

# GCSE Science at Holy Family

## When do I start GCSE Science?

Students start their GCSE science course in January of year 9. This allows them to learn the key foundational concepts with plenty of time to allow them to access the course more easily in years 10 and 11.

## What course do I do for science?

Edexcel Combined Science (9-1)

## How many GCSEs will I get?

GCSE Combined science is a double award subject, this means the students will gain 2 GCSE grades for science.

## What tier will I do?

Students will sit either the higher or foundation tier paper. The foundation tier paper will allow them to access grades 1-5 and the higher tier papers will allow them to access grades 4-9. This will be decided based on their predicted grades and their performance throughout their assessments during the course.

## What will my exams look like?

Students will sit 6 exam papers at the end of year 11. They will sit 2 biology, 2 chemistry and 2 physics papers

## Calculator

### Casio Scientific Calculator FX-83GTCW

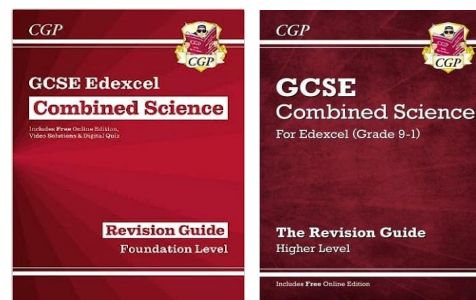
We recommend this calculator as it has all the functions needed for students to succeed. We will be using this model when explaining the use of calculators in lessons. It is essential that you are completely familiar with your calculator before sitting exams.

It is available online and in shops like WH Smiths and most supermarkets (it is currently £10-£15)

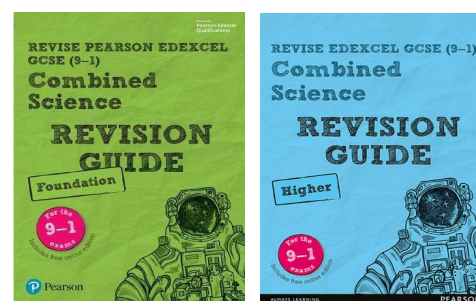


## Revision guides

If you wish to buy a revision guide so you can start working towards your exams there are 2 different ones we recommend. You would only need 1 of them.



CGP GCSE Edexcel  
Combined Science



Pearson GCSE Edexcel  
Combined Science

If you are unsure of which tier you need to buy, ask your science teacher.

## Paper 1: Biology 1

### Topics

1. Key concepts in biology
2. Cells and control
3. Genetics
4. Natural selection and genetic modification
5. Health, disease and the development of medicine

## GCSE Pod Higher



<https://members.gcsepod.com/shared/playlists/playlist/109844>

## GCSE Pod Foundation



<https://members.gcsepod.com/shared/playlists/playlist/109843>

Topic	BBC Bitesize
Key concepts in biology	<p><a href="https://www.bbc.co.uk/bitesize/topics/zy9ww6f">https://www.bbc.co.uk/bitesize/topics/zy9ww6f</a></p> 
Cells and control	<p><a href="https://www.bbc.co.uk/bitesize/topics/zpg997h">https://www.bbc.co.uk/bitesize/topics/zpg997h</a></p> 
Genetics	<p><a href="https://www.bbc.co.uk/bitesize/topics/zyggdm">https://www.bbc.co.uk/bitesize/topics/zyggdm</a></p> 

Topic	BBC Bitesize
Natural selection and genetic modification	<p><a href="https://www.bbc.co.uk/bitesize/topics/zqpyy4j">https://www.bbc.co.uk/bitesize/topics/zqpyy4j</a></p> 
Health, disease and the development of medicine	<p><a href="https://www.bbc.co.uk/bitesize/topics/z8xppbk">https://www.bbc.co.uk/bitesize/topics/z8xppbk</a></p> 

## Paper 2: Chemistry 1

### Topics

1. Key concepts in chemistry
2. States of matter and mixtures
3. Chemical changes
4. Extracting metals and equilibria

## GCSE Pod Higher






<https://members.gcsepod.com/shared/playlists/playlist/109843>

## GCSE Pod Foundation



<https://members.gcsepod.com/shared/playlists/playlist/172912>

Topic	BBC Bitesize
Key concepts in chemistry	<a href="https://www.bbc.co.uk/bitesize/topics/zw6nng8">https://www.bbc.co.uk/bitesize/topics/zw6nng8</a> 
States of matter and mixtures	<a href="https://www.bbc.co.uk/bitesize/topics/z9766yc">https://www.bbc.co.uk/bitesize/topics/z9766yc</a> 
Chemical changes	<a href="https://www.bbc.co.uk/bitesize/topics/zgd77p3">https://www.bbc.co.uk/bitesize/topics/zgd77p3</a> 

Topic	BBC Bitesize
Extracting metals and equilibria	<a href="https://www.bbc.co.uk/bitesize/topics/z3kjjty">https://www.bbc.co.uk/bitesize/topics/z3kjjty</a> 

## Paper 3: Physics 1

### Topics

1. Key concepts of physics
2. Motion and forces
3. Conservation of energy
4. Waves
5. Light and the electromagnetic spectrum
6. Radioactivity

## GCSE Pod Higher









<https://members.gcsepod.com/shared/playlists/playlist/109855>

## GCSE Pod Foundation



<https://members.gcsepod.com/shared/playlists/playlist/109852>

Topic	BBC Bitesize		Topic	BBC Bitesize	
Key concepts of physics	<a href="https://www.bbc.co.uk/bitesize/topics/z82ttv4">https://www.bbc.co.uk/bitesize/topics/z82ttv4</a>		Waves	<a href="https://www.bbc.co.uk/bitesize/topics/zsb44qt">https://www.bbc.co.uk/bitesize/topics/zsb44qt</a>	
Motion and forces	<a href="https://www.bbc.co.uk/bitesize/topics/zcw22nb">https://www.bbc.co.uk/bitesize/topics/zcw22nb</a>		Light and the electromagnetic spectrum	<a href="https://www.bbc.co.uk/bitesize/topics/zpvrrwx">https://www.bbc.co.uk/bitesize/topics/zpvrrwx</a>	
Conservation of energy	<a href="https://www.bbc.co.uk/bitesize/topics/z39ww6f">https://www.bbc.co.uk/bitesize/topics/z39ww6f</a>		Radioactivity	<a href="https://www.bbc.co.uk/bitesize/topics/zxnvv9q">https://www.bbc.co.uk/bitesize/topics/zxnvv9q</a>	

## Paper 4: Biology 2

### Topics

1. Key concepts in biology
2. Plant structures and their functions
3. Exchange and transport in animals
4. Ecosystems and material cycles

## GCSE Pod Higher



<https://members.gcsepod.com/share/d/playlists/playlist/109848>

## GCSE Pod Foundation



<https://members.gcsepod.com/share/d/playlists/playlist/109846>

Topic	BBC Bitesize	
Key concepts in biology	<a href="https://www.bbc.co.uk/bitesize/topics/zy9ww6f">https://www.bbc.co.uk/bitesize/topics/zy9ww6f</a>	
Plant structures and their functions	<a href="https://www.bbc.co.uk/bitesize/topics/zcgxxfr">https://www.bbc.co.uk/bitesize/topics/zcgxxfr</a>	
Animal coordination, control and homeostasis	<a href="https://www.bbc.co.uk/bitesize/topics/z38qqhv">https://www.bbc.co.uk/bitesize/topics/z38qqhv</a>	

Topic	BBC Bitesize	
Exchange and transport in animals	<a href="https://www.bbc.co.uk/bitesize/topics/zsrkk2p">https://www.bbc.co.uk/bitesize/topics/zsrkk2p</a>	
Ecosystems and material cycles	<a href="https://www.bbc.co.uk/bitesize/topics/ztvrrwx">https://www.bbc.co.uk/bitesize/topics/ztvrrwx</a>	

## Paper 5: Chemistry 2

### Topics

1. Key concepts in chemistry
2. Groups in the periodic table
3. Rates of reaction and energy changes,
4. Fuels and Earth science

### GCSE Pod Higher



<https://members.gcsepod.com/shared/playlists/playlist/172926>

### GCSE Pod Foundation



<https://members.gcsepod.com/shared/playlists/playlist/172914>

Topic	BBC Bitesize	
Key concepts in chemistry	<a href="https://www.bbc.co.uk/bitesize/topics/zw6nng8">https://www.bbc.co.uk/bitesize/topics/zw6nng8</a>	
Groups in the periodic table	<a href="https://www.bbc.co.uk/bitesize/topics/zsg997h">https://www.bbc.co.uk/bitesize/topics/zsg997h</a>	
Rates of reaction and energy changes,	<a href="https://www.bbc.co.uk/bitesize/topics/ztoggdm">https://www.bbc.co.uk/bitesize/topics/ztoggdm</a>	

Topic	BBC Bitesize	
Fuels and Earth science	<a href="https://www.bbc.co.uk/bitesize/topics/z2pyy4j">https://www.bbc.co.uk/bitesize/topics/z2pyy4j</a>	

## Paper 6: Physics 2

### Topics

1. Key concepts of physics,
2. Energy - Forces doing work
3. Forces and their effects,
4. Electricity and circuits,
5. Magnetism and the motor effect,
6. Electromagnetic induction,
7. Particle model
8. Forces and matter

## GCSE Pod Higher



<https://members.gcsepod.com/shared/playlists/playlist/109860>

## GCSE Pod Foundation



<https://members.gcsepod.com/shared/playlists/playlist/109859>

Topic	BBC Bitesize		Topic	BBC Bitesize	
Key concepts of physics	<a href="https://www.bbc.co.uk/bitesize/topics/z82ttv4">https://www.bbc.co.uk/bitesize/topics/z82ttv4</a>		Magnetism and the motor effect	<a href="https://www.bbc.co.uk/bitesize/topics/z34ddxs">https://www.bbc.co.uk/bitesize/topics/z34ddxs</a>	
Energy - Forces doing work	<a href="https://www.bbc.co.uk/bitesize/topics/zq6nng8">https://www.bbc.co.uk/bitesize/topics/zq6nng8</a>		Electromagnetic induction	<a href="https://www.bbc.co.uk/bitesize/topics/zs3ccj6">https://www.bbc.co.uk/bitesize/topics/zs3ccj6</a>	
Forces and their effects	<a href="https://www.bbc.co.uk/bitesize/topics/z8766yc">https://www.bbc.co.uk/bitesize/topics/z8766yc</a>		Particle model	<a href="https://www.bbc.co.uk/bitesize/topics/zts33k7">https://www.bbc.co.uk/bitesize/topics/zts33k7</a>	
Electricity and circuits	<a href="https://www.bbc.co.uk/bitesize/topics/zcd77p3">https://www.bbc.co.uk/bitesize/topics/zcd77p3</a>		Forces and matter	<a href="https://www.bbc.co.uk/bitesize/topics/z2tssrd">https://www.bbc.co.uk/bitesize/topics/z2tssrd</a>	