

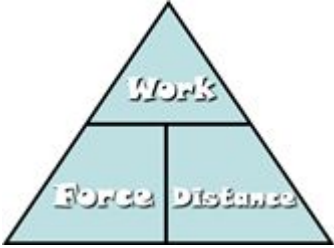
At St Cenydd...

- 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: Literacy task - Particles, Atoms and Elements keywords | Title: Literacy task - Particles, Atoms and Elements - using keywords | | | | | | | | | | | |
| | Details: Learn to spell the following key terms; Particle Evaporate Condense Diffusion Elements Write each one out 5 times. You will be tested on these next lesson. | Details: Write 5 sentences that include at least one of the key terms. | | | | | | | | | | | |
| Homework 2 | Title: Numeracy task - Density | Title: Numeracy task - What will sink and what will float? | | | | | | | | | | | |
| | Details: Put these substances in order of increasing density. <table border="1" data-bbox="411 1518 885 1818"> <thead> <tr> <th>Substance</th> <th>Mass(g)</th> <th>Volume (Cm³)</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>32.3</td> <td>1.7</td> </tr> <tr> <td>B</td> <td>0.25</td> <td>0.5</td> </tr> <tr> <td>C</td> <td>38.4</td> <td>3.2</td> </tr> </tbody> </table> Density = Mass / Volume | Substance | Mass(g) | Volume (Cm ³) | A | 32.3 | 1.7 | B | 0.25 | 0.5 | C | 38.4 | 3.2 |
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| Homework 3 | Title: Science in the News - Reading homework - Acids | Title: Literacy task - The importance of acids and alkalis in our everyday lives. |
| | Details: https://drive.google.com/a/stcenydd.co.uk/file/d/14VJNqLks3qoeWy1h6qesKMAAtLaGJ0_o/view?usp=sharing | Details: Write a diary of your typical day. Include details of all the substances you use or see used. Go through your account and highlight and acid substances in red, alkaline substances in blue and neutral substances in green. |
| Homework 4 | Title: Literacy task - Correct the spelling and punctuation mistakes in the method, then re-arrange it into the correct order. | Title: Science Skills - Equipment |
| | Details <ol style="list-style-type: none"> 1. crus table using mortar And pestle. 2. caerphilly transfer table to conical flask 3. Add 25 cm³ of warter. 4. Add thre drops Of methyl ornge 5. while slowly swirling the flask add acid form the burete 0.5 cm³ at a time 6. Continue adding acid in 0.5 cm³ portions until the liquid gows pink. 7. recod the Volum of acid used | Details: Make a table listing each piece of equipment used in one column. What it will be used for in another and why it was chosen in the third column. |
| Homework 5 | Title: Literacy task - Pure and impure substances keywords | Title: Literacy task - Pure and impure substances - using keywords |
| | Details: Learn to spell the following key terms; Solute Solvent Solution | Details: Write 5 sentences that include at least one of the key terms. |

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| | <p>Soluble Insoluble Dissolve Write each one out 5 times. You will be tested on these next lesson.</p> | |
| Homework 6 | <p>Title: Digital task - Separating mixtures</p> | <p>Title: Digital task - Separating mixtures</p> |
| | <p>Details: Research how to separate a mixture of sand and water. Draw and label the equipment you would use.</p> | <p>Details: Research how to separate a mixture of ethanol and water. Draw and label the equipment you would use. Explain the processes involved.</p> |
| Homework 7 | <p>Title: Literacy Task - Energy Transfers true and false</p> | <p>Title: Literacy Task - Energy Transfer</p> |
| | <p>Details: For each of the images write out the true statements only. https://docs.google.com/document/d/1KteA3bWMiaAUHY-qma4lCzaZIXil_kcViBRvO5YF5so/edit?usp=sharing</p> | <p>Details: Use the final cartoon from the true or false worksheet to help you create your own energy transfers cartoon.</p> |
| Homework 8 | <p>Title: Numeracy task - Use the formula answer the questions.</p> <p>Work done (J) = Force (N) x distance (m)</p> | <p>Title: Numeracy task - use the formula triangle to answer the questions.</p>  |
| | <p>Details:</p> <ol style="list-style-type: none"> 1. What work is done when we apply a force of 5N and move the object 2m? 2. What is the work done to a car if a force of 9N is applied and it moves 70m? 3. What is the work done | <p>Details:</p> <ol style="list-style-type: none"> 1. What force is required to move 7m if the work done is 21J? 2. What is the distance moved if a force of 70N is applied which results in 8J of work done? |

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| | when a force of 5N is applied to a ball which moves 80m? | 3. What is the work done to a lorry if a force of 50N is applied ant it moves 7km? |
| Homework 9 | Title: Literacy task - Forces | Title: Literacy task - Forces |
| | Details: Details: Learn to spell the following key terms; Magnetism Tension Friction Electrostatic Upthrust Write each one out 5 times. You will be tested on these next lesson. | Details: Write 5 sentences that include at least one of the key terms. |
| Homework 10 | Title: Numeracy - Balanced and unbalance forces | Title: Science Skills - Friction |
| | Details: https://docs.google.com/docume nt/d/1S8-m9w1Ud5mCC6bGTn55 uOccD1gxo0fMT8GX-hzgF8/edit?u sp=sharing | Details: Explain why you could build a slide out of smooth plastic or polished metal, but, not out or rough sorn wood. |
| Homework 11 | Title: Science Skills - Electrical Circuits | Title: Science Skills - Electrical Circuits |
| | Details: Draw the electrical circuit symbols for the following components: Cell Battery Open Switch Closed Switch Lamp Connecting wire Ammeter Voltmeter | Details: Draw a series circuit, containing: Battery Switch 3 lamps Draw a parallel circuit, containing: Battery Switch (controlling all 3 lamps) 3 lamps |
| Homework 12 | Title: Digital task - Lighting the world research task | Title: Digital task - Lighting the world research task |
| | Details: Discussion: Who made the world's first light bulb? Was it Thomas | Details: Create a social media profile for either Thomas Edison or Joseph |

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| | Edison or Joseph Swan? Give 2 reasons supporting each scientists claim. | Swan. |
| Homework 13 | Title: Science skills - Renewable energy | Title: Science skills - Renewable energy |
| | Details: Write a paragraph explaining why solar, wind and geothermal energy can be considered to be renewable. | Details: List one argument for and one argument against using wave, tidal and hydroelectric power in the UK. |
| Homework 14 | Title: Literacy task - Energy Resources | Title: Literacy task - Energy Resources |
| | Details: Learn to spell the following key terms; Radiation Fossil fuels Global Warming Renewable Non Renewable Write each one out 5 times. You will be tested on these next lesson. | Details: Write 5 sentences that include at least one of the key terms. |
| Homework 15 | Title: Numeracy task - Cells and Tissues | Title: Digital/Science Skill - Cells and Tissues |
| | Details: A slide is viewed under a microscope using an eyepiece lens with a magnification of X5 and an objective lens with a magnification of X20. Calculate the total magnification. Total magnification = eyepiece magnification X objective lens magnification What would the total magnification be if the eyepiece lens were changed to X15 | Details: Describe step by step how to prepare a specimen slide to view under a microscope. You can include diagrams to show each step. |

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| Homework 16 | Title: Literacy task - Cells and Tissues | Title: Science/Literacy - Cells and Tissues |
| | Details: Learn to spell the following key terms; Cell membrane Cell wall Chloroplasts Cytoplasm Nucleus Vacuole Write each one out 5 times. You will be tested on these next lesson. | Details: State the function of the following: Cell membrane Cell wall Chloroplasts Cytoplasm Nucleus Vacuole |
| Homework 17 | Title: Literacy task - Reproduction | Title: |
| | Details: Details: Learn to spell the following key terms; Ovulation Testes Hormones Fertilisation amnion Maybe a google quiz Write each one out 5 times. You will be tested on these next lesson. | Details: State the function of the following: Ovulation Testosterone Oestrogen Menstruation cycle Implantation |
| Homework 18 | Title: Literacy task - Reproduction | Title: Literacy task - Reproduction |
| | Details: Describe the journey of a sperm cell from inside the testis to an egg inside the woman. Include the names of all the structures it passes through, in the correct order. | Details: Describe some of the causes of infertility and suggest how the problems could be treated. |
| Homework 19 | Title: Numeracy task - Environment and Adaptation | Title: Numeracy task - Environment and Adaptation |
| | Details: Draw a food chain and a pyramid of numbers (to scale) for a habitat | Details: Bioaccumulation - To control aphids the gardner sprays their |

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| | <p>where 1 Buzzard eats 5 Thrush, which each feed on 10 snails and each snail eats 2 lettuce.</p> | <p>lettuces' with pesticide. As a result each lettuce contains 0.5ppm of the pesticide.</p> <p>i) Calculate the concentration of the pesticide for the snail, thrush and buzzard.</p> <p>ii) The fatal concentration of pesticide for the buzzard is 60ppm. How many more thrushes would the buzzard need to eat to reach this level?</p> |
| <p>Homework 20</p> | <p>Title: Numeracy task - Classification and Variation</p> | <p>Title: Numeracy task - Classification and Variation</p> |
| | <p>Details: The variation in blood groups of a class was investigated. They found; 11 are blood group A, 5 blood group B, 2 blood group AB and 13 group O.</p> <p>i) Draw a tally chart to display the data. You should include columns for the tally and total numbers.</p> <p>ii) How many pupils are in the class?</p> | <p>Details:</p> <p>i) Draw an appropriate graph to display the class data on blood groups.</p> <p>ii) Explain why you chose to draw this type of graph.</p> |