



## Subject Information for Parents

Department: Science

Year: Year 11 \*Single Science

### What topics are covered during the year?

GCSE Chemistry:	Edexcel 2011 GCSE Specification
GCSE Biology:	Edexcel 2011 GCSE Specification
GCSE Physics:	Edexcel 2011 GCSE Specification

During Year 11 Single Science students will study the remaining units for their GCSE's in Biology, Chemistry and Physics:

#### Chemistry Topics:

Chemistry Unit C2 - Discovering chemistry.

- Topic 1 - Atomic structure and the periodic table
- Topic 2 - Ionic compounds and analysis
- Topic 3 - Covalent compounds and separation techniques
- Topic 4 - Groups in the periodic table
- Topic 5 - Chemical reactions
- Topic 6 - Quantitative chemistry

Chemistry Unit C3 - Chemistry in action

- Topic 1 - Qualitative analysis
- Topic 2 - Quantitative analysis
- Topic 3 - Electrolytic processes
- Topic 4 - Gases, equilibria and ammonia
- Topic 5 - Organic chemistry

#### Biology Topics:

Biology Unit B2 - The components of life

- Topic 1 - The building blocks of cells
- Topic 2 - Organisms and energy
- Topic 3 - Common systems

Biology Unit B3 - Using biology

- Topic 1 - Control systems
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Topic 2 - Behaviour  
Topic 3 - Biotechnology

### Physics Topics:

Physics Unit P3 - Applications of physics  
Topic 1 - Radiation and treatment in medicine  
Topic 2 - X-rays and ECG's  
Topic 3 - Production, uses and risks of ionising radiation from radioactive sources  
Topic 4 - Motion of particles  
Topic 5 - Kinetic theory and gases

## What key assessments will take place?

All students will sit modular examinations in November, March and June. There is one 1 hour examination for each of the units and each exam is worth 25% of the overall single science grade. Exams take place as follows:

B2 -	The components of life	Monday 5th November 2012
C2 -	Discovering Chemistry	Tuesday 5th March 2013
B3 -	Using Biology	Monday 20th May 2013
C3 -	Chemistry in Action	Thursday 23rd May 2013
P3 -	Applications in Physics	Wednesday 5th June 2013

The remaining 25% of each GCSE award is assessed by a Science Controlled Assessment. For this work students will have to plan and carry out an investigation, record their results and then write up a conclusion and evaluation under exam conditions. Controlled assessment work can really boost your child's grade. Students have now completed Controlled Assessments for Biology, Chemistry and Physics. However after school sessions will run for those students that did not achieve their target grade.

## How can parents help their child's learning?

- ✓ log onto the Edexcel website for specification details and sample assessments;
- ✓ ask about the current topic and work and discuss this with your child;
- ✓ look at your child's exercise book. Help with tips on how to improve presentation;
- ✓ ask your child if any assessments are happening soon and if they understand what they have to do to be successful;
- ✓ encourage your child to revise for all of their Science exams, the website GCSE bitesize is very helpful and they can access revision materials by following this link:  
<http://www.bbc.co.uk/schools/gcsebitesize/science/edexcel/>

## Are there any trips, visits or special equipment needed?

For all Science lessons your child will need a pen, pencil, ruler and at times a calculator. Extra-curricular activities take place during the year and you will be informed of these as they arise.

It is also essential that they have Science Revision Guides for all three Single Sciences, these are available from school for 2:50 each.

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