MEADOW PARK SCHOOL

Year 11 Curriculum Overview: Science

Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
Homeostasis and Response (Biology) – maintaining stable internal conditions, the nervous system, hormonal control and the human endocrine system. **Rates of Reaction** (Chemistry) – factors affecting reaction rates, collision theory and measuring reaction rates. **Forces** (Physics) – forces and motion, speed, acceleration and stopping distance.	**Forces (continued)** (Physics) – momentum and applications of forces. **Chemical Analysis** (Chemistry) – identifying substances using chemical tests and instrumental analysis. **Organic Chemistry** (Chemistry) – hydrocarbons, crude oil, fractional distillation and polymers. **Inheritance, Variation and Evolution** (Biology) – genetic inheritance, variation, natural selection and evolution.	**Waves** (Physics) – wave properties, electromagnetic waves and their uses. **Chemistry of the Atmosphere** (Chemistry) – the composition and evolution of the Earth's atmosphere and environmental issues.	**Magnetism and Electromagnetism** (Physics) – magnetic fields, electromagnets, motors and generators. **Using Resources** (Chemistry) – sustainable use of resources and recycling. **Ecology** (Biology) – ecosystems, biodiversity and environmental impacts.	**GCSE Revision and Exam Preparation** – structured revision of key topics across Biology, Chemistry and Physics, including exam practice and revision strategies in preparation for GCSE examinations.	GCSE Examinations

Assessment	Key Concepts/ Skills	Reading
Students continue to complete Knowledge Checks throughout the year to monitor progress and identify areas for improvement. Regular exam-style questions and assessments help prepare students for GCSE examinations. Mock examinations and revision assessments support students in identifying gaps in knowledge before the final exams.	During Year 11 students focus on refining key GCSE skills including: • Applying scientific knowledge to unfamiliar contexts • Interpreting graphs, calculations and scientific models • Analysing data and evaluating investigations • Using accurate scientific vocabulary in extended written answers • Developing strong exam technique	Students develop their scientific literacy through reading scientific texts, case studies, and explanations of real-world scientific discoveries. Students practise interpreting diagrams, graphs, and written information to build confidence in reading scientific material. Students are taught the BUG strategy to help them approach exam questions effectively.
Enrichment	**Careers**	**Useful resources and revision**

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Students have opportunities to take part in enrichment activities such as: • Science Club • British Science Week activities • STEM challenges and competitions • Practical investigations and demonstrations	Throughout the curriculum, students are introduced to careers that use science, including: • Medicine and healthcare • Engineering and technology • Environmental science • Research and laboratory science These links help students understand how science connects to real-world careers and future opportunities.	Students are supported in their revision through: • **Sparx Science** (weekly homework) • GCSE revision guides and knowledge organisers • Teacher revision resources and past paper questions • Recommended science revision websites and videos