



SUBJECT: Science

Science

The Science curriculum at Key Stage 3 is designed to cover a broad range of topics across all elements of Science to spark our students' interest in science from Year 7 and support them through KS3 to GCSE success, with maths, literacy and working scientifically embedded throughout to develop key skills.

Science operates an accelerated curriculum with robust assessments, where all pupils start the GCSE course in year 9 and take their exams in year 10 and/ or year 11 (depending on their cohort)

Aims of Science at Stationers' Crown Woods Academy

- To provide students with a wide array of scientific knowledge about the world and universe around us.
- Enable students to identify, describe, explain, link, analyse and evaluate evidence and experience working with the scientific method to promote scientific study
- Promote the use of numeracy and literacy in all lessons to enable students to articulate, comment on and to prove evidence/data
- Enlighten students about the social, economic, environment and ethical implications surrounding the relevant aspects of science to promote responsible and critical thinkers
- Encourage pupils to discuss and evaluate different viewpoints with their peers. Considering their own views and those of others with regards to key philosophical questions.
- Build pupils communication, teamwork and leadership skills through group work and discussion exercises throughout the curriculum.

Assessment in Science

At Key Stage 3 students will be formally assessed at the end of each unit of work, focusing on the content that they have covered during that half term. However, teachers will also use ongoing, formative assessment throughout all lessons to continually monitor the progress of the students within their class.

Year 7 will also have 3 main synoptic assessments throughout the year (autumn, spring and summer terms) with year 8 having 2 synoptic assessments (spring and summer)

At Key Stage 4 students will regularly complete exam practice questions using examples from past exams in previous years; this regular assessment will give the teacher an ongoing understanding of student's strengths and areas for development. At regular intervals students will also sit summative assessments of past exam papers based on the content that they have covered.



Science Key Stage 3 Curriculum content

	<u>Year 7</u>	<u>Year 8</u>
<u>HT1</u>	<p>B1.1: Cells- You will discover what plants and animals are made of and you will also meet some tiny organisms that can only be seen under a microscope.</p> <p>C1.1: Particles and their behaviour- You will discover the way particles act move and behave under different circumstances</p>	<p>B2.1: Health and Lifestyle- You will compare the effects of healthy and unhealthy lifestyles on your body. You will also look at why organisms need energy to function effectively.</p> <p>P2.2: Energy- You will learn how the electricity in your house is generated, why it is important to insulate a house and what you pay for when you pay your electricity bill. You will also find out how to use graph to tell a story</p>
<u>HT2</u>	<p>P1.3: Light- You will learn about how you see, and how light waves travel</p> <p>C1.2: Elements, Atoms and Compounds- You will learn about atoms that make up everything on Earth...and beyond</p> <p>P1.2: Sound- You will learn about how you hear, and how sound waves travel</p>	<p>C2.1: Periodic Table- You will explore patterns in chemical reactions and you will identify patterns in the properties of elements, and learn how to use the Periodic Table to predict properties.</p> <p>P2.1: Electricity and Magnetism- You will discover the different types of circuits and how they work.</p> <p>C2.2: Separation Techniques- You will discover how we separate mixtures.</p>
<u>HT3</u>	<p>B1.2 Structure and Function of Body Systems- You will explore how different structures work together to keep an organism alive.</p> <p><u>Mid-Year Test Revision and Test</u></p>	<p>C2.2: Separation Techniques- continued</p> <p><u>Mid-Year Test Revision and Test</u></p> <p>B2.2: Ecosystems- You will discover how all organisms interdepend on each other for survival.</p>
<u>HT4</u>	<p>P1.4: Space- You discover about the place of the Earth and the Universe.</p> <p><u>SCIENCE WEEK</u></p> <p>B1.3: Reproduction- You will discover how new plants and animals are created through the</p>	<p>C2.4: The Earth: You will learn about the structure of the Earth, and the rocks of its crust and how to obtain the materials we need from the Earth and atmosphere</p> <p><u>SCIENCE WEEK</u></p>

	process of reproduction	
HT5	<p>B1.3: Reproduction continued</p> <p>C1.3: Chemical Reactions- You will explore how chemical reactions make vital materials and transfer energy for almost everything we do</p> <p>P1.1: Forces- You will learn about the forces from those that keep you falling through the floor and allow astronauts to stand on the Moon</p>	<p>P2.3: Motion and Pressure- You will learn how forces can explain gas and air pressure</p> <p>B2.3 Adaptations and Inheritance- You will investigate the differences that exist between organisms, and why this is important for their survival.</p> <p>C2.3: Metals and Acids- You will discover various chemical reactions, their uses and the materials they give us</p>
HT6	<p>P1.1: Forces- continued</p> <p>C1.4: Acids and Alkalis- You will discover all there is about these two important types of chemicals-properties, reactions and products</p> <p><u>End of Year Revision and Test</u></p>	<p>C2.3: Metals and Acids- continued</p> <p><u>End of Year Revision and Test</u></p>