

Curriculum Map 2025-26						
Year 11 Triple						
Half term	Unit title with hyperlink to scheme of work	Unit summary	Skills & content covered	Skills & content revisited	Summary of formative marking, feedback and student response	Summative assessment schedule, including assessment criteria
Autumn Half-term 1	<a href="#">B4 Bioenergetics</a>	In this section we will explore how plants harness the Sun's energy in photosynthesis in order to make food. This process liberates oxygen which has built up over millions of years in the Earth's atmosphere. Both animals and plants use this oxygen to oxidise food in a process called aerobic respiration which transfers the energy that the organism needs to perform its functions.  Conversely, anaerobic respiration does not require oxygen to transfer energy. During vigorous exercise the human body is unable to supply the cells with sufficient oxygen and it switches to anaerobic respiration. This process will supply energy but also causes the build-up of lactic acid in muscles which causes fatigue	1. <del>P</del> hotosynthesis 2. <del>R</del> ate of photosynthesis 3. <del>P</del> Rate of photosynthesis 4. <del>U</del> ses of glucose 5. <del>A</del> erobic and anaerobic respiration 6. <del>R</del> esponse to exercise 7. <del>M</del> etabolism	Plants and algae do not eat, but use energy from light, together with carbon dioxide and water to make glucose (food) through photosynthesis.  They either use the glucose as an energy source, to build new tissue, or store it for later use.  Plants have specially-adapted organs that allow them to obtain resources needed for photosynthesis.  Describe ways in which plants obtain resources for photosynthesis.  Explain why other organisms are dependent on photosynthesis.  Sketch a line graph to show how the rate of photosynthesis is affected by changing conditions.  Use a word equation to describe photosynthesis in plants and algae.  Respiration is a series of chemical reactions, in cells, that breaks down glucose to provide energy and form new molecules. Most living things use aerobic respiration but switch to anaerobic respiration, which provides less energy, when oxygen is unavailable.  Use word equations to describe aerobic and anaerobic respiration.  <u>Explain how specific activities involve aerobic or</u>	Sparx HW, in class teacher questioning, MCQ's, starter tasks	Exam practice
Autumn Half-term 1	<a href="#">B7 Ecology</a>	In this unit we will explore how humans are threatening biodiversity as well as the natural systems that support it. We will also consider some actions we need to take to ensure our future health, prosperity and well-being.	1. <del>I</del> ntroduction to Ecology 2. <del>A</del> adaptations 3. <del>F</del> eeding relationships 4. <del>S</del> ampling Required practical 5. <del>D</del> ecomposition (Triple only) 7. <del>B</del> iodiversity and conservation 8. <del>H</del> uman activity 9. <del>T</del> rophic levels (Triple only) 10. <del>F</del> ood production (Triple only)	Make and record observations of organisms. Extract information from charts, interpret information from graphs. Explain every day applications of science.	Sparx HW, in class teacher questioning, MCQ's, starter tasks	Exam practice
Autumn Half-term 1	<a href="#">C9- Chemistry of the Atmosphere</a>	The Earth's atmosphere is dynamic and forever changing. The causes of these changes are sometimes man-made and sometimes part of many natural cycles. The problems caused by increased levels of air pollutants require scientists and engineers to develop solutions that help to reduce the impact of human activity.	1. <del>E</del> arth's early atmosphere 2. <del>G</del> reenhouse gases 3. <del>C</del> limate change 4. <del>C</del> arbon footprint 5. <del>A</del> tmospheric pollutants	Develops work from C1 Atomic structure and looks at impact of changes to the earth's atmosphere over time. Students <b>continue to develop graphing skills from ks3</b> to plot data about the atmosphere	Sparx HW, in class teacher questioning, MCQ's, starter tasks	Exam practice
Autumn Half-term 1	<a href="#">P8 Space Physics</a>	Those studying this topic are expected to learn about the important elements in our Solar System, such as the Sun, the planets, the moons, the dwarf planets, asteroids and comets. The GCSE physics syllabus states that you should be able to: Describe the life cycle of a star Describe the similarities and distinctions between the planets, their moons, and artificial satellites How scientists are able to use observations to arrive at theories such as the Big Bang theory	Space Physics syllabus topics included are: 1. The expanding universe 2. The life cycle of a star 3. The Solar System	gravity force, weight = mass x gravitational field strength (g), on Earth g=10 N/kg, different on other planets and stars; gravity forces between Earth and Moon, and between Earth and Sun (qualitative only)  our Sun as a star, other stars in our galaxy, other galaxies  the seasons and the Earth's tilt, day length at different times of year, in different hemispheres  the light year as a unit of astronomical distance.	Sparx HW, in class teacher questioning, MCQ's, starter tasks	Exam practice
Autumn Half-term 2	<a href="#">C10- Using Resources</a>	Industries use the Earth's natural resources to manufacture useful products. In order to operate sustainably, chemists seek to minimise the use of limited resources, energy consumption, waste and environmental impact in the manufacture of these products.	1. <del>U</del> sing Earth's resources 2. <del>P</del> otable water 3. <del>W</del> aste water 4. <del>A</del> nalysis water required practical 5. <del>L</del> ife cycle assessments 6. <del>R</del> ecycling 7. <del>E</del> xtracting metals 8. <del>C</del> orrosion (Triple only) 9. <del>A</del> lloys (Triple only) 10. <del>C</del> eramics, polymers and composites (Triple only) 11. <del>M</del> aber process (Triple only) 12. <del>NPK</del> Fertilisers (Triple only)	This topic builds on themes from C9 atmosphere and develops students research skills as they review a range of uses of resources on earth such as water, copper and various products	Sparx HW, in class teacher questioning, MCQ's, starter tasks	Exam practice
Autumn 2	<a href="#">Paper 2 Reteaching</a>					
Spring 1/2	<a href="#">Paper 1 Reteaching</a>					
Revision and mocks						