|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Year 9 Curriculum Overview [2024-2025]**  **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** | **Reactions** | * Chemical Reactions * Word equations * Oxidation reactions * Decomposition reactions * Using ratios * Conservation of mass * Exothermic and endothermic | Do Now  MCQ | * Keyword and definition * Subject language [Speak like a Scientist] * Inclusive questioning * Writing a method * Write like a Scientist * Comprehension/Extended reading * Extract key points from texts | Personal Skills   * Teamwork * Problem solving * Practical applications   Scientific Careers   * Zoologist * Ecologist * Lab technician * Research scientist | Formative  Assessment  Summative  Assessment |
| **HT1/2** | **Biological Processes** | * Photosynthesis * Leaves * Plant minerals * Aerobic respiration * Atom Structure * Anaerobic respiration | Do Now  MCQ | * Keyword and definition * Subject language [Speak like a Scientist] * Inclusive questioning * Writing a method * Write like a Scientist * Comprehension/Extended reading * Extract key points from texts | Personal Skills   * Teamwork * Problem solving * Practical applications   Scientific Careers   * Atomic Research * Chemist * Engineer | Formative  Assessment  Summative  Assessment |
| **Year 9 Curriculum Overview [2023-2024]**  **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]** |
| **HT2** | **Light** | * Light * Reflection * Refraction * The eye and the camera * Colour | Do Now  MCQ | * Keyword and definition * Subject language [Speak like a Scientist] * Inclusive questioning * Writing a method * Write like a Scientist * Comprehension/Extended reading * Extract key points from texts | Personal Skills   * Teamwork * Problem solving * Practical applications   Scientific Careers   * Sport Scientist * National Grid * Energy Conservationist | Formative  Assessment  Summative  Assessment |
| **HT3** | **Inheritance** | * Variation * Continuous and discontinuous * Inheritance * Natural Selection * Extinction | Do Now  MCQ | * Keyword and definition * Subject language [Speak like a Scientist] * Inclusive questioning * Writing a method * Write like a Scientist * Comprehension/Extended reading * Extract key points from texts | Personal Skills   * Teamwork * Problem solving * Practical applications   Scientific Careers   * Doctor * Nurse * Food development * Counsellor | Formative  Assessment  Summative  Assessment |
| **Year 9 Curriculum Overview [2023-2024]**  **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]** |
| **HT4** | **Motion and Pressure** | * Speed * Motion graphs * Pressure in gases * Pressure in liquids * Pressure on solids * Turning forces | Do Now  MCQ | * Keyword and definition * Subject language [Speak like a Scientist] * Inclusive questioning * Writing a method * Write like a Scientist * Comprehension/Extended reading * Extract key points from texts | Personal Skills   * Teamwork * Problem solving * Practical applications   Scientific Careers   * Research Scientist * Engineer * Lecturer | Formative  Assessment  Summative  Assessment |
| **HT5** | **Metals and other materials** | * Metals and acids * Metals and oxygen * The reactivity series * Metal displacement reactions * Extracting metals * Ceramics * Polymers * Composites | Do Now  MCQ | * Keyword and definition * Subject language [Speak like a Scientist] * Inclusive questioning * Writing a method * Write like a Scientist * Comprehension/Extended reading * Extract key points from texts | Personal Skills   * Teamwork * Problem solving * Practical applications   Scientific Careers   * Electrician * National Grid * Computer Hardware design | Formative  Assessment  Summative  Assessment |
| **HT6** | **Energy** | * Food and fuels * Energy resources * Energy adds up * Energy and temperature * Energy transfer: particles * Energy transfer: radiation * Energy transfer: forces * Energy and power | Do Now  MCQ | * Keyword and definition * Subject language [Speak like a Scientist] * Inclusive questioning * Writing a method * Write like a Scientist * Comprehension/Extended reading * Extract key points from texts | Personal Skills   * Teamwork * Problem solving * Practical applications | Formative  Assessment  Summative  Assessment |
| **Catholicity Across the Science Curriculum** | Reaction- Combustion lesson – Impact on planet : Common Good  Inheritance – Jerome Lejeune – lesson on down syndrome (designer baby link)  Energy – Nuclear resources v renewable resources – debate: Common Home  Metals and Other Materials – Plastics: non biodegradable – lesson/ slides/ opinions : care for common home | | | | | |