



Science Learning Journey Map

LIONHEART SCHOOL

7-11



AQA entry level science

AQA GCSE biology 1-9

AQA GCSE combined science 1-9

If appropriate, AQA GCSE physics and/or chemistry 1-9



YEAR 11

YEAR 10

YEAR 9

YEAR 8

YEAR 7

CURRICULUM OVERVIEW

GCSE Biology B2

- Ecology
- Homeostasis and response
- Inheritance, variation and evolution

These topics build on **The human body** and **Environment, evolution and inheritance**

Entry level certificate:

Completion of any outstanding units if student is entered for this course.

- Revision of B1 units: cell biology, organization, infection and response, and bioenergetics.
- Revision of B2 units: ecology, homeostasis and response, and inheritance, variation and evolution

Entry Level Certificate completion of components as needed:

- Elements, mixtures and compounds
- Energy, forces and the structure of matter
- The human body
- Chemistry in our world
- Electricity, magnetism and waves
- Environment, evolution and inheritance

GCSE Biology B1:

- Cell biology
- Organization
- Infection and response
- Bioenergetics

These topics build on **The human body** and **Environment, evolution and inheritance**

- Chemistry in our world
Builds on: **Matter, reactions, energy, Earth**

- Electricity, magnetism and waves
Builds on: **waves, energy, electromagnets**

- Environment, evolution and inheritance
Builds on: **genes, ecosystems**

- Elements, mixtures and compounds
Builds on: **matter, reactions, Earth**

- Energy, forces and the structure of matter
Builds on: **forces, energy, matter**

- The human body
Builds on: **organisms**

- Forces
- Contact forces and pressure
- Matter
- Elements and periodic table
- Organisms
- Breathing and digestion
- Electromagnets
- Magnetism and Electromagnets

- Genes
- Evolution and inheritance
- Reactions
- Types of reactions and Chemical energy
- Energy
- Work and heating and cooling
- Earth
- Climate and Earth resources

- Waves
- Wave effects and Wave properties
- Ecosystems
- Respiration and Photosynthesis
- New technology, turning points and detection, STEM Project work, application of knowledge and scientific skills

- Waves
- Sound and light
- Ecosystems
- Interdependence and plant reproduction
- New technology, turning points and detection, STEM Project work, application of knowledge and scientific skills

- Genes
- Variation and Human reproduction
- Reactions
- Acids and alkalis and Metals and non-metals
- Energy
- Energy costs and energy transfer
- Earth
- Earth structure and universe

- Forces
- Speed and Gravity
- Matter
- Particle model and separating mixtures
- Organisms
- Movement and cells
- Electromagnets
- Potential difference and resistance and current

SKILLS TAUGHT ACROSS Science

- 1) Social skills
- 2) Oracy
- 3) Literacy
- 4) Numeracy
- 5) Investigative skills
- 6) Problem solving

Physics



SCIENCE



Chemistry

Biology



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