

YEAR 7 SCIENCE – Year on a Page

YEAR 7	Science Taught Content		Assessment
	7F HALF	7J HALF	
HT 1	Induction (+) Organisms (movement and cells) (NC) (1-6) Ecosystems (interdependence) (NC)(2,4,5,6)	Induction (+) Earth (Earth structure and universe) (NC) (1,5) Ecosystems (interdependence) (NC)(2,4,5,6)	7J – EARTH AND ECOSYSTEMS 7F – ORGANISMS
HT 2	Ecosystems (interdependence) (NC)(2,4,5,6) Earth (Earth structure and universe)(NC) (1,5) Reactions part 1(acids and alkalis) (NC)	Ecosystems (interdependence) (NC)(2,4-6) Organisms (movement and cells) (NC)(1-6) Forces (speed and gravity)(NC) (3,5)	7J – ORGANISMS 7F – EARTH AND ECOSYSTEMS
HT 3	Reactions (metals and non-metals)(NC) Forces (speed and gravity)(NC) (3,5) Electromagnets (potential difference and resistance)(NC) (4-6)	Reactions (acids and alkalis/metals and non-metals)(NC) Matter (particle model)(NC) (1-5)	7J AND 7F – REACTIONS AND FORCES
HT 4	Electromagnets (current)(NC)(4-6) Matter (particle model)(NC) (1-5)	Matter (separating techniques)(NC) (1-5)	
HT 5	Matter (separating techniques)(NC) (1-5) Waves (light)(NC) (3,6)	Electromagnets (current)(NC) (4-6) Waves (light) (NC) (3,6)	7J AND 7F – MATTER, ELECTROMAGNETS, LIGHT
HT 6	Organisms (animal and plant reproduction) (NC)(6)	Organisms (animal and plant reproduction) (NC) (6)	7J AND 7F – REPRODUCTION

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National Curriculum: (NC) indicates direct link to national curriculum, (+) indicates material beyond national curriculum scope.

Prior Learning Links:

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(7.1) indicates material building upon Year 7, Half term 1, (9.3) indicates material building upon Year 9, Half term 3 etc.

YEAR 8 SCIENCE – Year on a Page

YEAR 8	Science Taught Content		Assessment
	8F HALF	8J HALF	
HT 1	Threshold topics (1 lesson per Bio, Chem and Phys (+) Earth pt2 (climate and earth resources (NC)(1,5)(7.1,7.2) Ecosystems pt2 (respiration and photosynthesis) (2,4,5,6,7)(7.2) Lifestyle (drugs/alcohol etc) (NC)(1-6)	Threshold topics (1 lesson per Bio, Chem and Phys (+) Ecosystems pt2 (respiration and photosynthesis) (2,4,5,6,7)(7.2) Earth pt2 (climate and earth resources Organisms pt2 (breathing and digestion)	
HT 2	Lifestyle (drugs/alcohol etc) (NC)(1-6) Organisms pt2 (breathing and digestion) (NC)(1-6)(7.2) Sound (NC) (4)(7,5)	Organisms pt2 (breathing and digestion) (1-6) (7.2) Sound (NC) (4)(7,5) Lifestyle (drugs/alcohol etc) (NC)(1-6)	Ecosystems and Earth
HT 3	Reactions (types of reaction and chemical energy) (NC) (7.3) Energy (work) (NC) Energy and temperature (heating and cooling) (NC)	Energy (work) (NC) Reactions (types of reaction and chemical energy) (NC) (7.3) Energy and temperature (heating and cooling) (NC)	Organisms, sound and lifestyle
HT 4	Energy and temperature (heating and cooling) (NC) Forces (contact and pressure) (NC)(3,5)(7.3)	Energy and temperature (heating and cooling) (NC) Electromagnets (magnetism and electromagnets) (NC)(3) Matter (elements and periodic table)	Energy, reactions and energy and temperature
HT 5	Matter (elements and periodic table) (NC)(1-5) (7.4)	Matter (elements and periodic table) (NC)(1-5) (7.4) Forces (contact and pressure) (NC)(3,5)(7.3)	
HT 6	Electromagnets magnetism and electromagnets) (NC) (3) Genes (Evolution and inheritance) (NC) (6) (7.6)	Forces (contact and pressure) (NC)(3,5)(7.3) Genes (Evolution and inheritance) (NC) (6) (7.6)	Forces, matter, electromagnets and genes

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YEAR 9 SCIENCE – Year on a Page

Year 9 programme of study – 6 lessons per fortnight science (2 biology, 2 physics and 2 chemistry lessons)

YEAR 9	Science Taught Content			Assessment
	Biology	Chemistry	Physics	
HT 1	Cells (Structure and function of eukaryotic and prokaryotic cells) (NC) (1-8)	Atomic structure and Periodic table (separating techniques, atomic model, group 1, 7,0)(NC) (5,7,8) (7.3,7.4)	Particle Model of Matter (States of matter, density and pressure) (NC) (4,7,8)	ASP (assessing science progress) 20 marks worth of exam questions every 4 weeks (4 lessons) HOMEWORK End of topic – exam questions to practice at home
HT 2	Cells (Structure and function of eukaryotic and prokaryotic cells) (NC) (1-8)	Atomic structure and Periodic table (separating techniques, atomic model, group 1, 7,0) (NC) (7.3,7.4) Bonding (ionic, covalent, metallic, giant structures, states of matter, polymers) (NC) (4,5,7,8)(7.3,7.4)	Particle Model of Matter (States of matter, density and pressure) (NC) (4,7,8) Energy (Energy stores and transfers. Renewable and Non-renewable energy) (NC) (7,8)	
HT 3	Transport (Diffusion, active transport and diffusion) (NC) (7 and 8)	Bonding (ionic, covalent, metallic, giant structures, states of matter, polymers) (NC) (4,5,7,8) (7.3,7.4)	Energy (Energy stores and transfers. Renewable and Non-renewable energy) (NC) (7,8)	
HT 4	Transport (Diffusion, active transport and diffusion) (NC) (7 and 8) Organisation (Digestive, respiratory and digestive systems) (NC) (1-4, 6-8)	Bonding (ionic, covalent, metallic, giant structures, states of matter, polymers) (NC) (4,5,7,8) (7.3,7.4) Chemical change (reactivity series, reactions of metals, acid and alkalis, neutralisation) (NC) (7,8) (7.3)	Energy (Energy stores and transfers. Renewable and Non-renewable energy) (NC) (7,8) Electricity (Electrical circuits and Electricity in the home) (NC) (4,6,7,8)	
HT 5	Organisation (Digestive, respiratory and digestive systems) (NC) (1-4, 6-8)	Chemical change (reactivity series, reactions of metals, acid and alkalis, neutralisation) (NC) (7,8) (7.3)	Electricity (Electrical circuits and Electricity in the home) (NC) (4,6,7,8)	
HT 6	Organisation (Digestive, respiratory and digestive systems) (NC) (1-4, 6-8)	Chemical change (NC) (7,8) (7.3)	Electricity (Electrical circuits and Electricity in the home) (NC) (4,6,7,8)	

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YEAR 10 SCIENCE (BIOLOGY) – Year on a Page

YEAR 9	Science Taught Content		Assessment	
	Core	Triple		
HT 1	Catch up Organisation (Digestive, respiratory and digestive systems) (NC) (1-4, 6-8)	Catch up Organisation (Digestive, respiratory and digestive systems) (NC) (1-4, 6-8))	ASP (assessing science progress)	
HT 2	Organisation (Digestive, respiratory and digestive systems) (NC) (1-4, 6-8) Bioenergetics (Photosynthesis and respiration) (NC) (1-3, 6-9)	Bioenergetics (Photosynthesis and respiration) (NC) (1-3, 6-9) Infection and response (Diseases and how the body defends itself) NC) (1, 3, 6-9)		COMBINED 20 marks worth of exam questions every 4 weeks (6 lessons)
HT 3	Bioenergetics (Photosynthesis and respiration) (NC) (1-3, 6-9) Infection and response (Diseases and how the body defends itself) NC) (1, 3, 6-9)	Infection and response (Diseases and how the body defends itself) (NC) (1, 3, 6-9) Inheritance, variation and selection (Evolution and natural selection) (NC) (1-2, 4-9)	TRIPLE 20 marks worth of exam questions every 4 weeks (10 lessons)	
HT 4	Infection and response (Diseases and how the body defends itself) NC) (1, 3, 6-9) Ecology (Studying the relationship between organisms and their environment) (NC) (1-10)	Inheritance, variation and selection (Evolution and natural selection) (NC) (1-2, 4-9)		
HT 5	Ecology (Studying the relationship between organisms and their environment) (NC) (1-10)	Inheritance, variation and selection (Evolution and natural selection) (NC) (1-2, 4-9)	HOMEWORK End of topic – exam questions to practice at home	
HT 6	Ecology (Studying the relationship between organisms and their environment) (NC) (1-10)	Ecology (Studying the relationship between organisms and their environment) (NC) (1-10)		

Year 10 core programme of study – 9 lessons per fortnight of science (3 biology, 3 physics and 3 chemistry lesson)

Year 10 triple programme of study – 14 lessons per fortnight of science (5 biology, 5 physics and 4 chemistry lesson)

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Prior Learning Links:

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YEAR 10 SCIENCE (CHEMISTRY) – Year on a Page

YEAR 10	Science Taught Content		Assessment
	Combined	Triple	
HT 1	Atomic structure and Periodic table (separating techniques, atomic model, group 1, 7,0)(NC) (5,7,8) (7.3,7.4)	Atomic structure and Periodic table (separating techniques, atomic model, group 1, 7,0, transition metals) (NC) (5,7,8) (7.3,7.4) Bonding (ionic, covalent, metallic, giant structures, states of matter, polymers) (NC) (4,5,7,8)(7.3,7.4)	ASP (assessing science progress) COMBINED 20 marks worth of exam questions every 4 weeks (6 lessons) TRIPLE 20 marks worth of exam questions every 4 weeks (10 lessons) HOMEWORK End of topic – exam questions to practice at home
HT 2	Bonding (ionic, covalent, metallic, giant structures, states of matter, polymers) (NC) (4,5,7,8)(7.3,7.4)	Bonding (ionic, covalent, metallic, giant structures, states of matter, polymers, nanoparticles) (NC) (4,5,7,8)(7.3,7.4) Quantitative chemistry (relative formula mass, chemical measurements, concentration of solutions, percentage yield, atom economy, volumes of gases) NC)	
HT 3	Quantitative chemistry (relative formula mass, chemical measurements, concentration of solutions,) (NC)	Quantitative chemistry (relative formula mass, chemical measurements, concentration of solutions, percentage yield, atom economy, volumes of gases) (NC) Chemical change (reactivity series, reactions of metals, acid and alkalis, neutralisation, titrations) (NC) (7,8) (7.3)	
HT 4	Chemical change (reactivity series, reactions of metals, acid and alkalis, neutralisation) (NC) (7,8) (7.3)	Chemical change (reactivity series, reactions of metals, acid and alkalis, neutralisation, titrations) (NC) (7,8) (7.3) Energy changes (exothermic and endothermic, reaction profiles, chemical and fuel cells) (NC) (8.3)	
HT 5	Chemical change (reactivity series, reactions of metals, acid and alkalis, neutralisation) (NC) (7,8) (7.3) Energy changes (exothermic and endothermic, reaction profiles, chemical and fuel cells) (NC) (8.3)	Energy changes (exothermic and endothermic, reaction profiles, chemical and fuel cells) (NC) (8.3) Rates of reaction (collision theory, reversible reactions, equilibrium) (NC) (7,8)	
HT 6	Rates of reaction (collision theory, reversible reactions, equilibrium) (NC) (7,8)	Rates of reaction (collision theory, reversible reactions, equilibrium) (NC) (7,8)	

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YEAR 10 SCIENCE (Physics) – Year on a Page

YEAR [10]	Year 10 Combined Physics	Year 10 Triple Physics	Assessment
HT 1	Catch up for Energy . Electricity (Electrical circuits and Electricity in the home) (NC) (4,6,7,8)	Catch up for Particle Model of Matter-Triple content . Catch up for Energy . Electricity (Electrical circuits and Electricity in the home) (NC) (4,6,7,8)	<p style="text-align: center;">ASP (assessing science progress)</p> <p>COMBINED 20 marks worth of exam questions every 4 weeks (6 lessons)</p> <p>TRIPLE 20 marks worth of exam questions every 4 weeks (10 lessons)</p> <p>HOMEWORK End of topic – exam questions to practice at home</p>
HT 2	Electricity (Electrical circuits and Electricity in the home) (NC) (4,6,7,8) Atoms and Radiation (Alpha Beta and Gamma radiation and their properties) (NC) (8)	Electricity (Electrical circuits and Electricity in the home) (NC) (4,6,7,8) Atoms and Radiation (Alpha Beta and Gamma radiation and their properties) (NC) (8)	
HT 3	Atoms and Radiation (Alpha Beta and Gamma radiation and their properties) (NC) (8) Forces and their Interactions (Balanced/unbalanced forces, centre of mass, gears and levers) (NC) (2,3,5,7,8)	Atoms and Radiation (Alpha Beta and Gamma radiation and their properties) (NC) (8) Forces and their Interactions (Balanced/unbalanced forces, centre of mass, gears and levers) (NC) (2,3,5,7,8)	
HT 4	Forces and their Interactions (Balanced/unbalanced forces, centre of mass, gears and levers) (NC) (2,3,5,7,8) Forces and Motion (DistanceTime / VelocityTime graphs, acceleration, Newton’s Laws, Momentum) (NC) (5,7,8)	Forces and their Interactions (Balanced/unbalanced forces, centre of mass, gears and levers) (NC) (2,3,5,7,8) Forces and Motion (DistanceTime / VelocityTime graphs, acceleration, Newton’s Laws, Momentum) (NC) (5,7,8)	
HT 5	Forces and Motion (DistanceTime / VelocityTime graphs, acceleration, Newton’s Laws, Momentum) (NC) (5,7,8)	Forces and Motion (DistanceTime / VelocityTime graphs, acceleration, Newton’s Laws, Momentum) (NC) (5,7,8)	
HT 6	Forces and Motion (DistanceTime / VelocityTime graphs, acceleration, Newton’s Laws, Momentum) (NC) (5,7,8)	Forces and Motion (DistanceTime / VelocityTime graphs, acceleration, Newton’s Laws, Momentum) (NC) (5,7,8)	

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YEAR 11 SCIENCE (BIOLOGY) – Year on a Page

Year 11 core programme of study – 9 lessons per fortnight of science (3 biology, 3 physics and 3 chemistry lesson)

Year 11 triple programme of study – 14 lessons per fortnight of science (5 biology, 5 physics and 4 chemistry lesson)

YEAR 11	Science Taught Content		Assessment
	Core	Triple	
HT 1	Catch up Inheritance, variation and selection (Evolution and natural selection) (NC) (1-2, 4-10)	Catch up Ecology (Studying the relationship between organisms and their environment) (NC) (1-10)	ASP (assessing science progress) COMBINED 20 marks worth of exam questions every 4 weeks (6 lessons) TRIPLE 20 marks worth of exam questions every 4 weeks (10 lessons) HOMEWORK End of topic – exam questions to practice at home
HT 2	Inheritance, variation and selection (Evolution and natural selection) (NC) (1-2, 4-10) Homeostasis (Maintaining an internal environment in the body) (NC) (1-4, 7-10)	Homeostasis (Maintaining an internal environment in the body) (NC) (1-4, 7-10)	
HT 3	Homeostasis (Maintaining an internal environment in the body) (NC) (1-4, 7-10) Countdown	Homeostasis (Maintaining an internal environment in the body) (NC) (1-4, 7-10) Countdown	
HT 4	Countdown	Countdown	
HT 5	Countdown Exams	Countdown Exams	
HT 6	Exams	Exams	

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YEAR 11 SCIENCE (CHEMISTRY) – Year on a Page

YEAR 11	Science Taught Content		Assessment
	Combined	Triple	
HT 1	Rates of reaction (collision theory, reversible reactions, equilibrium) (NC) (7,8)	Organic Chemistry (crude oil, fractional distillation, cracking, alkenes, carboxylic acid, polymerisation, DNA) (NC) (1,2,3,5,7,8,9,10)(10.1,10.2) Chemical analysis (formulations, chromatography, tests for gases, test for positive ions, test for negative ions, instrumental analysis) (NC)	ASP (assessing science progress) COMBINED 20 marks worth of exam questions every 4 weeks (6 lessons) TRIPLE 20 marks worth of exam questions every 4 weeks (10 lessons) HOMEWORK End of topic – exam questions to practice at home
HT 2	Organic Chemistry (crude oil, fractional distillation, cracking) (NC) (1,2,3,5,7,8,9,10)(10.1,10.2) Chemical analysis (formulations, chromatography, test for gases) (NC)(7,8) (7.2, 8.3, 10.4) Chemistry of the atmosphere (changes in oxygen and carbon dioxide levels, greenhouse gases, climate change, pollutants) (NC) (5,7,8) (8.1)	Chemical analysis (formulations, chromatography, tests for gases, test for positive ions, test for negative ions, instrumental analysis) (NC) (7,8) (7.2, 8.3, 10.4) Chemistry of the atmosphere (changes in oxygen and carbon dioxide levels, greenhouse gases, climate change, pollutants) (NC) (5,7,8) (8.1) Using resources (potable water, waste water treatment, life cycle assessment, corrosion, ceramics, Haber process) (NC) (5,7,8) (8.1)	
HT 3	Chemistry of the atmosphere (changes in oxygen and carbon dioxide levels, greenhouse gases, climate change, pollutants) (NC) (5,7,8) (8.1) Using resources (potable water, waste water treatment, life cycle assessment) (NC) (5,7,8) (8.1)	Using resources (potable water, waste water treatment, life cycle assessment, corrosion, ceramics, Haber process) (NC) (5,7,8) (8.1)	
HT 4	COUNTDOWN TO EXAMS		
HT 5			
HT 6			

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YEAR 11 SCIENCE (Physics) – Year on a Page

YEAR [11]	Year 11 Combined Physics	Year 11 Triple Physics	Assessment
HT 1	<ul style="list-style-type: none"> Catch up Forces and their Interactions. Forces and Motion (DistanceTime / VelocityTime graphs, acceleration, Newton's Laws, Momentum) (NC) (5,7,8) 	<ul style="list-style-type: none"> Catch up for Forces and Motion Electromagnetism (Magnets, motors, generators, transformers) (NC) (7,8) 	<p>ASP (assessing science progress)</p> <p>COMBINED 20 marks worth of exam questions every 4 weeks (6 lessons)</p> <p>TRIPLE 20 marks worth of exam questions every 4 weeks (10 lessons)</p> <p>HOMEWORK End of topic – exam questions to practice at home</p>
HT 2	<ul style="list-style-type: none"> Forces and Motion (DistanceTime / VelocityTime graphs, acceleration, Newton's Laws, Momentum) (NC) (5,7,8) Electromagnetism (Magnets, motors, transformers) (NC) (7,8) 	<ul style="list-style-type: none"> Electromagnetism (Magnets, motors, generators, transformers) (NC) (7,8) Waves (Properties of waves, Sound, Light, EM Spectrum, Medical uses) (NC) (1,2,3,4,6,7,8) 	
HT 3	<ul style="list-style-type: none"> Waves (Properties of waves, Sound, Light, EM Spectrum, Medical uses) (NC) (1,2,3,4,6,7,8) 	<ul style="list-style-type: none"> Waves (Properties of waves, Sound, Light, EM Spectrum, Medical uses) (NC) (1,2,3,4,6,7,8) Space (The Universe, star life cycle, beginning and end of the Universe) (NC) (1,2,3,5,7,8) 	
HT 4	COUNTDOWN TO EXAMS		
HT 5			
HT 6			

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