Curriculum plan: Science

"Nothing in life is to be feared. It is only to be understood."
Marie Curie

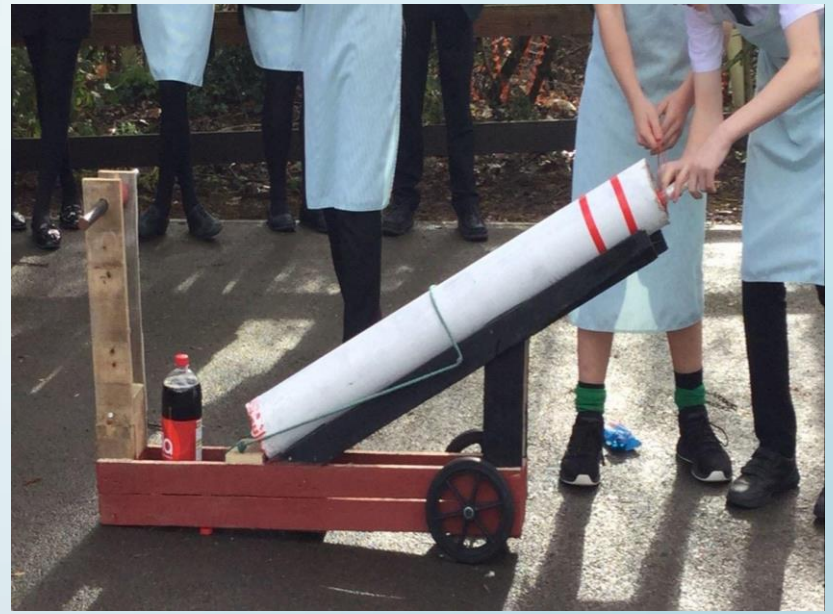
Our intent

Science explains everything about the world around us.

Studying science at Woodhouse Academy allows students to critically think about the world and phenomena they experience or witness. Students will learn to question everything they have been told and design experiments to test theories. We aim to provide students with the key skills that they will require in life including; problem solving, working through a method and presenting findings to their peers.

Enrichment in Science

The Woodhouse Academy science experience is complimented by cross-curricular links with English, geography, food technology, PE, DT, maths, PSHE, music, computer science and ICT.



Our enrichment programme is designed to bring science alive and we spend 2 weeks in March working on Science Week projects. During these 2 weeks the children have access to lots of different alternative activities during lunch times, including dissections and crime scene investigation. In lessons, during science fortnight, the students will design and carry out their own projects ready to show off at the science fair on the final Friday.

KS2 Curriculum Plan

Y5

- Working Scientifically
- Earth & Space
- Reproduction & Growth
- Evolution & Inheritance
- Forces
- Practical Project

Y6

- Light
- The Human Body
- Properties & Changes of Materials
- Classification
- Electricity
- Practical Project

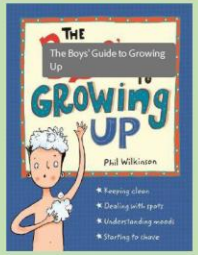
Y5

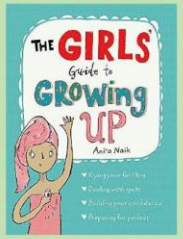
Reproduction & Growth



Places for extra learning:

- Octonauts - Series 2: 7. Jawfish - BBC iPlayer
- Plants - KS2 Science - BBC Bitesize



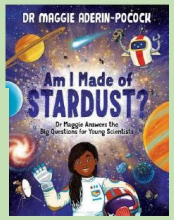


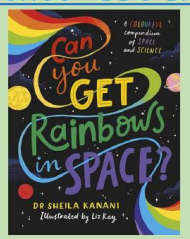
Earth & Space



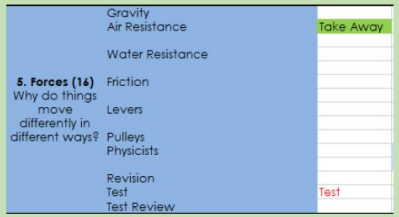
Places for extra learning:

- Horrible Science - Series 1: 13. Earth and Space Special - BBC iPlayer
- Earth and space - Year 5 Science - BBC Bitesize



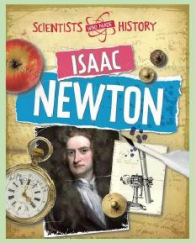


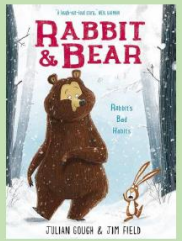
Forces



Places for extra learning:

- Absolute Genius with Dick and Dom - Series 1: 3. Sir Isaac Newton - BBC iPlayer
- Forces - KS2 Science - BBC Bitesize



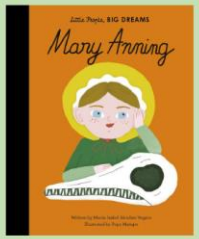


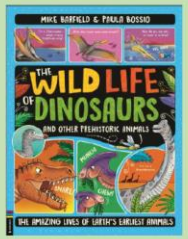
Y5 Fossils



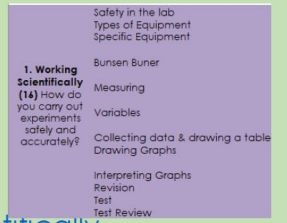
Places for extra learning:

- Deadly 60 - Museum Escape – Live Lesson - BBC iPlayer
- What is adaptation? – KS2 Science curriculum - BBC Bitesize



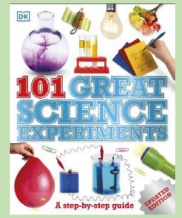


Working Scientifically



Places for extra learning:

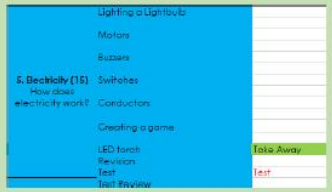
- Horrible Science - Series 1: 14. Working Scientifically Special - BBC iPlayer
- Asking relevant questions – KS2 Science curriculum - BBC Bitesize





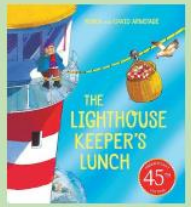
Y6

Y6 Electricity



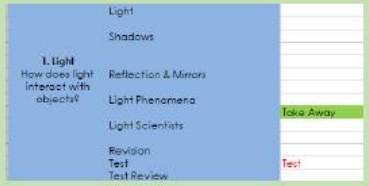
Places for extra learning:

- Absolute Genius with Dick and Dom - Series 1: 4. Michael Faraday - BBC iPlayer
- Circuit symbols – KS2 Science curriculum - BBC Bitesize



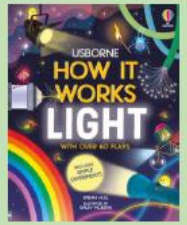


Light



Places for extra learning:

- Horrible Science - Series 2: 14. Light, Sound and Electricity Special - BBC iPlayer
- What is reflection? – KS2 Science curriculum - BBC Bitesize



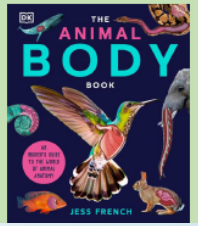


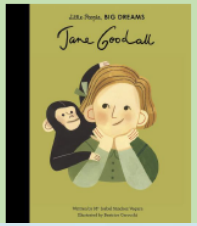
Classification



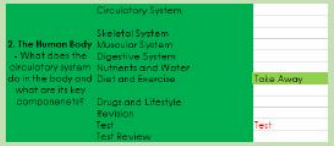
Places for extra learning:

- Absolute Genius with Dick and Dom - Series 2: 7. Darwin - BBC iPlayer
- What is classification? – KS2 Science curriculum - BBC Bitesize



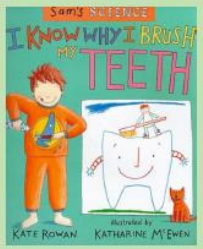


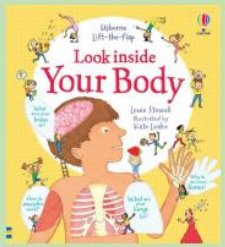
The Human Body



Places for extra learning:

- Operation Ouch! - BBC iPlayer
- The Human Body - KS2 The World Around Us - BBC Bitesize



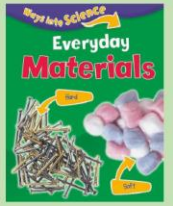


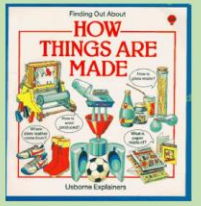
Properties & Changes of Materials



Places for extra learning:

- The Secret Genius of Modern Life - Series 1: 6. Trainer - BBC iPlayer
- Properties and change of materials - KS2 Science - BBC Bitesize

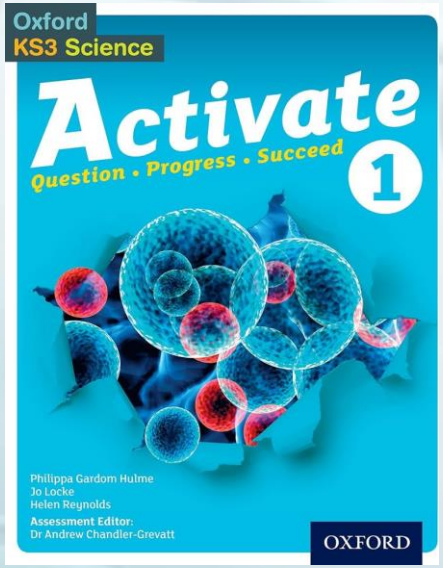




KS3 Curriculum Plan

Y7

- Working Scientifically
- Particles
- Forces
- Cells
- Elements
- Chemical Reactions
- Sound
- Body Systems
- Light
- Reproduction
- Acids & Bases
- Space



Y8

- Periodic Table
- Electricity & Magnetism
- Health & Lifestyle
- Separation Techniques
- Adaptation & Inheritance
- Metals & Acids
- Energy
- Ecosystem Processes
- Motion
- The Earth



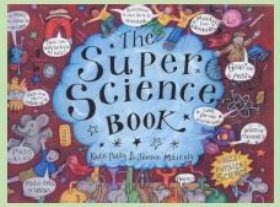
Y7

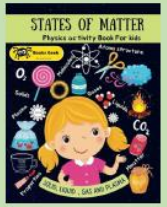
Particles

C1, 1 Particles and their behaviour How do particles move?	1.1 The particle model 1.2 States of matter 1.3 Melting and freezing 1.4 Boiling 1.5 More changes of state 1.6 Diffusion 1.8 Chapter 1 summary	TAKE AWAY

Places for extra learning:

- Changes of State | Matter | Physics | FuseSchool – YouTube
- The particle model of matter - KS3 Chemistry - BBC Bitesize



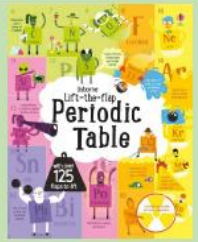


Elements

C1, 2 Elements, atoms, and compounds Are atoms the building blocks of matter?	Atoms and Elements Compounds 2.3 Compounds 2.4 Chemical formulae 2.5 Chapter 2 summary

Places for extra learning:

- Horrible Science - Series 2: 15. Manky Materials and Shifty States Special - BBC iPlayer
- Atoms, elements and compounds - KS3 Chemistry - BBC Bitesize





Working Scientifically

WS, 1 Working scientifically Why is it important to carry out experiments?	1.1 Asking scientific questions 1.2 Planning investigations 1.3 Recording data 1.4 Analysing data Graphs on a computer 1.5 Evaluating data Practical skills

Places for extra learning:

- Horrible Science - Series 1: 14. Working Scientifically Special - BBC iPlayer
- Variables - Working scientifically - KS3 Science - BBC Bitesize



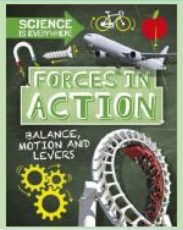


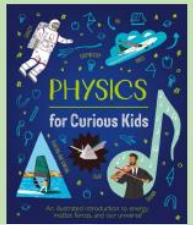
Forces

P1, 1 Forces Do forces explain why things happen?	1.1 Introduction to forces 1.2 Squashing and stretching 1.3 Drag forces and friction 1.4 Forces at a distance 1.5 Balanced and unbalanced 1.6 Chapter 1 summary	Graph
TEST		TEST
Test Review		

Places for extra learning:

- Absolute Genius with Dick and Dom - Series 1: 3. Sir Isaac Newton - BBC iPlayer
- Forces and movement - KS3 Physics - BBC Bitesize



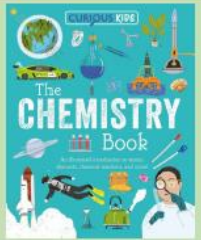


Chemical Reactions

C1, 3 Chemical reactions How do chemicals interact with each other?	3.1 Chemical reactions 3.2 Word equations 3.3 Burning fuels 3.4 Thermal decomposition 3.5 Conservation of mass 3.6 Exothermic and endothermic 3.7 Chapter 3 summary	REQUIRED PRAC
TEST		TEST
Test Review		

Places for extra learning:

- Chemical Equations | Environmental Chemistry | Chemistry | FuseSchool
- Chemical reactions - KS3 Chemistry - BBC Bitesize





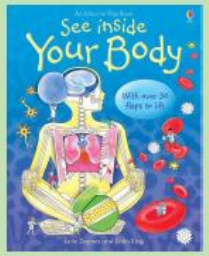
Y7

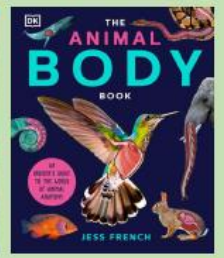
Cells

B1, 1 Cells How do cells make up an organism?	1.1 Observing cells 1.2 Plant and animal cells 1.2b Onion cells 1.3 Specialised cells 1.5 Unicellular organisms 1.6 Chapter 1 summary	6 Mark Question TAKE AWAY

Places for extra learning:

- Intro To Cells: Animals & Plants | Cells | Biology | FuseSchool
- What are plant and animal cells? - BBC Bitesize



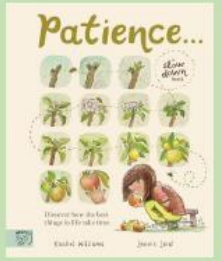


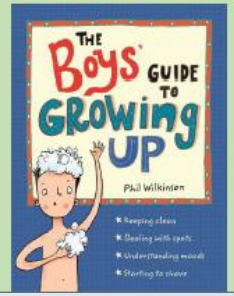
Y7 Reproduction

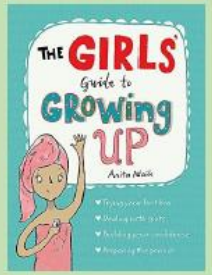
B1, 3 Reproduction How do plants and humans reproduce?	3.7 Fertilisation and germination 3.1 Adolescence 3.2 Reproductive systems 3.3 Fertilisation and implantation 3.4 Development of a fetus 3.5 The menstrual cycle Menopause 3.6 Flowers and pollination 3.7 Fertilisation and germination 3.9 Chapter 3 summary	Research Assessment

Places for extra learning:

- How plants and animals reproduce | Biology – Life Lessons
- DNA - Inheritance and genetics - KS3 Biology - BBC Bitesize





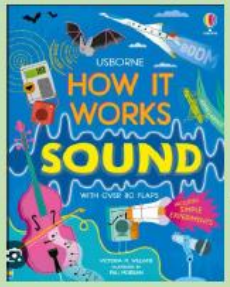


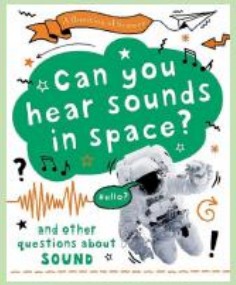
Sound

P1, 2 Sound How do we hear things?	2.1 Waves 2.2 Sound and Energy Transfer 2.3 Loudness and Pitch 2.4 Detecting Sound 2.5 Echoes and Ultrasound 2.6 Chapter 2 summary

Places for extra learning:

- Sound Waves: The Symphony of Physics - BBC iPlayer
- Sound Waves - BBC Bitesize





Acids & Bases

C1, 4 Acids and bases How do acids and bases interact with each other?	4.1 Acids and bases 4.2 Indicators and pH 4.3 Neutralisation 4.4 Making salts 4.5 Chapter 4 summary	TAKE AWAY REQUIRED PRAC

Places for extra learning:

- Jon Chase investigates how acids and alkalis affect us | Chemistry - Bitesize Science
- Acids in the laboratory - Acids and bases - KS3 Chemistry Revision - BBC Bitesize

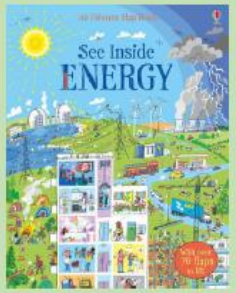
Y8

Energy

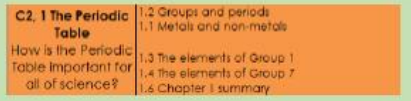


Places for extra learning:

- Absolute Genius with Dick and Dom - Series 1: 7. Watt - BBC iPlayer
- Energy - KS3 Physics - BBC Bitesize

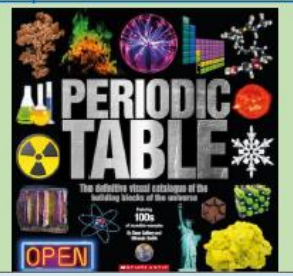


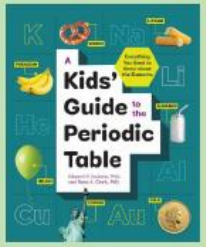
Periodic Table



Places for extra learning:

- Horrible Science - Series 2: 8. Platypuses, Heavy Metal and a Missing Biscuit - BBC iPlayer
- The periodic table - The periodic table - 3rd level Science Revision - BBC Bitesize



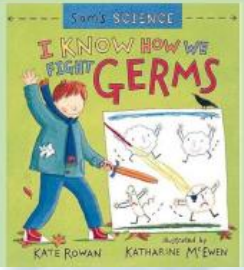


Health & Lifestyle



Places for extra learning:

- Operation Ouch! - Series 2: Episode 2 - BBC iPlayer
- Healthy diet - Nutrition, digestion and excretion - KS3 Biology - BBC Bitesize





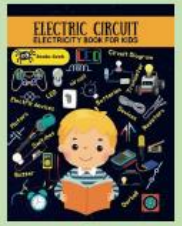
Electricity



Places for extra learning:

- Absolute Genius with Dick and Dom - Series 1: 4. Michael Faraday - BBC iPlayer
- Electricity - KS3 Physics - BBC Bitesize





Y8

Separation Techniques



Places for extra learning:

- Rough Science 23 Shipwrecked
- Separation – KS2 Science curriculum - BBC Bitesize

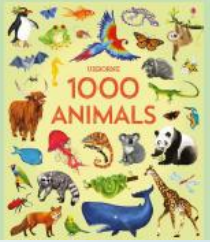


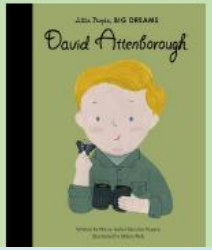
Adaptation & Inheritance



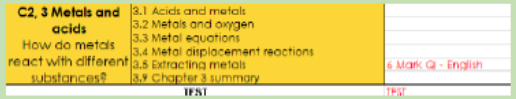
Places for extra learning:

- Blue Planet II - BBC iPlayer
- Adaptations and evolution - Inheritance and genetics - KS3 Biology - BBC Bitesize





Metals & Acids

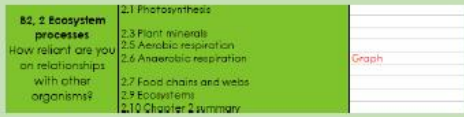


Places for extra learning:

- Chemical Reactions BBC19LS05
- What is an acid and metal reaction? - BBC Bitesize

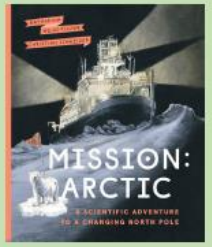


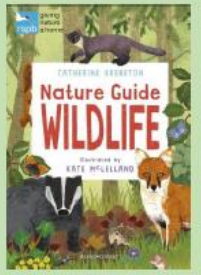
Y8 Ecosystem Processes



Places for extra learning:

- A Perfect Planet - BBC iPlayer
- What is respiration and photosynthesis in plants? - BBC Bitesize





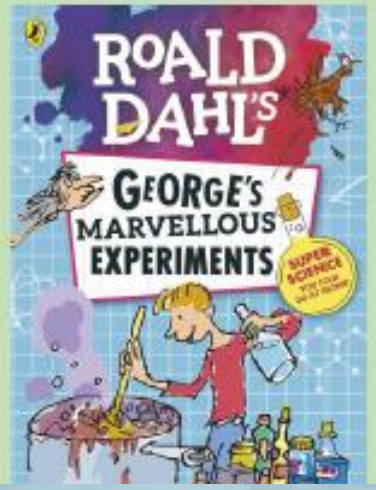
Working Scientifically

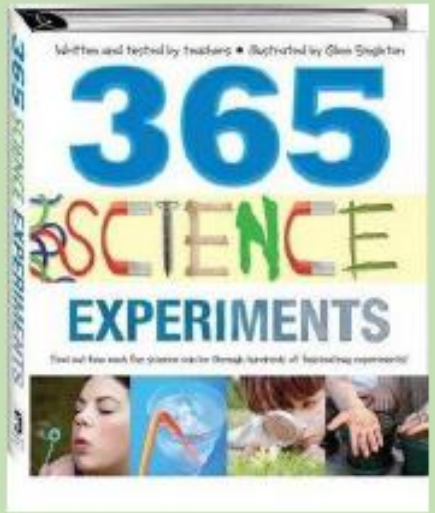
Science Fortnight

Practical Project	Question and research Research/Hypothesis Planning Experiment Graphs Graphs/Conclusion Conclusion Presentation	Practical Assessment

Places for extra learning:

- British Science Week 2026 – Live Lesson - BBC Teach
- Terrific Scientific is a series of science investigations linked to the primary curriculum.





Scholarly Opportunities

Science Focus
THE HOME OF BBC SCIENCE FOCUS MAGAZINE

NewScientist

WIRED

Ci

ScienceNews for Students

NATURAL HISTORY MUSEUM