**Y9 - Entry Level Certificate (AQA)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 | Summer 2 |
| Big Ideas | Biology 1 – \*The Human Body | Chemistry 3 – \*Elements, compounds, and mixtures | Physics 5 – \*Energy, forces, and matter | Biology 2 – \*Environment, evolution, and inheritance | Chemistry 4 – \*Chemistry in the world | Physics 6 – \*Electricity, magnetism, and waves |
|  Topics | What is the body made of?How the body works.How the body fights disease.How the body is co-ordinated. | Atoms, elements, and compounds.How structure affects properties.Separating mixtures.Metals and alloysPolymers | Energy, energy transfers and resourcesForces and workSpeed and stopping distancesAtoms and nuclear radiation | What are the feeding relationships between living organisms?What determines where species live?How life has developed on earth. | Reactions of acidsEnergy and rate of reactionEarth’s atmosphereFuels and human impacts on the atmosphereWater for drinking | Electric currentDomestic electricityMagnetism and electromagnetismDifferent types of wavesElectromagnetic waves |
| Skills | EXPERIMENTAL DESIGN- Creates a hypothesis- Identifies techniques/equipment-Describes a method | WORKING SAFELY-Handles equipment and materials safely-Makes simple measurements-Calculating means | RECORDING & PRESENTING DATA-Collect data in a table-Selects and appropriate method for displaying data | IDENTIFYING PATTERNS & RELATIONSHIPS- Draws conclusions- Identifies relationship-Evaluate success |
| Assessment | Formative assessment every lesson.Range of learning & skill-based homework.Teacher Devised Activity (TDA) & Externally Set Assignment (ESA) | Formative assessment every lesson.Range of learning & skill-based homework.Teacher Devised Activity (TDA) & Externally Set Assignment (ESA) | Formative assessment every lesson.Range of learning & skill-based homework.Teacher Devised Activity (TDA) & Externally Set Assignment (ESA) | Formative assessment every lesson.Range of learning & skill-based homework.Teacher Devised Activity (TDA) & Externally Set Assignment (ESA) | Formative assessment every lesson.Range of learning & skill-based homework.Teacher Devised Activity (TDA) & Externally Set Assignment (ESA) | Formative assessment every lesson.Range of learning & skill-based homework.Teacher Devised Activity (TDA) & Externally Set Assignment (ESA) |
| Linked learning | The topics taught during this course build upon those studied during KS3 science, cells, particles, and energy. It provides a firm foundation for the students who study it allowing them to transition to either KS4 combined or separate science. Learning components at the start of lessons remind students of prior learning and point out links to previous topics.Links with other subjects: Maths – use of fractions, decimals and percentages, graphical representations, accuracy and interpreting data. English – reading, comprehension and writing. |
| \*SMSC Links | 253 Provision for the spiritual development of pupils includes developing their:- sense of enjoyment and fascination in learning about themselves, others, and the world around them,- Use of imagination and creativity in their learning254 Provision for the moral development of pupils includes developing their: understanding of the consequences of their behaviour and actions |
| Literacy | Define keywords for basic concepts or scientific terms that relate to phenomena, objects, and their properties.Write in a style to fit purpose and audience.Use scientific vocabulary, clear language and well-formed sentencesRead and comprehend scientific methods and text  | Numeracy | Calculate a meanRead values from graphsSelect relevant data and perform calculationsEstimate values of dataPresent data in tables and graphsInterpret relationships |
| Enrichment | Developing STEM skills with visits from external speakers. Themed activities for British Science Week. |
| Impact | Students will be working independently, with practical dexterity, good organisation, and efficient time management. Students will have developed a deeper understanding relating to fundamental ideas and working scientifically. Science will help students to become logical thinkers and problem solvers with a better understanding of the world around them. Demonstrating resilience and the ability to consider moral and ethical implications of scientific developments. |

|  |
| --- |
| Ways to support student learning in this subject |
| * Encourage the completion of homework.
* Encourage discussion of science issues that arise in the news.
* Watch science documentaries together.
* Discuss science lessons and their progress.
* Encourage a positive attitude towards science.
* Practice the spelling of key terms
 |