by <b>04.08</b> )				<b>160</b>	NB: Each module may take between 30-35 to lessons to teach with 3 lessons revision time.

<b>Module</b>	<b>Value</b>	<b>Comments</b>
<b>Biology 2</b>	<b>25%</b>	<b>Written paper</b>
<b>Chemistry 2</b>	<b>25%</b>	<b>Written paper</b>
<b>Physics 2</b>	<b>25%</b>	<b>Written paper</b>
<b>Science Investigations</b>	<b>25%</b>	<b>Coursework</b>

### Career Path

**Doctor, Dentist, Engineer, Pharmaceuticals, Chemist, Conservation, Biologist, Nurse, Vet, Surgeon, Paramedic, Physiotherapy, Massage, Pathology, Forensic Science, Radiographer, Nutrition list, Optician, Teacher.**

### **Year 11 additional Science: (over one year)**

**Those who opt for core and additional will study Core science (4461) in year 10 and additional in year 11 (4462) Those who opt for Core science only will do Core over 2 years (Y 10 & 11)**

<b>Year 11 Additional Science AQA Specification A (4462)</b>					
<b>YEAR 11</b>	<b>UNIT CODE</b>	<b>TOPICS</b>	<b>ORDER</b>	<b>TIMINGS &amp; NO OF LESSONS</b>	<b>DATES</b>
<b>YEAR 11</b>		<b>Biology 2</b>	<b>1</b>	<b>45</b>	<b>Module finished by Nov 2007</b>
2007-2008		<b>Chemistry 2</b>	<b>2</b>	<b>45</b>	<b>Module finished by Nov 2008</b>
		<b>Physics 2</b>	<b>3</b>	<b>45</b>	<b>Module finished by Nov 2008</b>
<b>C'WORK</b>	<b>SC01</b>		<b>1</b>	<b>10</b>	<b>June until end of year 1 2008</b>
TOTAL LESSONS (end of June for Year 11) there are <b>150</b> lessons over Year 11. Study leave has been taken out. There are therefore <b>130</b> lessons for all modules and 20 lessons for coursework. The 3 modules must be finished by <b>25.06.08</b> . Coursework's must be finished by				<b>160</b>	NB: Each module may take between 40-35 to lessons to teach with 3 lessons revision time.

04.08

