



YOUR
SCHOOL
JOURNEY

YEAR 10

Combined Science

AUTUMN TERM

- Students registered for Educake to revise key content and they will have the opportunity to purchase revision guides.
- Introductory lesson on structure and grading of GCSE Science held.
- **Biology** content studied includes **Cells**, to build on the work in year 7, 8 and 9 and **Bioenergetics**, which looks at respiration and photosynthesis. The **Organisation** topic is studied which looks at the digestive system, the circulatory system and systems within plants.
- **Chemistry** content studied includes **Atomic Structure** and **Bonding** within different types of substance.
- **Physics** content studied includes **The Particle model of Matter**, looking at solids, liquids and gases, in greater, detail and changes of state and the **Radioactivity** unit, which looks at the uses and dangers of radiation.
- Paper 1 content examined and weak areas addressed.

SPRING TERM

- **Biology** content studied includes **Infection**, which looks at communicable and non-communicable diseases, and students find out how our bodies prevent infection and how they react if infected.
- **Chemistry** content studied includes **Quantitative Chemistry**, **Chemical Changes**, investigating acids and alkalis and electrolysis of solutions and **Energy Changes**, looking at exothermic and endothermic reactions.
- All covered content examined and weak areas addressed.

SUMMER TERM

- How to prepare for the exams assembly held.
- **Chemistry** content includes **Chemistry of the Atmosphere**, looking at how the atmosphere of the Earth has changed overtime.
- **Physics** content includes **Energy**, looking at conservation, dissipation and efficiency, including investigating specific heat capacity, and considering renewable energy resources. Also, **Electricity**, studying current and charge, investigating resistance and finding out about the National Grid.
- All Paper 1 content covered examined.

BUILDING EXCEPTIONAL YOUNG MEN



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AUTUMN TERM

- Students registered for Educake to revise key content and they will have the opportunity to purchase revision guides.
- Weekly revision homework on paper 1 content using Educake and exam past paper questions.
- **Chemistry** content studied includes **Carbon Chemistry**, where students find out how we obtain fuels, such as petrol and how the demand for these fuels is met. **Rates of Reaction**, investigating how reactions rates can be increased and why this is important in industry. **Chemical analysis**, looking at the importance of formulations in our everyday lives and investigating chromatography. The unit **Using Resources**, looking at potable water, the treatment of waste water and life cycle assessments for products.
- **Physics** content includes **Forces**, looking at speed, acceleration and terminal velocity and considering this in everyday life situations. **Waves**, finding out about the uses and dangers of the electromagnetic spectrum.
- Paper 1 content examined and weak areas addressed.

SPRING TERM

- Weekly revision homework on paper 2 content focusing on key fact recall questions, using Educake and past paper questions.
- Revision and required practical revision classes held.
- **Biology** content studied includes **Inheritance, Variation and Evolution**, looking at types of reproduction, natural selection and the theories around this, selective breeding and genetic modification. **Homeostasis**, finding out about the nervous system, investigating reaction times and learning how our bodies regulate temperature, sugar and water levels. **Ecology**, studying predator-prey cycles and material cycles, investigating different sampling techniques and considering how to maintain biodiversity.
- **Physics** content studied is **Electromagnetism**, investigating magnetism and the uses of electromagnets.
- Paper 2 content examined.

SUMMER TERM

- Finishing off any topics Revision classes on key questions and examination skills.
- Targeted in class revision programme on key themes to address areas of weakness from PPE analysis.

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