Learner Journey: Science

The Science Journey at Dawn House School...

Curiosity about the world

Knowledge of the human body

Environmental Care

Study Science at College

Beyond Dawn House School

Personal Development Opportunities:

Trips/visits	Scientific Curiosity	Practical Experiments	Environmental Awareness	The Human Body

Entry Level — GCSE

Qualifications:

GCSE
D13 - D16

Topics: Atomic Structure, States of Matter, Electrolysis, Metals, Rates of Reaction, Energy, Healthy Lifestyles

- Developing skills in planning, conducting and evaluating scientific investigations.
- Further developing skills in interpreting and analysing scientific data.
- Communicating scientific ideas, findings and conclusions effectively.
- Evaluating scientific theories, models and arguments.
- Building a deep understanding of scientific concepts and principles across biology, chemistry and physics.
- Mastering laboratory techniques and equipment.
- Designing and implementing controlled experiments.
- Conducting independent research using scientific literature.
- Considering ethical, social and environmental implications of scientific research.

KS4
D11-D13

Topics: Waves, Atoms, Compounds, Forces, Energy, Movement, Genetics, Separating Mixtures, Human Biology

- Independently planning, conducting and evaluating scientific investigations.
- Developing skills in interpreting and analysing data.
- Communicating ideas, findings and conclusions.
- Evaluating scientific claims and arguments.
- Applying scientific knowledge to solve problems.
- Exploring more complex life processes.
- Investigating Earth's geological features.
- Understanding the principles of forces and energy.
- Investigating the properties of electricity and magnetism.
- Exploring chemical changes and reactions.
- Understanding the properties and behavior of sound and light waves.
- Deeper understanding of environmental issues.
- Consider the ethical implications of scientific research.

KS3
D9-D11

Topics: States of Matter, Space, Cells, Chemical Reactions, Energy, Forces, Plants, Food, Materials, RSE

- Progressing in planning, conducting, and evaluating simple scientific investigations.
- Learning to collect and record data accurately.
- Developing observational skills.
- Exploring the life processes of living organisms.
- Investigating different habitats.
- Developing understanding of environmental issues.
- Learning about Earth's features.
- Experimenting with materials to explore their properties.
- Understanding the effects of forces on objects.
- Introducing the principles of electricity.
- Investigating sound, including how it is produced, how it travels, and how it can be changed.
- Exploring light sources, shadows and how it behaves.
- Investigating changes in states of matter.
- Building a vocabulary of scientific terms and concepts.

KS1/2
D1-D9

Topics: Living Things, Materials, Habitats, Animals, Plants, Rocks, Energy, Environment, Seasons, Light

- Developing the ability to observe the environment.
- Asking simple questions about the natural world.
- Investigating different materials for their properties.
- Learning about the 4 seasons and the changes.
- Identifying common plants and animals.
- Recognizing different types of weather.
- Engaging with activities that involve using the senses to explore the world.
- Participating in simple science experiments/activities.
- Spending time outdoors exploring natural environments.
- Learning about basic health and hygiene practices.
- Learning about the growth of plants from seeds.
- Developing an understanding of the importance of caring for the environment.
- Introducing and using simple scientific vocabulary.