

# GCSE Science

Science is vital to understanding the world around you, from the food you eat, the computers and phones you use to communicate to navigating the world safely. The key skills you learn in Science help you to spot “Fake News” on the internet or to work together in a team to solve a problem, all vital skills in the workplace.

A vast number of careers require a firm grounding in Science. If you want to go on to train as a doctor, vet, physiotherapist chemist, beautician, architect, surveyor, engineer, farmer, sports trainer, a strong knowledge of at least one of the sciences will be required. But there are thousands of other careers for which it will be similarly essential.

## Biology

1. Cell biology
2. Organisation
3. Infection and response
4. Bioenergetics
5. Homeostasis and response
6. Inheritance, variation and evolution
7. Ecology

- AQA
- Two GCSE Grades
- 10 hours per fortnight
- Specialist teachers

## Chemistry

1. Atomic structure and the periodic table
2. Bonding, structure, and the properties of matter
3. Quantitative chemistry
4. Chemical changes
5. Energy changes
6. The rate and extent of chemical change
7. Organic chemistry
8. Chemical analysis
9. Chemistry of the atmosphere
10. Using resources

- Required Practical Activities
- 6 exams – 1hr and 15mins each
- Foundation – Grades 1-1 – 5-5
- Higher – Grades 4-4 – 9-9 (allowed grade 4-3)

## Physics

1. Energy
2. Electricity
3. Particle model of matter
4. Atomic structure
5. Forces
6. Waves
7. Magnetism and electromagnetism

## COMBINED SCIENCE

9-9

9-8

8-8

8-7

7-7

7-6

6-6

6-5

5-5

5-4

4-4

4-3

3-3

3-2

2-2

2-1

1-1

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Biology	Chemistry	Physics	BIOLOGY, CHEMISTRY, PHYSICS
<ol style="list-style-type: none"> <li>1. Cell biology</li> <li>2. Organisation</li> <li>3. Infection and response</li> <li>4. Bioenergetics</li> <li>5. Homeostasis and response</li> <li>6. Inheritance, variation and evolution</li> <li>7. Ecology</li> </ol>	<ol style="list-style-type: none"> <li>1. Atomic structure and the periodic table</li> <li>2. Bonding, structure, and the properties of matter</li> <li>3. Quantitative chemistry</li> <li>4. Chemical changes</li> <li>5. Energy changes</li> <li>6. The rate and extent of chemical change</li> <li>7. Organic chemistry</li> <li>8. Chemical analysis</li> <li>9. Chemistry of the atmosphere</li> </ol>	<ol style="list-style-type: none"> <li>1. Energy</li> <li>2. Electricity</li> <li>3. Particle model of matter</li> <li>4. Atomic structure</li> <li>5. Forces</li> <li>6. Waves</li> <li>7. Magnetism and electromagnetism</li> <li>8. <u>Space physics</u></li> </ol>	9
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<ul style="list-style-type: none"> <li>• AQA</li> <li>• <u>Three</u> GCSE Grades</li> <li>• 10 hours per fortnight</li> <li>• Specialist teachers</li> </ul>			2
<ul style="list-style-type: none"> <li>• Required Practical Activities</li> <li>• 6 exams – 1 hr and 45mins each</li> <li>• Foundation – Grades 1 – 5</li> <li>• Higher – Grades 4 – 9 (allowed grade 3)</li> </ul>			1
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# FAQ

## **What's the difference between each science?**

Chemistry is the study of matter and what the world is made of, Physics studies how that matter moves and behaves, and Biology is the study of living organisms.

## **How much practical will I do?**

Practical is an important part of the GCSE and there are required practical activities you must do, on top of those there are regular opportunities to apply the ideas you have learnt in a practical activity.

## **Do I get marked on my practical activities in lesson?**

No, however you will be asked about the practical activities you have done in your exams so it is important to learn about what you did.

## **How many long mark questions are there?**

In science the longest question you will have will be 6 marks, there may be one or two (maximum) in each exam.

## **Are there any science trips?**

There are opportunities for trips in science to the Science Museum, Natural History Museum and The Big Bang Fair.



# Student Comments

**“I really like the practical lessons, where we get to do it ourselves.”**

**“Working in groups in Science is great.”**

**“Elephants’ toothpaste is my favourite!”**

**“Lots of active tasks for me to do helps me to learn the content.”**