

Please use this Route Through to learn more about what students are learning in lessons, and how they can extend their learning at home. Please contact the Head of Department or Director of Year for more information.

Subject	What are students learning in lessons?	What could students do to extend their learning and develop their character?
Autumn Term 1	Particles: changes of state and separating substances. Cells: microscopes, animal and plant cells, specialised cells.	Be curious: research microscopes and create an illustrated timeline showing how they have developed.
Autumn Term 2	Organ Systems: digestive system, respiratory system, circulatory system and skeletal system. Chemical Changes: introduction to atoms, elements and chemical reactions.	Be curious: research chemical reactions you can do at home. Choose one and write a scientific report.
Spring Term 1	Fundamentals of Physics: forces and their effects, energy stores and pathways. Revision: revise all units and prepare for the Science midyear exams.	Be curious: explore the websites: "PhET forces and motion basics", "PhET Energy Skate Park". Create a discoveries sheet explaining what learned.
Spring Term 2	Sound: production of sound waves, how the pitch and loudness can change. Light: how light travels, colours and filters, reflection, refraction and absorption.	Be curious: find examples of reflection, refraction and sound in everyday life and create a photo collage with explanations.
Summer Term 1	Materials: polymers, composites and why materials are used in different situations and for different purposes. Life Cycles: life cycles and human reproduction.	Be curious: mix play dough and couscous in different ratios. Record your observations in a data table. Explain the differences observed.
Summer Term 2	Life Cycles: life cycles and human reproduction. Revision: revise all units and prepare for the end of year exams.	Be curious: create a timeline showing the stages of a human life cycle.
How should I plan my time?	Assessment	Home Learning
	Students think hard and answer lots of questions every lesson. Students practice and get feedback on their work. Exam: Spring 1 and Summer 2	Character tasks and Sparx Science to continue the joy of learning beyond the classroom.