

Year 7 route groupings

<p>1Bio: Cells (structure, functions of organelles, microscope, specialised cells, stem cells)</p>	<p>2Bio: Organisation (digestive system, respiratory system, plants) (links to cells topic)</p>	<p>3Bio: Bioenergetics (photosynthesis and respiration) (links to cells and organisation topics)</p>	
<p>1Phys: Forces (force basics, pressure)</p>	<p>2Phys: Energy stores and transfers (efficiency calculations) (link to force basics)</p>	<p>3Phys: Electricity (circuits, current, pd, resistance) (link to energy topic)</p>	<p>4Phys: Space (link to forces topic; e.g. $w=mg$)</p>
<p>1Chem: Particles (states of matter, changes of state, element/compound/molecule)</p>	<p>2Chem: Atoms (atomic structure, periodic table, trends in periodic table) (links to particles)</p>	<p>3Chem: Mixtures (solubility, diffusion and separating techniques) (links to energy, particles and atoms topics)</p>	<p>4Chem: Earth's atmosphere (evolution, carbon cycle, greenhouse effect) (links to bioenergetics)</p>

Year 8 route groupings

<p>4Bio: Reproduction and inheritance (link back to cells topic)</p>	<p>5Bio: Health (nutrition, joints, disease) (link back to organisation topic)</p>	<p>6Bio: Ecology (include food security / sustainability) (links back to photosynthesis and inheritance)</p>	<p>9Phys: Sound (structure of the ear, sound waves) (link back to waves, particles and energy transfers)</p>
<p>5Phys: Wave basics and light (link to energy transfers)</p>	<p>6Phys: Force interactions (motion, Hooke's Law, resultant force diagrams) (link to force basics)</p>	<p>7Phys: Energy resources (adv, disadv) and heat transfers (link to atmosphere and energy transfers)</p>	<p>8Phys: Magnetism (link back to forces)</p>
<p>5Chem: Chemical reactions (equations, exo/endo, displacement, catalysts) (link to atoms topic)</p>	<p>6Chem: Earth's resources (structure of Earth, rock cycle, materials)</p>	<p>7Chem: Acids and alkalis (pH, neutralisation, metals and acids) (link to atoms and chemical reactions, nomenclature)</p>	<p>Skills refresher: Big recap on KS4 investigative and math skills</p>

Every topic has:

- One enquiry to mark – focus on one particular skill (planning, handling data, conclusion, evaluation).
- One extended writing lesson.
- A linking lesson at the start (after the initial 3 topics).
- Two homeworks: spelling and definitions; and extended writing plan.

Each topic will have between 7-9 lessons, leaving space for a homework review lesson for the extended writing.

Marking:

- Use the linking lesson for total recall.
- Use the extended writing lesson or homework review lesson instead of current progress obs opp.
- Assess just one practical skill per topic to gradually build up in the markbook over time.