**Overview 2024-25**

|  | Topics taught | | | Summative Assessments | Link for SWA Resources | Home Learning Expectations | Extracurricular opportunities |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Year | Biology | Chemistry | Physics |
| 7 | * Cells and Organs * Reproduction * Ecology | * Particles and Solutions * Chemical Reactions * The Earth | * Energy * Speed and Forces * Space | 7 assessments:   * USP Y7 Baseline + Y7 Milestone * Skills in Science x 2 * 2 x End of Term + 1 x End of Year | <https://padlet.com/nbailey40/Y7>  <https://padlet.com/nbailey40/Y8> | 4 x daily goals a week (or 1 weekly goal equivalent) on Tassomai (<https://www.tassomai.com>)  Using the parent dashboard feature you can monitor what they have done and encourage them to identify areas to revise.  Regular testing (either self-testing or with a family member) of the knowledge questions from the back of their booklets  Any revision homework which is set | Curiosity Cube  Science Week |
| Planet SOS | | |
| 8 | * Evolution and Genetics * Healthy Body * Photosynthesis and Respiration | * Energy in Reactions * Periodic Table * Acids and Alkalis | * Matter * Waves * Electricity and Magnetism | In each Y8 and Y9 there are 6 assessments:   * USP Y8 Milestone * Skills in Science x 2 * 2 x End of Term + 1 x End of Year | Faraday Challenge  Science Week |
| 9 | * Cells * Inheritance and Variation * Transport systems * Digestion * Organisation and Health | * Pure Substances and Mixtures * Atomic Structure * Chemical Properties of Metals and Non-Metals * Acidic and Alkali Solutions * Energy Changes during reactions | * The Particle Model * Motion * Forces and Newton’s Laws * Energy Stores and Transfers * Electrical Circuits | <https://padlet.com/nbailey40/science_resources>  and you will find separate padlets for biology, chemistry and physics  How to revise in science:  <https://padlet.com/nbailey40/sciencerevision> | NextGen Samsung Competition  Science Week |
| 10 | * Organisation in Plants * Organisation and Health * Bioenergetics * Disease and Immunity * Inheritance 2 * Biodiversity and adaptations | * Structure and Bonding * Extracting Resources and Sustainability * Introduction to moles * Making Salts * Quantitative and Qualitative Analysis (Triple Only) * Materials (Triple Only) | * Forces and Newton’s Laws * Electrical Circuits * Atomic Model and Nuclear Radiation (Combined Only) * Nuclear Physics (Triple Only) * Energy and Electricity in the home * Energy Changes * Space (Triple Only) | 6 assessments:   * Maths in science * 1 x Required Practicals Assessment * 1 x mini-paper 1 * 2 x End of Term   + Y10 mocks (3 papers based majority on “paper 1 topics” in each Biology, Chemistry and Physics) | 4 x daily goals a week (or 1 weekly goal equivalent) on Tassomai (<https://www.tassomai.com>)  Using the parent dashboard feature you can monitor what they have done and encourage them to identify areas to revise.  1 x set of of PPQs a week (on rotation between Bio/Chem/Phys)  Regular testing (either self-testing or with a family member) of the knowledge questions from the back of their booklets  Regular practicing of past paper questions (either teacher set or self-sought and also self-marked using resources on the revision padlet)  Any revision homework which is set | [GCSE Science Live!](https://sciencelive.org.uk/gcse/event_categories/cambridge/) – run in alternate years for both Y10 and Y11  Babraham Schools Day  Science Week |
| 11 | * Inheritance 2 * Nervous System and homeostasis * Hormonal Control System * Plant Hormones (Triple only) * Evolution and Variation * Impact of humans * Biodiversity and Adaptations (Combined Only) | * Making Salts (Combined Only) * Organic Chemistry and Pollution (Combined Only) * Fuels and Pollution (Triple Only) * Organic Compounds (Triple Only) * Chemical Analysis (Triple Only) * Rate and extent of reactions | * Electricity in the home (combined only) * Forces and their applications (Combined only) * Fields and EM waves * Forces and Momentum * Energy Changes * Applications of waves (Triple only) * Pressure (Triple only) * Electromagnetism | 3 internally-set assessments:   * 1 x mini paper 1 * 1 x Required Practicals Assessment * Y11 mocks (3 papers based majority on “paper 2 topics” in each Biology, Chemistry and Physics)   6 externally-set assessments (GCSE science exams):   * 2 x Biology * 2 x Chemistry * 2 x Physics |

**Summative Assessment Schedule 2024-25:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Term | Y7 | Y8 | Y9 | Y10 | Y11 |
| Autumn 1 | Baseline milestone assessment | Skills in science | Skills in science | Maths in science assessment | Mini Paper 1 |
| Autumn 2 | Autumn assessment | Autumn assessment | Autumn assessment | Autumn assessment | Required practical Assessment |
| Spring 1 | Skills in science | Skills in science | Skills in science | Required practical Assessment | Y11 mock |
| Spring 2 | Spring assessment | Spring assessment | Y9 milestone assessment | Spring assessment |  |
| Summer 1 | Skills in Science | Y8 milestone assessment | Summer assessment | Mini Paper 1 | GCSE EXAMS |
| Summer 2 | Y7 milestone assessment | End of Y8 assessment | End of Y9 assessment | Y10 mock | GCSE EXAMS |
| End of Y7 assessment |  |  |  |  |

**Curriculum Schedule 2024-25:**

**Y7-9**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 7 | | 8 | | 9 | |
|  | Teacher 1 | Teacher 2 | Teacher 1 | Teacher 2 | Teacher 1 | Teacher 2 |
| Autumn 1 | Energy | Cells and Organs | Energy in reactions | Evolution and Genetics | Pure Substances and Mixtures | The Particle Model |
| Cells |
| Autumn 2 | Particles and Solutions | Speed and Forces | Healthy Body | Atomic Structure | Motion |
| Matter | Forces and Newton’s Laws |
| Spring 1 | Waves |
| Reproduction | Periodic Table | Chemical Properties of Metals and Non Metals | Inheritance and Variation |
| Spring 2 | Chemical Reactions |
| Energy Stores | Transport systems |
| Summer 1 | Space | Acids and Alkalis | Electricity and Magnetism | Electrical Circuits | Digestion |
| Ecology |
| Summer 2 | Energy changes in chemical reactions | Organisation and Health |
| The Earth | Planet SOS | Photosynthesis and Respiration |  |  |

**Y10**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 10 (Triple) | | | 10 (Combined) | | |
|  | Teacher 1 | Teacher 2 | Teacher 3 | Teacher 1 | Teacher 2 | Teacher 3 |
| Autumn 1 | Oragnisation in plants | Forces and Newton's Laws | Structure and Bonding | Organisation in Plants | Forces and Newton's Laws | Structure and Bonding |
| Organisation and Health | Electrical Circuits |
| Autumn 2 | Bioenergetics | Extracting Resources and Sustainability | Organisation and health | Electrical Circuits | Extracting Resources and Sustainability |
| Disease and Immunity | Nuclear Physics | Bioenergetics |
| Spring 1 | Inheritance 2 | Introduction to moles | Disease and Immunity | Atomic Structure and Nuclear Radiation |
| Spring 2 | Energy and Electricity in the home | Making Salts |
| Biodiversity and Adaptations | Inheritance 2 | Energy and Electricity in the home | Introduction to moles |
| Summer 1 | Energy Changes | Quantitative and Qualitative Analysis |
| Biodiversity and Adaptations | Energy changes | Making Salts |
| Summer 2 |  | Materials |
|  | Space |

**Y11**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 11 (Triple) | | | 11 (Combined) | | |
|  | Teacher 1 | Teacher 2 | Teacher 3 | Teacher 1 | Teacher 2 | Teacher 3 |
| Autumn 1 | Inheritance 2 | Energy changes | Fuels and Pollution | Inheritance 2 | Electricity in the home | Making Salts |
| Nervous system and homeostasis | Pressure | Nervous system and homeostasis | Forces and their applications |
| Autumn 2 | Hormonal Control Systems | Fields and EM waves | Organic Compounds | Hormonal Control Systems | Fields and EM waves |
| Plant Hormones | Forces and Momentum | Organic Chemistry |
| Spring 1 | Evolution and Variation | Applications of waves | Chemical Analysis | Evolution and Variation | Forces and Momentum |
| Spring 2 | Electromagnetism | Rate and Extent of Reactions | Impact of humans | Energy changes | Rate and Extent of Reactions |
| Impact of humans | Biodiversity and Adaptations | Electromagnetism |  |
| Summer 1 |  |  |  |  |
|  |  |  |  |