Blog PROGRESS REPORT Weekly Total

/18

TERM 3 During the following class in Mathematics, Science and Technology you need to complete the following progress report and place on your BLOG.

1. **Group rolls and Evaluation of each students contribution (6 marks)**

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| --- | --- | --- | --- |
| **Student name** | **Title and description of students role.** | **Contribution to STEM project this week** | **Marks** |
| Izaak  Cerneaz | **Manager/Leader:** The role of the manager is to take on the responsibility of:   * getting the group organised * keeping the group on task * organising tasks into sub-tasks | * I ensured that everyone was on task and completing their allocated work * Helped group members with tricky questions in into science and Sankey diagrams worksheet. * Made sure that Aiden was taking lots of photos and videos of our work | **2** |
| Ky Broome | **Thinker/Researcher:** The role of the sceptic is to:   * ensure the group avoids premature agreement * ask questions that will lead to understanding * push the group to explore all possibilities | * I tried different ways of completing the cotton wheel car. * I researched why people are switching to LED lights instead of regular or halogen. * Helped the group with tricky questions on the unit in into science. | **2** |
| Aiden  Sloots | **Checker/Recorder:** The role of the recorder is to:   * Recommend and check videos and photos * Record the group’s findings and collect our evidence * Check each groups member’s understanding of questions and solutions. | * I made sure that we had valid evidence, videos and photos, and that they were clear, visible and accessible. * I helped and checked that all Into Science work was being completed and that the group understood the questions asked. * Assisted in the construction of the cotton wheel car, and contributed to the recording of photos and videos. | **2** |

1. **Identify what you have completed in class this week on the STEM Project. (6 marks)**

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| --- | --- | --- |
| **Describe TWO :**  Problems/difficulties you encountered this week.  (In Mathematics, Science/Technology/group work/resources) | 1. The first problem we encountered this week is that I had been absent for the last two weeks of Term 2. This meant that I did not have a blog set up and that I was unsure of the tasks we had to complete. 2. The second problem we faced was that all of the footage that we had taken of the cotton reel car experiment was unable to be uploaded to our websites. This was due to the fact that website development software’s such as Weebly, are unable to upload mp4 or other HD video files straight onto the website. | **Marks**  **2** |
| **Explain** for both problems:  What did you did to resolve this problem. | * 1. I solved this problem with the help of a few different people. First of all I was able to look at the Seqta Portal Page and read up on each week’s focus question and therefor what we would be covering. Secondly, I asked my group members and the teacher about certain aspects of the task that weren’t completely straightforward, such as how the blog had to be set out and what else needed to be covered in the blog. Finally, my group members showed me what was required on the blog and helped me get that set up.   2. We were able to upload our photos and videos to our sites through a combined group effort. First all the footage that we had taken on Ky’s phone was distributed to all group members via Seqta Direqt Message. After this Izaak uploaded the videos to YouTube and shared the link so that it can be uploaded to our blogs. | **2** |
| **SKILLS Learnt**  **Describe two** new skill you have learnt this week in working on your STEM project. | 1. The first skill that I learnt this week is the ability to interpret and record energy transformations on a Sankey diagram using given energy measurements. I learnt how to construct a Sankey diagram with appropriate size arrows to correspond with the amount of energy. 2. I also learnt how to calculate the energy efficiency of an object or appliance using the formula, | **2** |

1. **Blog Presentation – Information and presentation of your BLOG. (6marks)**

Marks will be awarded for any of the following additions to your Blog this week.

|  |  |  |
| --- | --- | --- |
| **Blog Information** |  | **Mark** |
| Copies of individual /group work  Images/ Videos of your work/ Attempts to answers weekly Focus question | Focus Questions:   1. What is energy? Energy is the ability to do work. All things in the universe contain energy and it is this energy that allow them to have an impact on the environment around them. Energy can be classified as either forms or sources. Forms are physical forms of observable energy and sources are where the energy comes from. Energy cannot be created or destroyed. All energy in the world transforms from one form to another. Energy can also be transferred from one body to another. This can occur via particles, through conduction or convection, or it can occur through waves, via radiation. The amount of energy within the universe remains constant and is the reason the world is able to function as it is. 2. How do we illustrate energy transformations? Energy transformations can be illustrated using a Sankey diagram. All energy is measured in joules (J) and kilojoules (KJ) and a Sankey diagram uses scaled arrows to illustrate the amount of energy used and the amount wasted. The diagram is constructed on grid paper to allow for a proper scale, with each square equal to a certain measurement. The width of the arrow, excluding the arrow head, directly corresponds to the energy input. This means that the width of the arrow representing useful energy and the width of the arrow representing wasted energy added together is equal to the width of the input arrow. The useful energy output is always illustrated with an arrow going right and the wasted energy is represented by an arrow going down. From the information on a Sankey we can calculate energy efficiency using the formula | **3** |
| ICT: Hyperlinks, User friendly blog/ Videos of group work/ Links to research | Links to group members websites can also be found on the home page:  <http://izaakstemblog.weebly.com/>  <http://kystemblog.weebly.com/>  All videos are also located on Lesson 2:  <https://www.youtube.com/watch?v=hV6Wb6obxG0>  <https://www.youtube.com/watch?v=sqFNM863CUQ>  Link to IntoScience:  <http://www.intoscience.com/signin/> | **3** |