YEAR 7 EARTH AND SPACE INVESTIGATION 2015

ANGLES MAKE A DIFFERENCE

TASK: You are to explore the impact that the angles of sunlight have on the Earth’s temperature. You will carry out the practical activity on page 353 of the Pearson 7 Science textbook in groups of 2-3. You will then need to submit your laboratory write-up with your results and the discussion questions from page 353. Your write-ups need to be submitted individually. The only part you are doing as a group is the actual experiment.

**Planning table**

|  |  |  |
| --- | --- | --- |
| Step in investigation | What you need to write | Statement |
| 1. Aim | What needs to be found out? |  |
| 1. Hypothesis | A prediction of what the results will be. |  |
| 1. Independent variable | The thing that is deliberately changed.  **CAUSE** |  |
| 1. Dependent variable | What happens as a **RESULT** of the independent variable?  It is the change that is measured. |  |
| 1. Controlled variables | All the things that need to be kept the same during the experiment. |  |
| 1. Materials | The list of equipment used. |  |
| 1. Method | Given | Given on page 353. You need to re-write and add information to the method to get full marks for this section. |
| 1. Results | Data collected during the experiment. | Draw a results table and fill in your results. |
| 1. Discussion | Any trends seen.  Any problems and how your might fix them if the experiment was repeated. | You will complete this after the results have been collected. Answer the questions from page 353. |
| 1. Conclusion | Did the results support the hypothesis? | You will complete this after the results have been collected |

**Marking Key**

|  |  |  |
| --- | --- | --- |
| Step in investigation | Possible mark | Your mark |
| Aim | 1 |  |
| Hypothesis | 2 |  |
| Independent variable | 1 |  |
| Dependent variable | 1 |  |
| Controlled variables | 2 |  |
| Materials | 2 |  |
| Method | 8 |  |
| Results Table | 4 |  |
| Discussion Questions | 1  2  4 |  |
| Conclusion | 2 |  |
| Total | 30 |  |

Comments:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_