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## PRIMARY

Year	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
<b>EYFS</b>	Children in early years settings follow the national curriculum that highlights seven areas of learning and development that must shape educational programmes. This includes understanding the world and involves guiding children to make sense of their physical world and their community through opportunities to explore, observe and find out about people, places, technology and the environment. Children learn and explore changes in the environment, metamorphosis, growth of self and plants, concepts of floating and sinking and magnets.					
<b>1</b>	<b>Biology</b> Plants <i>Identifying and naming common plants and describing basic structures</i>	<b>Biology / Physics</b> Seasonal changes <i>Observing changes across four seasons and describing associated weather</i>	<b>Chemistry</b> Everyday materials <i>Distinguishing objects from the material it's made from, and describing simple properties</i>	Consolidation and review	<b>Biology</b> Animals <i>Identifying and naming fish, amphibians, reptiles, birds and mammals; carnivores, herbivores and omnivores</i>	<b>Biology</b> Humans <i>Human body parts and senses</i>
<b>2</b>	<b>Biology</b> Needs of animals <i>Animals need water, food and air to survive and to have offspring</i>	<b>Chemistry</b> Uses of everyday materials <i>Comparisons of an object's material with its use; impact of bending, twisting on solid objects</i>	<b>Biology</b> Living things & their habitats <i>Basic introduction to habitats and micro-habitats, and simple food chains</i>	<b>Chemistry</b> Solids, liquids and gases <i>Understanding how the same substances can exist as solids, liquids and gases</i>	<b>Biology</b> Plant growth <i>Plants grow from seeds, and require water, light and a suitable temperature</i>	Consolidation and review
<b>3</b>	<b>Chemistry</b> Rocks <i>Comparisons of types of rocks and how fossils are formed</i>	<b>Physics</b> Light <i>Relationship between light and how we see; the formation of shadows</i>	<b>Biology</b> Living organisms <i>The role of muscles and skeletons; the importance of nutrients</i>	<b>Biology</b> Plants <i>The key features of flowering plants and what they need to survive</i>	<b>Physics</b> Forces & motion <i>Introducing pushes and pulls; opposing forces, and balanced forces</i>	<b>Physics</b> Friction & magnetism <i>Contact and non-contact forces, including friction and magnetism</i>
<b>4</b>	<b>Biology</b> Classifying organisms <i>Introduction to classifying animals and their environment</i>	<b>Biology</b> Food & digestion <i>The human digestive system and simple food chains</i>	<b>Chemistry</b> Particle model and states of matter <i>States of matter in relation to particle arrangement</i>	<b>Physics</b> Sounds <i>Relationship between strength of vibrations and volume of sound</i>	<b>Physics</b> Electricity <i>Simple series circuits</i>	<b>Chemistry</b> Properties of materials <i>Considering physical and chemical properties</i>

<b>5</b>	<b>Chemistry</b> Separating mixtures <i>Identifying and separating mixtures; difference between reversible and non-reversible changes</i>	<b>Biology, Chemistry, Physics</b> <b>Energy</b> <i>Introducing the concept of energy stores and energy transfers, and relating this to prior knowledge</i>	<b>Biology</b> <b>Life cycles</b> <i>Life cycles of a mammal, amphibian, insect and bird, and some reproduction processes</i>	<b>Biology</b> <b>Human development</b> <i>Human development to old age</i>	<b>Physics</b> <b>Forces</b> <i>Gravity, air and water resistance and friction; introduction to pulleys</i>	<b>Physics</b> <b>Earth and space</b> <i>Movements of planets and the Moon, and relationship to day and night</i>
<b>6</b>	<b>Physics</b> <b>Electricity</b> <i>Investigating variations in series and parallel circuits, and how electricity is generated</i>	<b>Biology</b> <b>Evolution</b> <i>Fossils; introduction to the idea that adaptation may lead to evolution</i>	<b>Physics</b> <b>Light</b> <i>How light travels and is reflected, and how this allows us to see</i>	<b>Biology</b> <b>Further classification</b> <i>Further classification of living organisms based on characteristics</i>	<b>Biology</b> <b>Functions of the human body</b> <i>Human circulatory system; transport of nutrients within the body</i>	<b>Chemistry</b> <b>Physical and chemical changes</b> <i>Identifying physical and chemical changes</i>

### **KEY STAGE 3**

SUBJECT	1 <sup>st</sup> Half of the year (Sep – Jan)	2 <sup>nd</sup> Half of the year (Jan-July)
<b>7</b>	<ul style="list-style-type: none"> <li>• Intro into Science</li> <li>• Particles (7CP)</li> <li>• Cells, Tissues and Organs (7BC)</li> <li>• Energy (7PE)</li> </ul>	<ul style="list-style-type: none"> <li>• Reproduction and Variation (7BR)</li> <li>• Chemical Reactions (7CR)</li> <li>• Forces and Motion (7PF)</li> <li>• Plants and Photosynthesis (8BP)</li> </ul>
	<b>Mid-Year Assessment: 7CP, 7BC, 7PE</b>	<b>End of Year Assessment : Biology- 7BC, 7BR Chemistry – 7CP, 7CC Physics – 7PE, 7PF</b>
<b>8</b>	<ul style="list-style-type: none"> <li>• Materials and the Earth (8CM)</li> <li>• The Periodic table (8CP)</li> <li>• Electricity (8PE)</li> <li>• Matter (8PM)</li> </ul>	<ul style="list-style-type: none"> <li>• Ecological relationships and classification (8BE)</li> <li>• Biological systems and processes (9BB)</li> <li>• Matter (9PM)</li> <li>• Reactivity (9CR)</li> <li>• Sound Waves (9PS)</li> </ul>
	<b>Mid-Year Assessment: 8PL, 8BD, 8CM</b>	<b>End of Year Assessment : Biology- 8BD, 8BE Chemistry- 8CM, 8CP</b>

		<b>Physics – 8PL, 8PE</b>
<b>9</b>	<ul style="list-style-type: none"> <li>• Energetics and Rates (9CE)</li> <li>• Forces in Action (9PF)</li> <li>• Plants, photosynthesis and respiration (9BP)</li> </ul>	<ul style="list-style-type: none"> <li>• Atomic Structure</li> <li>• Cell Biology</li> <li>• Bonding</li> <li>• Changes in Energy Stores</li> <li>• Energy Transfer &amp; The Particle Model</li> <li>• Organisms and Disease</li> </ul>
	<b>Mid-Year Assessment: 9PM, 9CR, 9PS, 9BB</b>	<b>End of Year Assessment: Biology- 9BB, 9BP Chemistry- 9CR, 9CE Physics – 9PS, 9PF, 9PM</b>

## **KEY STAGE 4**

<b>SUBJECT</b>	<b>1<sup>st</sup> Half of the year (Sep – Jan)</b>	<b>2<sup>nd</sup> Half of the year (Jan-July)</b>
<b>10</b>	<ul style="list-style-type: none"> <li>• Organisms and Disease</li> <li>• Electricity</li> <li>• The Periodic Table</li> <li>• Chemical Changes and Energy Changes</li> </ul>	<ul style="list-style-type: none"> <li>• Generating electricity</li> <li>• Infection and Response</li> <li>• Reactions in Biology</li> <li>• Nuclear Radiation</li> <li>• Quantitative Chemistry</li> <li>• Organic Chemistry</li> <li>• Forces</li> </ul>
	<b>Mid-Year Assessment: AQA GCSE Science Paper 1 (except from Generating Electricity, Infection &amp; Response, Reactions in Biology, Nuclear Radiation &amp; Quantitative Chemistry)</b>	<b>End of Year Assessment: AQA GCSE Science Paper 1</b>

<b>SUBJECT</b>	<b>September – November</b>	<b>December – March</b>	<b>March - June</b>
<b>11</b>	<ul style="list-style-type: none"> <li>○ Ecology</li> <li>○ Forces and Motion</li> </ul>	<ul style="list-style-type: none"> <li>○ Inheritance</li> <li>○ Waves</li> </ul>	<ul style="list-style-type: none"> <li>○ Magnetism</li> <li>○ Revision for GCSEs</li> </ul>

	<ul style="list-style-type: none"> <li>○ Rates of Reaction</li> <li>○ Chemical Analysis</li> </ul>	<ul style="list-style-type: none"> <li>○ Earth and Resources</li> </ul>	
	<b>November Mock Exam: AQA GCSE Science Paper 1</b>	<b>March Mock Exam: AQA GCSE Science Paper 2</b>	<b>ACTUAL GCSE EXAMINATION</b>

## KEY STAGE 5: Biology

SUBJECT	1 <sup>st</sup> Half of the year (Sep – Jan)	2 <sup>nd</sup> Half of the year (Jan-July)
<b>12</b>	<ul style="list-style-type: none"> <li>○ Chapter 1 Biological molecules</li> <li>○ Chapter 2 Nucleic Acids</li> <li>○ Chapter 3 Cell structure</li> <li>○ Chapter 4 Transport across cell membranes</li> </ul>	<ul style="list-style-type: none"> <li>○ Chapter 5 Cell recognition and the immune system</li> <li>○ Chapter 6 Exchange</li> <li>○ Chapter 7 Mass transport</li> <li>○ Chapter 8 DNA, genes and protein synthesis</li> <li>○ Chapter 9 Genetic Diversity</li> <li>○ Chapter 10 Biodiversity</li> <li>○ Chapter 14 Response to stimuli</li> </ul>
	<b>Mid-Year Assessment: Chapters 1-4</b>	<b>End of Year Assessment: AQA AS Biology Paper 1 &amp; Paper 2</b>

SUBJECT	September – November	December – March	March - June
<b>13</b>	<ul style="list-style-type: none"> <li>○ Chapter 11 Photosynthesis</li> <li>○ Chapter 15 Nervous coordination and muscles</li> <li>○ Chapter 16 Homeostasis</li> <li>○ Chapter 17 Inherited Changes</li> </ul>	<ul style="list-style-type: none"> <li>○ Chapter 12 Respiration</li> <li>○ Chapter 20 Gene expression</li> <li>○ Chapter 18 Populations and Ecosystems</li> <li>○ Chapter 19 Populations in ecosystems</li> </ul>	<ul style="list-style-type: none"> <li>○ Chapter 13 Energy and ecosystems</li> <li>○ Chapter 21 Recombinant DNA technology</li> <li>○ Revision for A-Level</li> </ul>
	<b>November Mock Exam: AQA A-Level Biology Paper 1 &amp; 2 (part of)</b>	<b>March Mock Exam: AQA A-Level Biology Paper 1, 2 &amp; 3</b>	<b>ACTUAL A LEVEL EXAMINATION</b>

## KEY STAGE 5: Chemistry

SUBJECT	1 <sup>st</sup> Half of the year (Sep – Jan)	2 <sup>nd</sup> Half of the year (Jan-July)
12	<ul style="list-style-type: none"> <li>○ Atomic Structure</li> <li>○ Bonding</li> <li>○ Amount of Substance</li> <li>○ Periodicity</li> <li>○ Energetics</li> <li>○ Introduction to Organic Chemistry</li> </ul>	<ul style="list-style-type: none"> <li>○ Alkanes, Alkenes and Alcohols</li> <li>○ Kinetics</li> <li>○ Equilibrium</li> <li>○ Oxidation and Reduction</li> <li>○ Organic Analysis</li> <li>○ Group 2 &amp; Group 7</li> <li>○ Nomenclature and optical isomerism</li> <li>○ Aldehydes and Ketones</li> <li>○ Thermodynamics</li> </ul>
	<b>Mid-Year Assessment: Atomic Structure, Bonding, Amount of Substance</b>	<b>End of Year Assessment: AQA AS Level Chemistry Paper 1 &amp; Paper 2</b>

SUBJECT	September – November	December – March	March - June
13	<ul style="list-style-type: none"> <li>○ Nomenclature and optical isomerism</li> <li>○ Aldehydes and Ketones</li> <li>○ Aromatic Chemistry</li> <li>○ Carboxylic Aids</li> <li>○ Thermodynamics</li> <li>○ Rate equations</li> <li>○ kP</li> </ul>	<ul style="list-style-type: none"> <li>○ Electrode potentials and cells</li> <li>○ Acids and bases</li> <li>○ Amines, polymers and amino acids</li> <li>○ NMR</li> <li>○ Period 3 elements &amp; oxides</li> <li>○ Transition elements</li> <li>○ Reactions of ions</li> </ul>	<ul style="list-style-type: none"> <li>○ Chromatography</li> <li>○ Organic Synthesis</li> <li>○ Revision for A-Level</li> </ul>
	<b>November Mock Exam: AQA A-Level Chemistry Paper 1</b>	<b>March Mock Exam: AQA A-Level Chemistry Paper 1, 2 &amp; 3</b>	<b>ACTUAL A LEVEL EXAMINATION</b>

## KEY STAGE 5: Physics

SUBJECT	1 <sup>st</sup> Half of the year (Sep – Jan)	2 <sup>nd</sup> Half of the year (Jan-July)
12	<ul style="list-style-type: none"> <li>○ Matter and Radiation</li> <li>○ Quarks and Leptons</li> <li>○ Quantum Phenomena</li> <li>○ Forces</li> <li>○ Mechanics</li> <li>○ Energy</li> </ul>	<ul style="list-style-type: none"> <li>○ Waves</li> <li>○ Optics</li> <li>○ Materials</li> <li>○ Electricity</li> <li>○ Circular motion</li> <li>○ Simple harmonic motion</li> </ul>
	Mid-Year Assessment: Test on material covered	End of Year Assessment: AS Paper 1 and Paper 2

SUBJECT	September – November	December – March	March - June
13	<ul style="list-style-type: none"> <li>○ Thermal Physics</li> <li>○ Gravitational Fields</li> <li>○ Electric Fields</li> <li>○ Capacitors</li> </ul>	<ul style="list-style-type: none"> <li>○ Magnetic Fields</li> <li>○ Nuclear Physics</li> </ul>	<ul style="list-style-type: none"> <li>○ Astrophysics option unit</li> </ul>
	November Mock Exam: A level Paper 1 and modified Paper 2 to remove questions on magnetic fields and nuclear physics	March Mock Exam: A level Paper 1, 2 and 3A	<b>ACTUAL A LEVEL EXAMINATION</b>