

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	Biological systems: organ systems, gas exchange and effects of toxins on health. Reactivity: the periodic table, patterns in reactivity.	Be curious: Research cystic fibrosis and how it can effect different organ systems.
Autumn Term 2	Electricity: electrical components, circuits, current, potential difference and resistance. Magnetism: magnets, magnetic fields and electromagnetism.	Demonstrate independence: create a circuit using a potato or lemon! Investigate why this works. Can you make an electromagnet too?
Spring Term 1	Matter: states of matter, pressure, Brownian motion and pressure. Revision: revise all units and prepare for the Science midyear exams.	Be resilient: make a revision time table and stick to it! Learn the science question and answers for each topic.
Spring Term 2	Atomic Structure: subatomic particles, development of the atom, isotopes, group 1 and group 7.	Be curious: Which scientists were involved in the development of an atom? How were they able to develop this model?
Summer Term 1	Cells: organelles and their functions in animal, plant and bacterial cells. Radiation: types of radiation and their applications.	Be curious: how are bacteria cells different to animal cells? Where do we use bacterial cells in industry?
Summer Term 2	Bioenergetics: photosynthesis in plants, respiration (aerobic and anaerobic) in humans, bacteria and yeast. Revision: revise all units and prepare for the end of year exams.	Be resilient: make a revision time table and stick to it! Learn the science question and answers for each topic.

	Assessment	Home Learning
How should I plan my time?	Students think hard and answer lots of questions every lesson. Students practice and get feedback on their work. Exam: Spring 1 and Summer 2	Due every Thursday at 4pm: 1 hour Sparx Science