

THE INDEPENDENT GRAMMAR SCHOOL: DURHAM

Science Curriculum Overview - Middle School (Years 5-8)

Core Knowledge UK / KS3 Science Whole School Curriculum Map

Year Group	Michaelmas 1	Michaelmas 2	Lent 1	Lent 2	Trinity 1	Trinity 2
Year 5	The human body: circulatory and respiratory	Forces	Properties of Matter	Electricity	Living things and habitats	Earth and Space
Year 6	Classification	Cell structures and processes	Chemistry: matter and change	Plant structures and processes	The human body: hormones & reproduction	Meteorology
Year 7	Biology: 7A Cells, tissues and systems Chemistry: 7E Mixtures and separation Physics: 7I Energy	Biology: 7A Cells, tissues and systems; 7B Sexual Reproduction in humans Chemistry: 7E Mixtures and separation; 7F Acids and alkalis Physics: 7I Energy; 7J Current	Biology: 7B Sexual Reproduction in animals Chemistry: 7F Acids and alkalis Physics: 7J Current	Biology: 7C Muscles and bones Chemistry: 7G The particle model Physics: 7K Forces	Biology: 7C Muscles and bones; 7D Ecosystem Chemistry: 7G The particle model; 7H Atoms, elements and molecules Physics: 7K Forces; 7L Sound	Biology: 7D Ecosystem; revision/end-of-year assessment Chemistry: 7H Atoms, elements and molecules; revision/end-of-year assessments Physics: 7L Sound; revision/end-of-year assessments
Year 8	Biology: 8A Food and nutrition Chemistry: 8E Combustion Physics: 8I Fluids	Biology: 8A Food and nutrition; 8B Plants and their reproduction Chemistry: 8E Combustion; 8F The periodic table Physics: 8I Fluids; 8J Light	Biology: 8B Plants and their reproduction Chemistry: 8F The periodic table Physics: 8J Light	Biology: 8C Breathing and respiration Chemistry: 8G Metals and their uses Physics: 8K Energy transfers	Biology: 8C Breathing and respiration; 8D Unicellular organisms Chemistry: 8G Metals and their uses; 8H Rocks Physics: 8K Energy transfers; 8L Earth and space	Biology: 8D Unicellular organisms; revision/end-of-year assessment Chemistry: 8H Rocks; revision/end-of-year assessments Physics: 8L Earth and space; revision/end-of-year assessments

Curriculum Intent

- Develop pupils' natural curiosity about the world around them
- Build scientific knowledge and understanding of key concepts
- Develop enquiry skills, including observing, predicting, experimenting and evaluating
- Encourage pupils to think critically and solve problems
- Foster understanding of how science impacts everyday lives and the wider world

Document Owner: Science Lead

Implementation

- Science is taught through high-quality, engaging lessons
- Topics are taught in a coherent sequence across the year
- Lessons develop scientific knowledge, vocabulary and enquiry skills
- Pupils use practical investigations, discussion and a range of resources to deepen understanding
- Regular retrieval practice and assessment support long-term retention

Review Cycle: Annual

Impact

- Know more and remember more about the natural world
- Understand key scientific concepts and vocabulary
- Apply scientific knowledge to practical and unfamiliar contexts
- Think critically and apply knowledge to real-life situations
- Develop a lasting curiosity about science and be well-prepared for the next stage

Date: _____