


Learning Plan 2		Subject/Pwnc: Gwyddoniaeth	Year/Blwyddyn: 9		
<p><b><u>The Four Purposes in Science and Technology:</u></b></p> <p><b>Ambitious, capable learners</b> who: set themselves high standards; seek and enjoy challenge; are increasingly knowledgeable and skilful; are questioning; enjoy solving problems; can communicate effectively; can explain the ideas and concepts; can use number effectively; understand how to interpret data and apply mathematical concepts</p> <p><b>Enterprising, creative contributors</b> who: connect and apply their knowledge and skills to create ideas; think creatively to reframe and solve problems; identify and grasp opportunities; take measured risks</p> <p><b>Ethical, informed citizens</b></p> <p><b>Healthy, confident individuals</b> who: face and overcome challenge; have the skills and knowledge to manage everyday life</p>					
<p><b>Knowledge focus/what matters:</b></p> <p>Being curious and searching for answers. The world around us is full of living things which depend upon each other for survival. Focus on how north Wales can harness its natural resources to generate clean, sustainable wind power. Link this sector with the Careers and Work-Related Education offered by the renewable sector.</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		
<p>Weeks 1 - 2:</p> <p>Is static electricity useful?</p> <p>How can we explain what we observe with electromagnets?</p>	<ul style="list-style-type: none"><li>Explore and explain static electricity</li><li>Model the effects of static on everyday materials.</li><li>Construct an electromagnet and build series and parallel circuits.</li></ul>	<p>I can both investigate the effect of static electricity and model it in real life.</p> <p>I can construct an electromagnet safely and take measurements.</p> <p>I can construct both a series and parallel circuit virtually.</p>	Wk 1	<div></div> <p>Set:</p> <p>Due:</p>	

			Wk 2	Set:  Due:
<p>Weeks 3 - 5:</p> <p>How can we harness local wind power in north Wales?</p>	<ul style="list-style-type: none"> <li>• Create a plan for the siting of a wind farm by analysing the best location.</li> <li>•</li> <li>• Interpret a survey of stakeholders and decide on the location of the wind farm from this intelligence.</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• I can write a detailed scientific proposal about the siting of a wind farm using key terms.</li> <li>• I can summarize stakeholders viewpoints and reach a conclusion on who I agree with.</li> </ul>	Wk 3	Set:  Due:
<p>Weeks 6 - 7</p> <p>Metals &amp; Reactions</p>	<ul style="list-style-type: none"> <li>• Conduct chemical practicals safely with metals and acids.</li> <li>• Model the reactions between metals and acids to prove the reactivity series is correct.</li> </ul>	<ul style="list-style-type: none"> <li>• I can identify trends in chemical reactions and begin to make predictions based on these trends.</li> </ul>	Wk 5	Set:  Due: