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| **Year 7 Curriculum Overview [2024-2025]** **Science**  |
|  **Half 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**  |  7 Introduction to Science | * Working Scientifically
* Using equipment
* Following a method
* Working safely
 | Do Now | * Keyword and definition
* Subject language [Speak like a Scientist]
* Inclusive questioning
* Writing a method
* Write like a Scientist
 | Personal skills* Thinking and problem solving
* Working together and communicating
* Attention to health and safety
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| **HT1** | 7 Particles and their behaviour | * Particles and their behaviour
* Particle model
* States of Matter
* Density
* Melting and Freezing
* Boiling
* More changes of State

Diffusion | Do NowMCQ 1 | * Keyword and definition
* Subject language [Speak like a Scientist]
* Inclusive questioning
* Writing a method
* Write like a Scientist
* Literacy Article
* Keyword vocabulary sheet
 | Personal skills* Thinking and problem solving
* Working together and communicating
* Attention to health and safety

Scientific Careers* Synthetic Chemist
* Materials Scientist
 | Formative Assessment Summative Assessment |
| **HT2** | 7 Forces | * Introduction to forces
* Squashing and stretching
* Drag forces and friction
* Forces at distance
* Balanced and Unbalanced Forces
 | Do NowMCQ 1  | * Keyword and definition
* Subject language [Speak like a Scientist]
* Inclusive questioning
* Writing a method
* Write like a Scientist
* Literacy Article
* Keyword vocabulary sheet
 | Personal skills* Thinking and problem solving
* Working together and communicating
* Attention to health and safety

Scientific Careers* Engineer
* Materials Scientist
* NASA
* Formula One Engineer
 | Formative Assessment Summative Assessment |
| **HT2** | 7 Cells | * Observing cells- Microscopes and Microscope Calculations
* Plant and animal cells
* Specialised Cells
* Movement of substances
* Unicellular organisms
 | Do NowMCQ 1 | * Keyword and definition
* Subject language [Speak like a Scientist]
* Inclusive questioning
* Writing a method
* Write like a Scientist
* Literacy Article
* Keyword vocabulary sheet
 | Personal skills* Thinking and problem solving
* Working together and communicating
* Attention to health and safety

Scientific Careers* Microbiologist
* Medical careers
* Cell Biologist
 | Formative Assessment Summative Assessment |
| **HT3** | Atoms, Elements and Compounds | * Elements
* Atoms
* Compounds
* Chemical formulae
 | Do NowMCQ 1  | * Keyword and definition
* Subject language [Speak like a Scientist]
* Inclusive questioning
* Writing a method
* Write like a Scientist
* Literacy Article
* Keyword vocabulary sheet
 | Personal skills* Thinking and problem solving
* Working together and communicating
* Attention to health and safety

Scientific Careers* Chemist
* Shampoo manufacturer
* Atomic scientist
 | Formative Assessment Summative Assessment |
| **HT3** | Space | * The night sky (Celestial objects)
* Solar system (Planets)
* The Earth (season/days)
* The moon (eclipses)
 | Do NowMCQ 1  | * Keyword and definition
* Subject language [Speak like a Scientist]
* Inclusive questioning
* Writing a method
* Write like a Scientist
* Literacy Article
* Keyword vocabulary sheet
 | Personal skills* Thinking and problem solving
* Working together and communicating
* Attention to health and safety

Scientific Careers* Engineer
* Materials Scientist
* NASA
* Formula One Engineer
 | Formative Assessment Summative Assessment |
| **HT4** | 7 Acids and Alkalis  | * Acids and Alkalis
* Indicators and pH
* Neutralisation
* Acid Strength
* Making salts
 | Do NowMCQ 1  | * Keyword and definition
* Subject language [Speak like a Scientist]
* Inclusive questioning
* Writing a method
* Write like a Scientist
* Literacy Article
* Keyword vocabulary sheet
 | Personal skills* Thinking and problem solving
* Working together and communicating
* Attention to health and safety

Scientific Careers* Chemist
* Engineer
* Atomic scientist
 | Formative Assessment Summative Assessment |
| **HT5** | 7 Reproduction and Variation | * Adolescence
* Reproductive System and Organs (humans and plants)
* Fertilisation and implantation in Humans
* Development of a foetus
* Menstrual Cycle
* Effect of Maternal Lifestyle
* Flowers and pollination
* Fertilisation and germination
* Seed Dispersal Mechanisms
 | Do NowMCQ 1  | * Keyword and definition
* Subject language [Speak like a Scientist]
* Inclusive questioning
* Writing a method
* Write like a Scientist
* Literacy Article
* Keyword vocabulary sheet
 | Personal skills* Thinking and problem solving
* Working together and communicating

Scientific Careers* Doctor
* Nurse
* Midwife
* Paediatrician
 | Formative Assessment Summative Assessment |
| **HT6** | Separation techniques  | * Pure substance
* Mixtures
* Solutions
* Solubility
* Filtration
* Evaporation and distillation
* Chromatography
 | Do NowMCQ 1  | * Keyword and definition
* Subject language [Speak like a Scientist]
* Inclusive questioning
* Writing a method
* Write like a Scientist
* Literacy Article
* Keyword vocabulary sheet
 | Personal skills* Thinking and problem solving
* Working together and communicating

Scientific Careers* Chemist
* Engineer

Atomic scientist  | Formative Assessment Summative Assessment |
| **Catholicity across the science curriculum**  | **Particles and their behaviour** – Team work and participation in practical's, helping draw graphs and how science works skills – JeanBaptiste Dumas (Discover of atomic weight) CST values Subsidiarity, common good, participation **Cells** – Stem cells debate and literacy task **Space** – Literacy task on big bang, Georges Lernaitre (Invented big bang theory) **Reproduction** – Sanity of life debate, human dignity and common good  |