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** |
| Aiden Sloots | Part Photographer/Recorder/Checker:  The duties of this role are to:   * Make sure all work is being recorded by at least one of the group members. * Make sure all photos and videos have been distributed to all group members. * Take photos and videos of experiments that are taking place. | This week I:   * Recorded via photograph and video, all of the experiments and distributed the footage. * Constructed circuit diagrams and ensured the group understood. * Recorded the amps, volts and brightness in the Circuits Construction practical. | **2** |
| 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 * making sure everyone has a chance to contribute | This week I contributed by:   * Ensuring that the circuits were made correctly. * Made sure that Ky got the photos when he was away. * Took photos/videos when Ky was away. | **2** |
| Ky Broome | Part photgrapher/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 * re-emphasise the main points | This week I contributing to the team by:   * I took video for the group on the days that I was at school (Monday, Tuesday, Wednesday, Thursday) * I asked question about electrical circuits and for some I did some extra research on the topics. * I looked at the content for the weeks in advance and asked the group questions about additional lights and other components. | **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. Ky missed out on the Circuits Construction lesson on Friday and therefore didn’t partake in the physical construction of the circuits. 2. When we were constructing the series and parallel circuits, the readings on the ammeter and voltmeter would often go into the negative. | **Marks**  **2** |
| **Explain** for both problems:  What did you did to resolve this problem. | 1. We solved this problem through Ky’s own initiative and the distribution of images, photos and content covered in the lesson. Ky, even though he was away, researched the topics we were covering and Izaak and I sent him the footage of the practical class task. 2. We discovered that the negative output and positive input wires from the transformer were connected to the wrong ports in the ammeter and voltmeter. Once we switched the position of the two cables, the measurement became positive again | **2** |
| **SKILLS Learnt**  **Describe two** new skill you have learnt this week in working on your STEM project. | Two new skills that I learnt this week are:   1. The ability to construct an electrical diagram, using proper electrical symbols and terminology 2. The ability to create series and parallel circuits using wires, switched, lights, and ammeter, a voltmeter and a transformer. | **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.

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| **Blog Information** |  | **Mark** |
| Copies of individual /group work  Images/ Videos of your work/ Attempts to answers weekly Focus question | Focus Questions:  What is a series circuit?  A series circuit is a circuit in which the flow of electrons, or current, has only one possible path to flow through. A series circuit is the simplest circuit to construct and has various advantages and disadvantages. First of all, a series circuit is easy to construct and uses minimal materials to construct a singular circuit. However, if a component in the circuit is broken, destroyed or removed, then the circuit will break in turn and all components will cease to work. Also, due to the electrons having to flow through each individual component, it is impossible to activate and deactivate individual components separately.  Why do we get electric shocks?  Electric shocks are the transfer of static electrons onto or from the human being. When two objects rub or are pulled away from each other, the materials will either lose or gain electrons, depending on the material. If the electrons are unable to flow to another material, then they will build up and become static. Once enough electrons have built up, then when you come into contact with a conductor, then all of the electrons will flow out at once. This is an electric shock. | **3** |
| ICT: Hyperlinks, User friendly blog/ Videos of group work/ Links to research | The Group Blogs:  <http://izaakstemblog.weebly.com/>  <http://kystemblog.weebly.com/week-3>  <http://slootsstem.weebly.com/week-three>  School for Champions:  <http://www.school-for-champions.com/science/static_electricity.htm#.WX51bulLc2w>  Van de Graaff Generator:  <https://www.youtube.com/watch?v=1xAObhhBTuc>  Circuit Diagrams Interactive:  <https://www.physics-chemistry-interactive-flash-animation.com/electricity_electromagnetism_interactive/circuits_diagram.htm>  Series and Parallel Circuits:  <https://www.youtube.com/watch?v=TJhPBxrCOXk> | **3** |