# Welcome to GCSE Chemistry

West Hill School

*Aiming High Since 1927*

# Specification Information

- Specification details:  AQA GCSE CHEMISTRY (8462)

- GCSE Chemistry is an important science. It gives students a good understanding of the nature of substances, how they react together and how our knowledge of Chemistry is used in business and industry.
- The Chemistry course is broken into ten separate topics. This course provides a firm foundation for progression to A-level Chemistry. On completion of the course pupils will be awarded a GCSE in Chemistry.

Note: Pupils taking the Separate Science pathway will be awarded the three separate GCSE science subjects.

# What you will learn

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

# How you will be assessed?

| Paper 1: |
| --- |
| **What's assessed**<br>Topics 1–5: Atomic structure and the periodic table; Bonding, structure, and the properties of matter; Quantitative chemistry, Chemical changes; and Energy changes. |
| **How it's assessed**<br>• Written exam: 1 hour 45 minutes<br>• Foundation and Higher Tier<br>• 100 marks<br>• 50% of GCSE |
| **Questions**<br>Multiple choice, structured, closed short answer and open response. |

| Paper 2: |
| --- |
| **What's assessed**<br>Topics 6–10: The rate and extent of chemical change; Organic chemistry; Chemical analysis, Chemistry of the atmosphere; and Using resources.<br>Questions in Paper 2 may draw on fundamental concepts and principles from sections 4.1 to 4.3. |
| **How it's assessed**<br>• Written exam: 1 hour 45 minutes<br>• Foundation and Higher Tier<br>• 100 marks<br>• 50% of GCSE |
| **Questions**<br>Multiple choice, structured, closed short answer and open response. |

# Skills developed

- Students taking GCSE Chemistry can use the knowledge and skills they gain to specialise in any of the three separate sciences. Pupils taking the Separate Science pathway will be awarded the three separate GCSE science subjects.

- The topics met through KS4 further develop recall, application and investigative skills. The required practical element of the courses allows students to become familiar with common scientific apparatus, methods and laboratory techniques.

- 'How science works' is an important element of GCSE Chemistry. Through scientific inquiry, students are able to formulate methods, collect measurements and observations to investigate their own hypotheses. Recording, presenting and evaluating both secondary and primary data to draw conclusions.

- The curriculum sparks the imagination and passion in our students by allowing them to formulate their own understanding of the world around them, this underpins and develops their own thought processes and opinions on matters relating to industry, their own personal well-being and their impact on the environment.

# Careers/Next steps

- **This course provides a firm foundation for progression to A-level Chemistry.**

- **A GCSE in Chemistry opens the door to many career paths. Here are just a few areas that require you to study Chemistry to A-Level and beyond.**

- Opportunities include, but are not limited to:

- Analytical Chemist
- Accountant/ Auditor
- Chemical Engineer
- Chemical Development Engineer
- Environmental Chemist
- Forensic Researcher
- Forensic Scientist
- Purification Scientist
- Toxicologist

# Where can you find more information

- Twitter: @westhillscience
- Email (Head of Science): carty@westhillschool.co.uk
- School website: https://www.westhillschool.co.uk/page/?title=Science&pid=116
- Examples of the past exam papers can be found here: https://www.aqa.org.uk/subjects/science/gcse/chemistry-8462/assessment-resources?f.Resource+type%7C6=Question+papers