

**Science:
All-Through
Curriculum**

Year	T1	T2	T3	T4	T5	T6
EYFS	<u>Animals, including humans (B1)</u> Dental Hygiene My Body	<u>Seasonal Changes (B4, C2)</u> Observe changes in seasons (Autumn) <u>Light and Dark (C2)</u> Day and night	<u>Materials (C1, S2)</u> Properties of basic materials (houses) <u>Seasonal Changes (B4, C2)</u> Observe changes in seasons (Winter)	<u>Plants (B1)</u> Planting and Growing <u>Animals, including humans (B4)</u> Animal Habitats <u>Seasonal Changes (B4, C2)</u> Observe changes in seasons (Spring)	<u>Animals, including humans (B1, B4)</u> Lifecycles (Butterfly) Living and non-living	<u>Materials (C1, S2)</u> Sinking and floating <u>Seasonal Changes (B4, C2)</u> Observe changes in seasons (Summer)
1	<u>Animals, including humans (B4)</u> Carnivores, herbivores and omnivores (dinosaurs) Fossils	<u>Seasonal Changes (B4, C2)</u> Observe changes Weather and day length Deciduous and evergreen	<u>Plants (B1)</u> Basic structure of a plant <u>Animals, including humans (B1, B4)</u> Classifying and compare animals and look at their features	<u>Material Properties (C1, S2)</u> Identify and compare properties of materials		<u>Animals including humans (B1)</u> Identify, name and draw parts of human body
2	<u>The Earth and Beyond</u> Earth, space C2, P4	<u>The Earth and Beyond</u> Earth, space C2, P4	<u>Materials, Properties and Changes</u> Materials C1, S2	<u>Materials, Properties and Changes</u> Materials C1, S2	<u>Living things and their habitats/Animals(including humans)</u> Animals and humans B1,B4	<u>Living things and their habitats/Animals/Plants</u> Animals, humans and plants B1,B4
3	<u>Rocks and Fossils (C2)</u> Types of rocks, properties, formation	<u>Light and dark (P2)</u> Reflections, shadows,	<u>Animals including humans (B1 & B4)</u> Nutrition, skeletons and muscles	<u>Plants (B1 & B4)</u> Functions of a plant, requirements for life and growth	<u>Forces (P1)</u> Movement, friction, magnetic attraction, repel, magnetic poles, materials	<u>Plants (B4)</u> Plant life cycle <u>Light and dark (P2)</u> sun safety
4	<u>Sound (P1,B1)</u> How sounds travels	<u>States of Matter (C1)</u> Solids, liquids and gas	<u>Animals including Humans (B1 & B4)</u> Digestion	<u>Electricity (P2)</u> Building circuits	<u>Plants (B1, B4)</u> Functions of a plant, requirements for life and growth	<u>Living things and their habitat B3, B4)</u> Classification Environments Habitats
5	Working scientifically (S1, S2, S3)	Light (S2, P2)	Forces (S2, P2)	Properties of materials (S2, C1)	Living things and their habitats (B1, B3)	Animals including humans (B1, B2, B4)
6	Animals including humans (S2, B1, B4)	Earth and Space (P4)	Material changes (S2, C1, C4, C5)	Evolution and inheritance (B1, B2)	Living things and their habitats (B1, B3, B4)	Electricity (S2, P2)
7	7B1 – Living Organisms (B1, B4, S1, S2, S3) 7C1 – Meteorite Impact (C1, P2, S1, S3, C4, C5) 7P1 – Escaping Earth (P1, P2, P3, P4, C2, S1, S2)			7B2 – The Human Body (B1, B4, S2) 7C2 – Making Crystals (C1, C5, S2) 7P2 – Heat, Light and Sound (P1, P2, P3, S1, S2)		

8	8B1 – Reproduction and Genetics (B4, B1, B2, S1, S2, S3) 8C1 – How Chemistry Changed the World (C1, C4, C5, S1, S2) 8P1 – Electricity and Magnetism (P1, P2, S1, S2)		8B2 – Repopulating a Planet (B1, B3, B4, S1, S2, S3) 8C2 – Colonising a New Planet (C2, C2, C5, S1, S2, S3) 8P2 – Escape From Treasure Island (P1, P3, C1, S1, S2)			
9	B1 – Cells, Enzymes and Transport (B1, B4, S1, S2)	C1 – States and Separation (C1, S1, S2) P1 – Motion (P1, P3, S1, S2)	B2 – Growth, stem cells and nerves (B1, B4, S1, S3)	C2 – Atoms and Periodic Table (C1, C4) P – Conservation of Energy (P2, S1, S2)	C3 – Structure and Bonding (C1, C4, S1, S2)	P – Waves (P2, P3, S1, S2)
10	B3 – Genes and DNA (B1, B2, B3, B4, S1, S1, S3) C4 – Rates, Energetics And Groups (C1, C4, C5, P2, S1, S2)	P – Forces B4 – Evolution, Selective Breeding And Genetic Modification (B1, B3, S1, S2, S3)	C5 – Fuels and the Atmosphere (C2, C3, C5, S1, P2, S2, S3) P – Radioactivity (P2, C1, S2, S3)	B5 – Health and Disease (B1, B3, B4, S1, S3)	C6 – Acids and Bases (C1, C5, S1, S2) P – Electricity (P2, S1, S2)	B6 – Plants and Photosynthesis (B1, B4, S1, S2)
11	B7 – Hormones C7 – Mass calculations (B4, S1, S3), electrolysis, metals and reversible reactions (C1, C4, C5, P2, S1, S2, S3)	P – Density, heat and gases (P1, P2, C1, S1, S2) B8 – Circulatory and Respiration (B1, B4, S1, S2)	P – Electromagnetism (P1, P2, S1, S2) B9 – Ecology (B1, B3, B4, S2, S3)	P – Work, Power and Vector Diagrams (P1, P2, P3, S1)	Revision	
12	Y12 Biology 1. Lifestyle, health and risk (B1, B4, S1, S2, S3) 2. Genes and health (B1, B2, B4, S1, S2, S3) 3. Voice of the genome (B1, B2, B4, S1, S2, S3) 4. Biodiversity and natural resources (B1, B3, B4, S1, S2, S3)	Y12 Chemistry 1. P: Atomic Structure (C1, S1, S2) 2. P: Mass Calculations (C1) 3. P: Structure and Bonding (C1, C5) 4. P: Energetics (C1, P2) 5. P: Kinetics and Equilibria (C1, C5, P2) 6. I: Redox, Periodicity, Alkaline Earth Metals and Halogens (C1, C4, C5) 7. O: Introduction to Organic (C1, C4) 8. O: Functional Groups (alkanes, halogenoalkanes, alkenes, alcohols) (C1, C3, C5, S3) 9. O: Organic Analysis (C1, C4, C5, S1, S2)	Y12 Physics 1. Matter and Radiation (P1, P2, S1, S2) 2. Quarks and leptons (C1, P1, P2) 3. Quantum phenomena (P1, P2, C1) 4. Waves (P2, S1, S2) 5. Optics (P2, S1, S2) 6. Forces in equilibrium (P1, P2, S1, S2) 7. Motion (P1, P2, S1, S2) 8. Newtons Laws (P1, P2, P3, S1, S2) 9. Force and momentum (P1, P2, P3, S1, S2) 10. Work, energy and power (P1, P2, S1, S2) 11. Materials (P1, P2, C1, S1, S2) 12. Electricity (P1, P2, S1, S2) 13. DC Circuits (P1, P2, S1, S2)			
13	Y13 Biology 1. On the Wild Side (B1, B3, B4, S1, S2, S3) 2. Infection, immunity, and forensics (B1, B3, B4, S1, S2, S3)	Y13 Chemistry 1. P: Thermodynamics (C1, C5, P2) 2. P: Kinetics and equilibria (C1, C5, P2)	Y13 Physics 1. Motion in a circle (P1, P2, P3) 2. Simple harmonic motion (P1, P2, P3) 3. Thermal physics (P1, P3) 4. Gases (P1, P2, S1, S2) 5. Gravitational fields (P1, P2, P3, P4, S1, S2)			

<p>3. Run for your life (B1, B4, S1, S2, S3)</p> <p>4. Grey matter (B1, B2, B4, S1, S2, S3)</p>	<p>3. P: Electrode potentials (C5, P2, S2)</p> <p>4. P: Acids and bases (C5, S1, S2)</p> <p>5. I: Periodicity (C1, C4, C5, S1, S2)</p> <p>6. I: Transition metals, complex ions and reactions of complex ions in aqueous conditions (C1, C4, P2, S1, S2)</p> <p>7. O: Optical isomerism, the carbonyl group and amines (C1, C3, S2)</p> <p>8. O: Aromatic Chemistry (C1 C3, S2)</p> <p>9. O: Polymerisation, amino acids and biochemistry (C1, C3, C5, S1, S2, B2, B4)</p> <p>10. O: Spectroscopy and chromatography (C1, C3, P2, S1, S2)</p>	<p>6. Electric fields (P1, P2, P3, S1, S2)</p> <p>7. Capacitors (P1, P2, S1, S2)</p> <p>8. Magnetic fields (P1, P2, S1, S2)</p> <p>9. Electromagnetic induction (P1, P2, P3, S1, S2)</p> <p>10. Radioactivity (P2, C1, S1, S2, S3)</p> <p>11. Nuclear energy (P2, C1, S1, S2, S3)</p> <p>12. Astrophysics (P1, P2, P3, P4, S3)</p>
---	---	--

Golden threads:

<p>B1 – Cells and organisms B2 – Genetics B3 – Diversity and Ecology B4 – Life processes</p>	<p>C1 – Matter C2 – The Earth C3 – Organic Chemistry C4 – Inorganic Chemistry C5 – Chemical Reactions</p>	<p>P1 – Forces P2 – Energy P3 – Motion P4 - Space</p>	<p>S1 - The scientific Process S2 – Investigative Skills S3 – Ethical/social/ political/Economical implications</p>
--	---	---	---