

At St Cenydd...

- We believe homework is a key part of school life. It allows students to develop their skills and knowledge independently and can be the difference between good and excellent progress.
- We strive for all of the homework we set to be engaging and challenging, but above all worthwhile.
- We expect students to complete all their homework and contact their teachers if they have a problem with their homework.

**You must complete either the core homework OR the challenge homework.**

	Core Gwaith Cartref	Challenge Gwaith Cartref											
Homework 1	Title: <b>Literacy</b> - Photosynthesis	Title: <b>Literacy</b> - Photosynthesis											
	Details: Learn to spell the following key terms; <table border="1" style="margin-left: 20px;"> <thead> <tr> <th>Easier</th> <th>Harder</th> </tr> </thead> <tbody> <tr> <td>plant</td> <td>palisade</td> </tr> <tr> <td>stomata</td> <td>chloroplast</td> </tr> <tr> <td>glucose</td> <td>chlorophyll</td> </tr> <tr> <td>light</td> <td>photosynthesis</td> </tr> <tr> <td>oxygen</td> <td>nucleus</td> </tr> </tbody> </table> Write each one out 5 times. You will be tested on these next lesson.	Easier	Harder	plant	palisade	stomata	chloroplast	glucose	chlorophyll	light	photosynthesis	oxygen	nucleus
Easier	Harder												
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Homework 2	Title: <b>Numeracy</b> -Photosynthesis	Title: <b>Numeracy</b> -Photosynthesis											
	Details: The table shows the yield of wheat when different fertilisers are used on fields.	Details: Work out how much each element (nitrogen, phosphorus and potassium) increased the yield of wheat.											

	<table border="1"> <thead> <tr> <th>Fertiliser</th> <th>Wheat yield in tonnes</th> </tr> </thead> <tbody> <tr> <td>none</td> <td>95</td> </tr> <tr> <td>nitrogen</td> <td>159</td> </tr> <tr> <td>Nitrogen and phosphorus</td> <td>167</td> </tr> <tr> <td>Nitrogen, potassium and phosphorus</td> <td>211</td> </tr> </tbody> </table>	Fertiliser	Wheat yield in tonnes	none	95	nitrogen	159	Nitrogen and phosphorus	167	Nitrogen, potassium and phosphorus	211	
	Fertiliser	Wheat yield in tonnes										
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Plot this data as a bar chart.												
Homework 3	Title: <b>Research</b> - Diseases	Title: <b>Research</b> - Diseases										
	Details: Research the causes of anemia	Details: Research the causes of scurvy and rickets										
Homework 4	Title: <b>Reflection</b> - small intestine	Title: <b>Reflection</b> - small intestine										
	Details: Make a list of all the organs in the digestive system that produce digestive enzymes	Details: Make a list of ways in which the small intestine is adapted for efficient absorption of food molecules.										
Homework 5	Title: <b>Literacy</b> - Lungs and gas exchange	Title: <b>Literacy</b> - Lungs and gas exchange										
	Details: Learn to spell the following key terms;											
	<table border="1"> <thead> <tr> <th>Easier</th> <th>Harder</th> </tr> </thead> <tbody> <tr> <td>airway</td> <td>trachea</td> </tr> <tr> <td>ribs</td> <td>bronchi</td> </tr> <tr> <td>mouth</td> <td>bronchioles</td> </tr> </tbody> </table>	Easier	Harder	airway	trachea	ribs	bronchi	mouth	bronchioles	Details: Write 5 sentences that include at least one of the key terms.		
	Easier	Harder										
airway	trachea											
ribs	bronchi											
mouth	bronchioles											

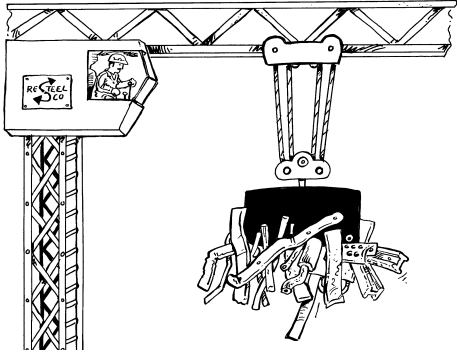
	<table border="1"> <tr> <td>breathing</td> <td>alveoli</td> </tr> <tr> <td>oxygen</td> <td>diaphragm</td> </tr> </table>	breathing	alveoli	oxygen	diaphragm											
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Write each one out 5 times. You will be tested on these next lesson.																
Homework 6	Title: <b>Numeracy</b> - Lungs and gas exchange	Title: <b>Numeracy</b> - Lungs and gas exchange														
	<p>Details:</p> <table border="1"> <caption>Atmospheric Composition Comparison</caption> <thead> <tr> <th>Gas</th> <th>Earth (%)</th> <th>Mars (%)</th> </tr> </thead> <tbody> <tr> <td>Nitrogen</td> <td>78%</td> <td>1.9%</td> </tr> <tr> <td>Oxygen</td> <td>21%</td> <td>0.1%</td> </tr> <tr> <td>Carbon Dioxide</td> <td>0.04%</td> <td>96%</td> </tr> <tr> <td>Argon</td> <td>0.9%</td> <td>1.9%</td> </tr> </tbody> </table> <p>Calculate the difference in the percentages of nitrogen, oxygen and carbon dioxide.</p>	Gas	Earth (%)	Mars (%)	Nitrogen	78%	1.9%	Oxygen	21%	0.1%	Carbon Dioxide	0.04%	96%	Argon	0.9%	1.9%
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Homework 7	Title: <b>Reflection</b> - Respiration	Title: <b>Reflection</b> - Respiration														
	Details: What is Aerobic Respiration?	Details: In humans, where does the Oxygen and Glucose come from for Respiration?														
Homework 8	Title: <b>Reflection</b> - Respiration	Title: <b>Reflection</b> - Respiration														
	<p>Details:</p> <p>List as many benefits of exercising as possible.</p>	<p>Details:</p> <p>Use the words in bold to fill in the gaps in the following summary of respiration.</p> <p><b>condense, glucose, breathe, reaction, water, cold, mitochondria, diet, limewater, energy</b></p> <p>Respiration is a chemical ..... that occurs in the ..... of all cells in all living organisms. The</p>														



		<p>reactants of respiration are ..... and oxygen. The products of respiration are carbon dioxide and ..... It releases ..... so that our cells can complete the seven life processes. Humans obtain the glucose we need for respiration from our ..... We ..... in so that we can obtain the oxygen we need for respiration. We can see the products of respiration when we breathe out. If we stand near a ..... window we can see water vapour ..... on it. If we breathe out through a straw into a beaker of ..... it turns cloudy, proving that we also breathe out carbon dioxide.</p>
Homework 9	Title: <b>Reflection</b> - Chemical reactions	Title: <b>Reflection</b> - Chemical reactions
	Details: Explain what you would see if a piece of magnesium was put into copper sulphate.	Details: Write a word equation for this reaction.
Homework 10	Title: <b>Reflection</b> - Chemical reaction	Title: <b>Reflection</b> - Chemical reaction
	Details: Name the elements in the following compounds: MgO NaCl HCl KOH CuSO <sub>4</sub>	Details: Balance the following equation:  Ca + HCl ⇒ CaCl <sub>2</sub> + H <sub>2</sub>
Homework 11	Title: <b>Literacy</b> - Compounds	Title: <b>Literacy</b> - Compounds
	Details: Make a list of the keywords used last lesson (you should have at	Details: 66 word challenge. Write a summary of what you learnt last

	least 5)	lesson in 66 words.
Homework 12	Title: <b>Reflection</b> - Compounds	Title: <b>Reflection</b> - Compounds
	Details: What is the difference between an element, mixture and compound?	Details: Read each comment carefully- they all contain mistakes. Write a correct version of each statement. <ul style="list-style-type: none"> <li>● Hydrochloric acid is a mixture because it contains lots of different atoms. It's formula is HCl.</li> <li>● Water is a mixture, it contains hydrogen and oxygen. It's formula is H<sub>2</sub>O.</li> <li>● Oxygen is a compound, it is made of two oxygen atoms combined together in a molecule of O<sub>2</sub>.</li> </ul>
Homework 13	Title: <b>Digital</b> - Periodic Table	Title: <b>Digital</b> - Periodic Table
	Details: Use the website: <a href="https://www.ptable.com/">https://www.ptable.com/</a> to find out 3 things about Calcium.	Details: Use the website: <a href="https://www.ptable.com/">https://www.ptable.com/</a> to find out 3 things about each of the elements Chlorine, Fluorine and Iodine.
Homework 14	Title: <b>Digital</b> - Periodic Table	Title: <b>Digital</b> - Periodic Table
	Details: Use the website: <a href="http://www.bbc.co.uk/schools/gcs/ebitesize/science/edexcel_pre_2011/patterns/periodictablerev4.shtml">http://www.bbc.co.uk/schools/gcs/ebitesize/science/edexcel_pre_2011/patterns/periodictablerev4.shtml</a> To find out why Mendeleev's Periodic Table was successful.	Details: Use the website: <a href="http://www.bbc.co.uk/schools/gcs/ebitesize/science/edexcel_pre_2011/patterns/periodictablerev4.shtml">http://www.bbc.co.uk/schools/gcs/ebitesize/science/edexcel_pre_2011/patterns/periodictablerev4.shtml</a> To find out why Mendeleev's Periodic Table had gaps.
Homework 15	Title: <b>Digital/ In the News</b> - Extracting Metals	Title: <b>Digital/ In the News/ Numeracy</b> - Extracting Metals

	<p>Details: Use the website: <a href="https://www.independent.co.uk/news/business/news/trump-steel-tariffs-us-import-tax-levy-uk-competition-market-a8236136.html">https:// www.independent.co.uk/ news/ business/ news/ trump-steel-tariffs-us-import-tax-levy-uk-competition-market-a8236136.html</a> to find out why Donald Trump is imposing a levy (tax) on imported metals.</p>	<p>Details: Use the website: <a href="https://www.independent.co.uk/news/business/news/trump-steel-tariffs-us-import-tax-levy-uk-competition-market-a8236136.html">https:// www.independent.co.uk/ news/ business/ news/ trump-steel-tariffs-us-import-tax-levy-uk-competition-market-a8236136.html</a> To calculate the difference in percentage levy, Donald Trump is imposing on Steel and Aluminium.</p>
<p>Homework 16</p>	<p>Title: <b>Digital</b> - Extracting Metals</p>	<p>Title: <b>Digital/ Numeracy</b> - Extracting Metals</p>
	<p>Details: Use the website: <a href="https://www.history.co.uk/history-of-america/gold-rush">https:// www.history.co.uk/ history-of-america/ gold-rush</a> To find out who started the 1848 'Gold Rush' by finding a 3 inch nugget of Gold.</p>	<p>Details: Use the website: <a href="https://www.history.co.uk/history-of-america/gold-rush">https:// www.history.co.uk/ history-of-america/ gold-rush</a> To calculate how much, per ounce, the Chinese make in four days.</p>
<p>Homework 17</p>	<p>Title: <b>Reflection</b> - Magnets</p>	<p>Title: <b>Reflection/ Research</b></p>
	<p>Details: Sketch the diagrams below in to your books and state weather the magnets will attract or repel in each case</p> <div style="text-align: center;"> </div> <ol style="list-style-type: none"> <li>1.</li> <li>2.</li> <li>3.</li> <li>4. What do 'N' and 'S' stand for?</li> </ol>	<p>Details: State and explain three everyday uses of magnets.</p>

Homework 18	Title: <b>Reflection - Magnets</b>	Title: <b>Reflection/ Research- Magnets</b>
	Details: <i>Decide if the following statements are true or false.</i> <ol style="list-style-type: none"> <li>1. All metals are magnetic T/ F</li> <li>2. All magnets have a South pole and a North pole T/ F</li> <li>3. The Earth has its own magnetic field           T/ F</li> <li>4. If you place two South poles together they will attract each other T/ F</li> <li>6. The Earth has a magnetic field because it's iron core acts like a giant magnet           T/ F</li> <li>7. North poles attract iron and South poles repel it    T/ F</li> <li>8. Iron and steel are the only magnetic metals           T/ F</li> <li>9. You can separate iron and copper using a magnet    T/ F</li> <li>10. Magnets can pick up 2p coins T/ F</li> </ol>	Details: At metal scrap heaps, metals can be moved and sorted using a large electromagnet.    How do you think a scrap heap magnet works?
Homework 19	Title: <b>Numeracy - Motion</b>	Title: <b>Numeracy - Motion</b>
	Details: If Usain Bolt runs the 100m in 9.58s, Calculate his speed..	Details: The Jamaican runners in the 4 x 100m race, if they complete it in

	<p>Mo Farrah ran 5000m in 13 minutes and 6s. What was his speed?</p>	<p>36.85s, Calculate their average speed.</p>
<p>Homework 20</p>	<p>Title: <b>Numeracy- Motion</b></p>	<p>Title: <b>Digital/ In the News - Motion</b></p>
	<p>Details: The graph below shows the speed of a bus for 25 second of it's journey.</p> <p>1. Describe the motion of the bus between:</p> <p>O to A- A to B- B to C- C to D- D to E- E to F-</p> <div data-bbox="411 1205 885 1545" data-label="Figure"> </div>	<p>Details:</p> <p>Use the website: <a href="http://www.bbc.co.uk/guide/zpfs8mn">http://www.bbc.co.uk/guide/zpfs8mn</a></p> <p>To explain which falls faster - a feather or a hammer?</p>