


Learning Plan 5		Subject/Pwnc: Science	Year/Blwyddyn: 9				
<p><u>The Four Purposes in Science and Technology:</u></p> <p>Ambitious, capable learners, who: set themselves high standards; seek and enjoy challenge; are increasingly knowledgeable and skilful; ask questions; enjoy solving problems; can explain ideas and concepts; can use number effectively in different contexts; interpret data and apply mathematical concepts; use digital technologies creatively to communicate, find and analyse information; research and evaluate critically what they find.</p> <p>Enterprising, creative contributors, who: take measured risks.</p> <p>Ethical, informed citizens, who: find, evaluate and use evidence in forming views; consider the impact of their actions when making choices and acting; are committed to sustainability.</p> <p>Healthy, confident individuals, who: are establishing their ethical beliefs; face and overcome challenge.</p>							
<p>Knowledge focus/what matters: Understanding the vital role of technicians in STEM empowers learners to develop practical, collaborative, and problem-solving skills essential for real-world scientific and technological progress.</p>							
Learning objective/key question	What will I know and be able to do? I can...	How will I develop my skills? (Success Criteria)		Homework/Gwaith cartref to support progress			
Week 1 Food Science technician	<ul style="list-style-type: none"> Form a plan to solve a problem in a real-world context linked to catering. Accurately apply knowledge of respiration to problem solve in a real-world context Clearly explain and justify my choices using my results to form conclusions. 	I have a detailed understanding of aerobic respiration and can apply this to real world contexts E.g. exercise and health. I can recall scientific contexts and apply them to new ideas. I can recognise potential issues and problems. I can evaluate my approaches and results to identify areas for development or further research. I can ask and answer subject specific questions that help me develop my understanding of the scientific process.		Wk 1	Homework: Set: Due:		
Week 2 Healthcare service technician	<ul style="list-style-type: none"> Use prior knowledge to design and create products in the health sector similar to lateral flow tests. Use the findings from practical scientific trials to improve the overall results. Find and suggest solutions when faced with a problem 	I can analyse and justify potential solutions. I can create a Lateral Flow test using chromatography. I can evaluate evidence within concepts and models.		Wk 2	Homework: Set: Due:		

	and be able to justify the choices made using scientific concepts			
Week 3 Battery Technician	<ul style="list-style-type: none"> Use subject knowledge to design and create real world products Use existing knowledge to problem solve in real world contexts 	<p>I can start to form my own strategies when problem solving and use them to find the solution.</p> <p>I can generate many ideas to try out when provided with scientific equipment and an aim.</p> <p>I can collect results and combine them to generate a class average to see how many piles it takes to light the LEDs.</p>	Wk 3	<p>Homework:</p> <p>Set:</p> <p>Due:</p>
Week 4 Lighting technician	<ul style="list-style-type: none"> Use subject knowledge of lighting to create a stage set up <p>I can evaluate processes and amend my approach with what works best.</p>	<p>I understand that light is 'additive' with the primary colours combining to make white light and just two primary colours combining to make secondary colours.</p> <p>I can ask and answer subject specific questions confidently.</p>	Wk 4	<p>Homework:</p> <p>Set:</p> <p>Due:</p>
	<ul style="list-style-type: none"> SHOW YOUR LEARNING <p>I can use previous knowledge to inform decisions when creating a lighting setup making links to performing arts and stage management/control.</p>	<p>I can evaluate evidence within concepts and models.</p>		
Weeks 5 - 6 Water technician	<ul style="list-style-type: none"> Use prior knowledge and create links to wider world as part of an investigation into water quality Find, suggest and justify reasons as to why water may be contaminated 	<p>I can analyse and justify potential solutions to problems in the real-world context.</p> <p>I can make links between pH levels in a laboratory tests to applied tests in real life.</p> <p>I can select an appropriate way to present data. TABLE</p> <p>I can make connections to make inferences to further support my learning and understanding.</p>	Wk 5	<p>Homework:</p> <p>Set:</p> <p>Due:</p>