



St George's School

Physics

KS4 Curriculum

PRIOR KNOWLEDGE <i>Knowledge and skills developed in KS3</i>	Physics specific knowledge as detailed in our KS3 curriculum maps. Skills developed: <ul style="list-style-type: none">• Knowledge of key facts• Describing concepts using models• Scientific method - linking experiment to hypothesis• Describing, explaining and sequencing steps in a process• Linking causes to effects• Practical skills (required practical)• Interpretation of data in tables and graphs• Numerical and logic skills• Research skills
COURSE DELIVERY & STRUCTURE <i>How the curriculum is delivered</i>	Lessons: 1.5 hours a week / 2 hours a week Grouping: Setting based on previous year results and teacher assessment / <i>Separate Science Class</i> Structure: Theory lessons and practical based lessons Prep: 1 prep per week (2 for separate) with 1 assessed homework per chapter
QUALIFICATION <i>Exam Board, aim and objectives</i>	AQA GCSE (9-1) in Combined Science (8464), GCSE (9-1) in Physics (8463) Qualification aims and objectives: GCSE specifications in combined award science should enable students to: <ul style="list-style-type: none">• develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics• develop understanding of the nature, processes and methods of science, through different types of scientific enquiries that help them to answer scientific questions about the world around them• develop and learn to apply observational, practical, modelling, enquiry and problem-solving skills, both in the laboratory, in the field and in other learning environments• develop their ability to evaluate claims based on science through critical analysis of the methodology, evidence and conclusions, both qualitatively and quantitatively
ASSESSMENT <i>Internal monitoring and final assessment</i>	Internal Assessment: End of Topic Tests for each chapter, Year 10 Exam, Yr 11 Mock Exam Final assessment: GCSE Exams: 2 exams - 1 hour 15 mins each / 2 exams - 1 hour 45 mins each
BREADTH <i>Opportunities, trips, wider reading, cultural capital</i>	

	SUBJECT KNOWLEDGE <i>Overview of topics</i>	SKILLS & STRATEGIES <i>Procedural knowledge</i>
Autumn Y10	P6 - Molecules and Matter P4 - Electric Circuits	Knowledge of key facts Analysing data Mathematical skills in Science Practical skills
Spring Y10	P5 - Electricity in the Home P1 - Energy	Knowledge of key facts Analysing data Mathematical skills in Science Practical skills
Summer Y10	Study Leave & Exam P2 - Energy Transfer P14 - Light P16 - Space	Knowledge of key facts Analysing data Mathematical skills in Science Practical skills Independent research Presentation skills
Autumn Y11	P7 - Radioactivity Study leave & Mock Exam	Knowledge of key facts Independent research Presentation skills Analysing data Mathematical skills in Science
Spring Y11	P8 - Forces in Balance P10 - Forces and Motion P11 - Force and Pressure	Knowledge of key facts Analysing data Mathematical skills in Science Practical skills Independent research
Summer Y11	P13 - Electromagnetism Revision Study leave & Exams	Knowledge of key facts Analysing data Mathematical skills in Science