## Dawn House School: Science Overview 2024/25

# Engage, Develop, Communicate, Aspire



# Subject: Science

Subject Intent: The intent of our Science curriculum is to **engage** children in active learning that contributes to their successful futures. The science curriculum content **develops** a can-do approach to problem solving and involves lots of STEAM learning opportunities. Our curriculum is developed with speech and language therapists to support pupils to **communicate** confidently. The science curriculum aims to enable our pupils to make a positive contribution and to **aspire** to meet their full potential in all aspects of life at Dawn House School and beyond.

### Develop:

- To achieve key parts of the National Curriculum that will support their future pathways.
- To help develop an understanding of the natural world. To foster their responsibility towards it with regards to global events such as climate change and the Corona virus pandemic.
- To understand how their bodies work and actions they should take to remain a healthy lifestyle.
- To understand how and why their bodies are changing, how pregnancy occurs and the rights and responsibilities they have with regards to sexual activity.
- To develop their understanding of the scientific processes.
- To foster a can-do approach to problem solving.

#### Engage:

- STEM and STEAM activities.
- Lots of hands on learning and kinaesthetic opportunities.
- Quality feedback on their progress and clear next steps.
- Using sign, symbols and clear simple language as appropriate.
- Using age-appropriate resources that represent the whole community.
- Incorporating British values into learning opportunities and schemes of work.
- A positive supportive learning environment.

## **Communicate:**

- Bingo with key terms
- Follow a method and write up their results.
- Focus on key words and build a science vocabulary in their folders.
- Key words in displays related to their topics.
- Focus on key words e.g., repeat, sound out, spell or use key words.
- We also encourage pupils to answer in full sentences and use connectives etc. We use the school's current literacy targets as appropriate and reward pupils who meet these. This is often done with SLT support.
- Emotional and social literacy We 'catch the moment' to highlight success and discuss opportunities for improvement.

#### Aspire:

- Career opportunities linked to science, links to life skills.
- Understanding of the world around them.
- Teamwork working in groups and collaborative working.
- Personnel development Targets are incorporated into lesson planning. Successes are highlighted.
- Health and fitness Fitness for life and health related. Healthy lifestyle lessons educate the pupils on how to keep themselves healthy.
- Health and Fitness Fitness for Life and Health Related lessons educate pupils about the importance of exercise and how to keep ourselves healthy.
- Developing Resilience Our 'try your best' ethos develops confidence and determination.

Primary 1 Overview	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
2024-25	Everyday materials	Exploring materials Freezing and melting Artic animals	Exploring materials: Light and dark	Forces	Exploring seasons and weather	Exploring natural materials Life cycles

Primary 2 Overview	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
Year 1	Living things - Humans	Living Things - Animals	Plants	Everyday Materials- types	Seasonal Changes	Materials in the wider world
Year 2	Rocks	Changing States	Forces	Light	Sound	Electricity

Junior Overview	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
Year 1	Living things, Humans	Animals and Habitats	Plants	Everyday Materials	Seasonal Changes	Material developments in the wider world
Year 2	Rocks	Changing States	Forces	Light	Sound	Electricity

KS3 Overview	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
Year 1	Introduction to Science	Plants & Animals	Energy	Everyday Materials	Human Body	Electricity
Year 2	Healthy Living	Earth & Space	Chemical Reactions	Diseases & Cells	Forces	Acids & Alkalis
Year 3	Rocks & Soils	Environmental Science	Reproduction	Light & Sound	Periodic Table & Elements	Ecosystems

KS4 SW	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
Year 1 Entry Level Aim Award	Introduction to Science Animals, including Humans	Animals, including Humans Continued Earth and Space	Everyday Materials  Electricity and  Energy	Electricity and Energy Continued Plants and Ecology	Working Scientifically	RSE and The Human Body
Year 2 Entry Level WJEC	Health, Fitness and Sport	Our planet	Obtaining Resources	Modern Living and Energy	Science Safety Working Scientifically	RSE and The Human Body

KS4 LC and MW	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
Year 1	Health, Disease and the development of Medicines Waves and Radiation	Waves and Radiation	Atoms, Compounds and States of Matter	Forces, Movement and Energy	Forces, Movement and Energy Working Scientifically	RSE and The Human Body
Year 2 Level 1 BTEC Applied Science	Principles of Science	Chemistry and Our Earth	Energy and Our Universe	Biology and Our Environment	Working Scientifically	RSE and The Human Body

KS4 GCSE Biology	Autumn term 1	Autumn term 2	Spring term 1	Spring term 2	Summer term 1	Summer term 2
Year 1	Cell Biology	Cell Biology Continued	Organisation	Organisation Continued	Infection & Response	Bioenergetics
Year 2	Homeostasis & response	Inheritance, Variation & Evolution	Inheritance, Variation & Evolution Ecology	Ecology Revision	Revision Exams	Exams

KS4 GCSE Chemistry	Autumn term 1	Autumn term 2	Spring term 1	Spring term 2	Summer term 1	Summer term 2
Year 1	Atomic Structure & The Periodic Table	Atomic Structure & The Periodic Table Bonding, Structure, and the Properties of Matter	Bonding, Structure, and the Properties of Matter Quantitative Chemistry	Quantitative Chemistry Chemical Changes	Chemical Changes Energy Changes	Energy Changes  The Rate and Extent of Chemical Change
Year 2	The Rate and Extent of Chemical Change	Organic Chemistry	Chemical Analysis	Chemistry of the Atmosphere Using Resources	Revision Exams	Exams