

**Year 8 Learning Map**

<b>B2 - Respiration and Photosynthesis</b>				
<b>Prior Learning</b>		<b>Current Learning</b>		<b>Subsequent Learning</b>
<p>This topic builds on B2 from the Year 7 scheme of work where you will have learned about reproduction in plants. It also builds on ideas from the Key Stage 2 curriculum, which allows you to look at the conditions plants need to survive.</p>		<p>In this topic, you will learn how respiration allows organisms to use energy aerobically and anaerobically. You will be able to represent this with chemical equations. You will also learn how plants are adapted to make their own energy through photosynthesis.</p>		<p>This topic will prepare you for GCSE Biology where in the B4 topic you will study aerobic and anaerobic respiration. It will also help you when you study plant organs in the B2 topic. Furthermore, it will link to studying factors affecting the rate of photosynthesis in B3.</p>
<b>Lesson Sequencing</b>		<b>Tier 3 Vocabulary</b>	<b>Wider Reading Opportunities</b>	<b>Ways in which parents/carers can support</b>
Lesson 1	Anaerobic respiration	Aerobic respiration Anaerobic respiration (fermentation) Fertilisers Photosynthesis Chlorophyll Stomata	'KS3 CPG Science Revision Guide' contains useful revision materials for the science course.  Botany: Plants, Cells and Photosynthesis (Super Smart Science) by April Chloe Terrazas	Encourage students to use their course home learning booklets to revise and practice key information after each lesson.  Ensure students are accessing Microsoft Teams to complete work directed by their teachers.
Lesson 2	Anaerobic respiration			
Lesson 3	Photosynthesis			
Lesson 4	Adaptation of leaves			
Lesson 5	Changing conditions for photosynthesis			
Lesson 6	Planning an investigation into photosynthesis			
Lesson 7	Carrying out an investigation into photosynthesis			
Lesson 8	Using data to link respiration to fermentation			
Lesson 9	Directed improvement and reflection time			
Lesson 10	C2/B2 assessment			