Acle Academy

GCSE Science

- What will be covered in Science
- How will it be assessed
- Key dates
- How can you improve your learning
- Key careers that are linked to Science

We are part of...

WENSUMTRUST

Acle Academy

What will I study?

Combined Science

Biology

- B5 - Cell biology
- B6 - Infection and Drugs
- B7 - Bioenergetics
- B8 – Plant Biology
- B9/11 - Ecology
- B10 - Homeostasis and response
- B12 – Reproduction and Genetics

Chemistry

- C5 - Atomic structure
- C6 - Bonding
- C7 - Chemical reactions
- C8 - Energy changes
- C9 – Rates of reaction
- C10 – Mixtures and hydrocarbons
- C11 Earth and Atmosphere

Physics

- P5 - Energy
- P6 – Energy Transfers and resources
- P7 - Electricity
- P8/9 – Matter and Radiation
- P10/11 - Forces
- P12 - Waves
- P13 - Magnetism and electromagnetism

What will I study?

Separate Science

Biology

- B5 - Cell biology
- B6 - Infection and Drugs
- B7 - Bioenergetics
- B8 – Plant Biology
- B9/11 - Ecology
- B10 - Homeostasis and response
- B12 – Reproduction and Genetics

Additional units

- SB1 – Bacteria & cloning
- SB2 – Food and decay
- SB3 – Control & Genetics

Chemistry

- C5 - Atomic structure
- C6 - Bonding
- C7 - Chemical reactions
- C8 - Energy changes
- C9 – Rates of reaction
- C10 – Mixtures and hydrocarbons
- C11 Earth and Atmosphere

Additional units

- SC1 – Organic Chemistry
- SC2 – Using resources

Physics

- P5 - Energy
- P6 – Energy Transfers and resources
- P7 - Electricity
- P8/9 – Matter and Radiation
- P10/11 - Forces
- P12 - Waves
- P13 - Magnetism and electromagnetism

Additional units

- SP1 – Light and Space

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How is it assessed?

Combined Science

6 exams at the end of Y11:

2 x Biology Papers – 1 hour 15 minutes

2 x Chemistry Papers – 1 hour 15 minutes

2 x Physics Papers – 1 hour 15 minutes

Triple Science

6 exams at the end of Y11:

2 x Biology Papers – 1 hour 45 minutes

2 x Chemistry Papers – 1 hour 45 minutes

2 x Physics Papers – 1 hour 45 minutes

Practical Skills

There is no coursework in GCSE Science. However you will undertake required practical activities. 15% of your exams will be an assessment of practical skills.

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Combined Science

You will receive **2 GCSE grades** for Combined Science:

e.g.

Combined Science: 8-7

Triple Science

You will receive **3 GCSE grades** for Triple Science, one for each Subject:

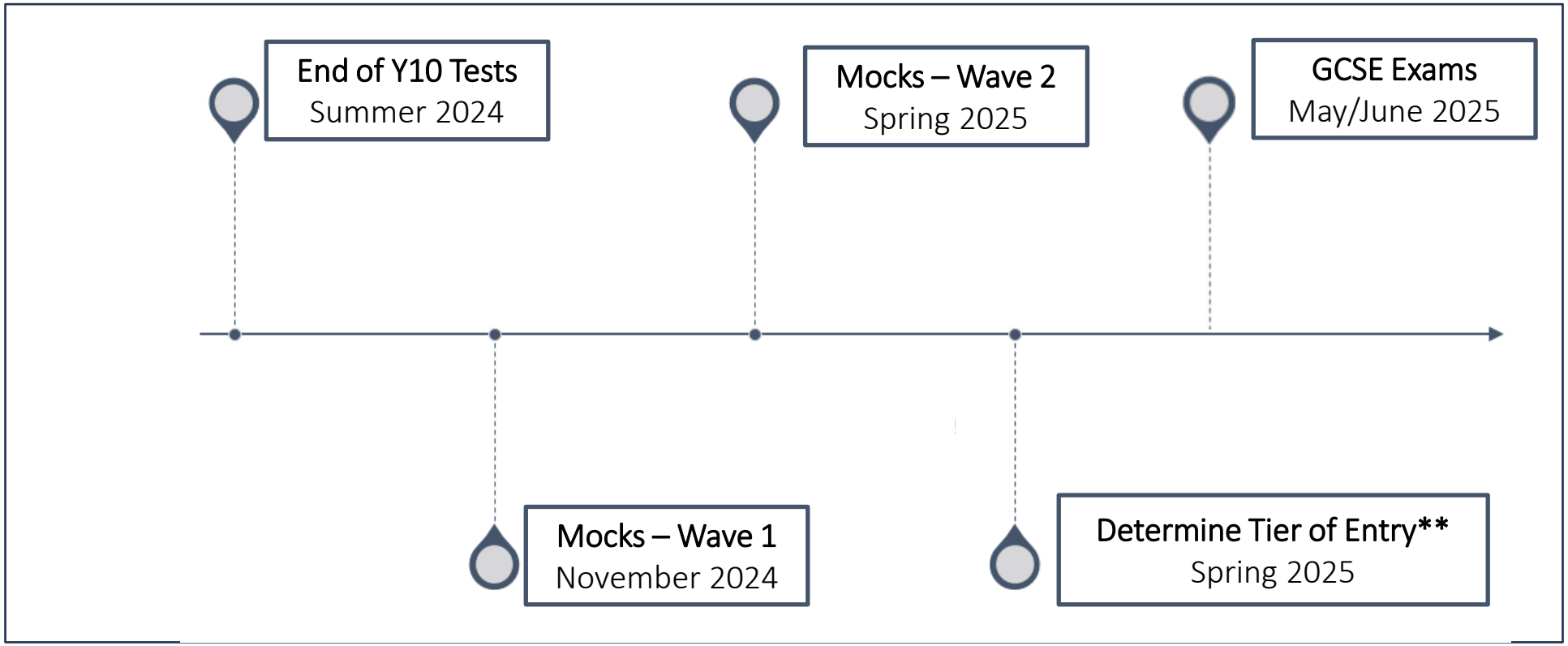
e.g.

Biology: 7

Chemistry: 8

Physics: 8

Key dates


End of Y10 Tests
Summer 2024
Mocks – Wave 2
Spring 2025
GCSE Exams
May/June 2025
Mocks – Wave 1
November 2024
Determine Tier of Entry**
Spring 2025

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Tiers of Entry

How the new grades compare with the old ones

Old grades	New grades
A*	9
	8
A	7
B	6
	5 STRONG PASS
C	4 STANDARD PASS
D	3
E	2
F	1
G	
U	U

Higher Paper
(Grades 4-9)

Foundation paper
(Grades 1-5)

The decision over tiers will be made in spring of Y11. This decision will be made to support you to attain the best grade possible.

Source: Ofqual

BBC

Acle A

How can I support my learning

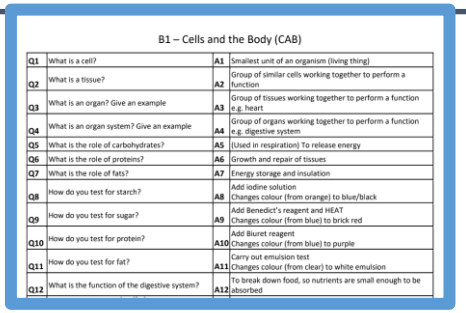
In class

Supports you to develop:

- Understanding of key content
- Practical skills
- Ability to apply core knowledge
- Exam skills

At home – independent work

- Regularly test yourself core questions to learn key content.
- Complete homework tasks to practise exam skills and review content.



B1 – Cells and the Body (CAB)

Q1	What is a cell?	A1	Smallest unit of an organism (living thing)
Q2	What is a tissue?	A2	Group of similar cells working together to perform a function
Q3	What is an organ? Give an example	A3	Group of tissues working together to perform a function e.g. heart
Q4	What is an organ system? Give an example	A4	Group of organs working together to perform a function e.g. digestive system
Q5	What is the role of carbohydrates?	A5	(Used in respiration) To release energy
Q6	What is the role of proteins?	A6	Growth and repair of tissues
Q7	What is the role of fats?	A7	Energy storage and insulation
Q8	How do you test for starch?	A8	Add iodine solution Changes colour (from orange) to blue/black
Q9	How do you test for sugar?	A9	Add Benedict's reagent and HEAT Changes colour (from blue) to brick red
Q10	How do you test for protein?	A10	Add Biuret reagent Changes colour (from blue) to purple
Q11	How do you test for fat?	A11	Carry out emulsion test Changes colour (from clear) to white emulsion
Q12	What is the function of the digestive system?	A12	To break down food, so nutrients are small enough to be absorbed

If you miss a lesson

It is important to catch up using resources from the google classroom!

Stretch yourself

Read around the topic (news articles), listen to podcasts.

Which careers can Science lead to?

GCSE Science feeds into a large number of careers including:

Medicine, Engineering, Environmental Science, Electronics, Nursing, Pharmacy, Ecology, Zoology, Biotechnology and Sports Science.