

Curriculum Map – Science Year 8

	1	2	3	4	5	6				
Y7	Topic Title Health and lifestyle (B1)	Theme: Chemical reactions (C1)	Theme: Electricity and magnetism (P1)	Theme: Ecosystems (B2)	Theme: The periodic table (C2)	Theme: Forces in liquids and gases (P2)	Theme: Adaptation and inheritance (B3)	Theme: Acids and alkalis (C3)	Theme: Energy transfer by waves (P3)	Theme: Space (P4)
	Big Questions: How do we get the correct nutrients?	Big Questions: What are atoms and how do they interact with each other?	Big Questions: How does a simple electrical circuit work? What are magnets and how are they used?	Big Questions: How are ecosystems constructed?	Big Questions: How is the periodic table arranged and why is this important?	Big Questions: How do liquids and gases affect forces?	Big Questions: How is genetic information inherited?	Big Questions: What are acids and alkalis and how do they interact with each other?	Big Questions: How is energy transferred by waves?	Big Questions: How is our solar system constructed and how does it affect Earth?
Links to NC	consequences of diet, food groups, energy requirements, importance of exercise, digestive system, importance of bacteria, enzymes and the breakdown of molecules	review of photosynthesis and the importance of producers in an ecosystem, food webs, food chains, bioaccumulation	DNA, characteristics of individual, variation, genes, chromosomes, mutations, evolution, natural selection, artificial selection	atoms, elements, compounds, physical vs. chemical changes, reactants, conservation of mass, chemical formula, chemical equations, state symbols, energy transfer, exothermic and endothermic,	organization of the periodic table, chemical properties, reactive metals, displacement, properties of metals, metal reactions	pH, acid particle, alkali particle, reactions of acids and alkalis	current, voltage, resistance, resistance calculations, series circuit, parallel circuits, (current, resistance and voltage in series and parallel circuits, static electricity & the transfer of electrons, electrostatic forces,	re-cap of forces, force diagrams, re-cap particles, air resistance, air pressure, depth of a fluid the greater the pressure	longitudinal and transverse waves, sound waves, wave diagrams, ear drum/hearing, light waves, refraction, reflection (optional: light and color, lenses)	mass, weight, gravity, bigger the masses the greater the force of gravitational attraction, weight calculations, gravitational field strength, earth's axis, sun/star/galaxies and light years (what would happen if the sun

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				testing for common gases			magnetic fields, electromagnets			disappeared right now – use pom poms etc...) (what affects gravity...key ideas here)
	Assessment per half term		CFU e.g. Blast from the past		Substantive knowledge e.g. quiz or exam questions			Disciplinary knowledge – Part or complete practical		

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