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| **Year 9 Curriculum Overview [2023-2024]**  **Science – Combined Science** | | | | | | |
| **Autumn Term** | **Knowledge & Understanding** | | | **Literacy Skills**  **Opportunities for**  **developing**  **literacy skills** | **Employability Skills**  **[if any]** | **Assessment Opportunities** |
| **Composites** | **Components**  **[KEY concepts & subject specific vocab]** | **Formal Retrieval**  **[if any]** |
| **HT1** | BU1 Cell Biology | * Cell structure and differentiation – eukaryotes and prokaryotes * Specialised cells * Cell transport – diffusion, osmosis and active transport * Cell division and cells | Do Now (7Interdependence and Cells): Structure and function of animal and plant cells, microscope and diffusion  MCQ’s | Oral  Writing  Write a method  Use of Scientific language and practice keywords  Comprehension/Extended reading  Extract key points from texts | Teamwork  Problem solving  Practical applications  Zoologist  Ecologist  Lab technician  Research scientist | Formative  Summative  Mock Exams |
| **HT2** | CU1 Atomic structure and the periodic table | * Separation Techniques * Atomic Model * The development of the Periodic table * Group 1,7,0 | Do Now  (8Periodic Table and Materials and 8Chemical reactions)  Reactivity (9CR)  MCQ’s | Write a method  Write a conclusion  Use of Scientific language and practice keywords  Comprehension/Extended reading  Extract key points from texts | Teamwork  Problem solving  Practical applications  Lab Technician | Formative  Summative  Mock Exams |
| **Year 9 Curriculum Overview [2023-2024]**  **Science – Combined Science** | | | | | | |
| **Spring**  **Term** | **Knowledge & Understanding** | | | **Literacy Skills**  **Opportunities for**  **developing**  **literacy skills** | **Employability Skills**  **[if any]** | **Assessment Opportunities** |
| **Composites** | **Components**  **[KEY concepts & subject specific vocab]** | **Formal Retrieval**  **[if any]** |
| **HT3** | PU1 Conservation and Dissipation of Energy  Energy Transfer by Heating  Energy Resources | * Energy stores and conservation of energy * Energy transfers – work done, kinetic, gravitational potential, and elastic * Energy dissipation and efficiency * Energy, power and electrical appliances * Conduction * IR radiation * Specific heat capacity * Insulation * Energy demands * Renewable energy resources * Non-renewable energy resources * Energy issues | Do Now  (7Energy)  MCQ’s | Write a method  Write a conclusion  Use of Scientific language and practice keywords  Comprehension/Extended reading  Extract key points from texts  Identify and construct questions  Propose predictions  Plan experiments  Record and analyse data  Communicate information and ideas | Logical workings  Problem solving  Analytical skills  Teamwork  Problem solving  Practical applications  Engineering | Formative  Summative  Mock Exams (GCSE Paper 1) |
| **HT4/5** | BU2 Organisation | * Enzymes and digestion * The heart and blood vessels * Non-communicable disease * Cancer * Plant transport | Do Now Now7(Interdependence and Cells and 8(Energy from Foods and 8Keeping Healthy)  MCQ’s | Oral  Writing  Write a method  Write a conclusion  Use of Scientific language and practice keywords  Extract key points from texts | Teamwork  Problem solving  Practical applications  Lab technician  Research Scientist  Phlebotomist  Plant biologist | Formative  Summative |
| **Year 9 Curriculum Overview [2023-2024]**  **Science – Combined Science** | | | | | | |
| **Summer**  **Term** | **Knowledge & Understanding** | | | **Literacy Skills**  **Opportunities for**  **developing**  **literacy skills** | **Employability Skills**  **[if any]** | **Assessment Opportunities** |
| **Composites** | **Components**  **[KEY concepts & subject specific vocab]** | **Formal Retrieval**  **[if any]** |
| **HT5** | CU2 Bonding, structures and properties of matter | * Ionic bonding and compounds * Covalent bonding and covalent structure * Metals and Alloys * Solids, Liquids and Gases | Do Now Task  (8Periodic Table and Materials and 8Chemical reactions)  MCQ’s | Write a conclusion  Use of Scientific language and practice keywords  Comprehension/Extended reading  Extract key points from texts | Teamwork  Problem solving  Practical applications  Materials Scientist | F Formative  Summative |
| **HT5/6** | PU2 Electric Circuits  PU2 Electricity in the Home | * Current, charge, potential difference and resistance * Component characteristics * Alternating current * Plugs and cables * Power and potential difference * Electrical currents and energy transfer * Appliances and efficiency * Series and parallel circuits | Do Now  (8Electricity and Magnets)  MCQ’s | Write a method  Write a conclusion  Use of Scientific language and practice keywords  Comprehension/Extended reading  Extract key points from texts  Identify and construct questions  Propose predictions  Plan experiments  Record and analyse data  Communicate information and ideas | Logical workings  Problem solving  Analytical skills  Teamwork  Problem solving  Practical applications  Electrician | Formative  Summative  Mock Exams (GCSE Paper 1) |