**Visiting Group 4 Project**

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| Name and Number | Group 12, the Effect of Abiotic Factors towards the Lake Water |
| Questions you asked | How does the mechanism work in the system?  Why the data from the first position shows that the temperature is highest even though there are covers on top that protect it from sunshine? |
| What aspects of the project are inherently scientific? | Control groups and experimental groups are divided clearly;  Three repetitions are made for each location.  Detailed and thorough justification and explanation given for the results drew from the experiment;  The equipment used is advanced—Pasco: advanced water quality fit;  Ways of improving the project were given. |
| similarities and differences between the group's work and your individual investigation | We all came across some unexpected difficulties concerning the experimental results and the hypothesis we made;  We all changed variables in order to conduct the experiment and draw a full conclusion. |
| How strongly is the project's conclusion/product supported/based on the data gathered? | Very strong relation between conclusion and data.  The standard was well set; the data is accurate with repetition; the conclusion was made that in three locations of 2, 3 and 4, the results are positive; also, detailed explanation was given for why those different conditions can all meet the standard. |
| Areas of Improvement | The project is almost perfect except that there seems to be no correlation between the 4 indexes they tested, and thus the conclusion drew can be stronger. It will be better if the drew the connection between these values including BODJ, COD, TOC, TIX and IP. |
| One thing you learned from this project | The most valuable lesson I learned from this project is that when you find something unexpected in your experiment, what you need to do is to think more critically about all the factors that can influence the result, and you can always find something interesting by doing that. |

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| Name and Number | 22 Extracting Heat from a Compost Pile |
| Questions you asked | How high the temperature can reach using this method?  Have you taken the strong smell in the heating process into consideration that can affect surrounding negatively?  Why the waste will produce land erosion? |
| What aspects of the project are inherently scientific? | Advanced equipment for heat measuring was used;  Graphing real-time variation of temperature over time for modelling. |
| similarities and differences between the group's work and your individual investigation | The topic and focus are completely different;  They have a more down-to-earth aim compared to mine: sustainability and recycling;  They lack data because of time limitation;  They did a better job for further study and application. |
| How strongly is the project's conclusion/product supported/based on the data gathered? | Strong. The conclusion was made that at least 30% of energy is stored in the waste. And the data collected, even not sufficient due to time limitation, shows that there are a lot of heat produced and still have many energies stored inside. |
| Areas of Improvement | Sufficient data is needed;  They still need to consider how to do this on a larger scale if they really want to launch their product. |
| One thing you learned from this project | I did not thought about this way of recycling before; what people usually did is just use the waste as fertilizers, but they never take the land erosion into consideration; think critically, see the advantage and make improvement based on disadvantages. |

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| Name and Number | 15, Purifying Kuncheng Lake Water |
| Questions you asked | Why do you want to purify the water?  How can you purify that large amount of water using this device? What improvement are you planning to make?  How did you change the PH value in water using this device? |
| What aspects of the project are inherently scientific? | The PH value was tested for different groups of water sample and comparison was made before and after;  The calculation was precise and scientific data was used from Changshu report office; |
| similarities and differences between the group's work and your individual investigation | The similarities lie in the way the investigation was conducted: scientific calculation as well as the experiment.  We all need a lot of improvement based on our experiments.  However, we are different in that we have different topics and have different ways to approach the research questions. |
| How strongly is the project's conclusion/product supported/based on the data gathered? | It is strongly connected; the qualitative data shows that the water is not drinkable but can be used better for irrigation, as the PH value and purity testing show. |
| Areas of Improvement | The product cannot be put into massive production yet;  Also, the efficiency of purification should be improved. |
| One thing you learned from this project | When different methods are present, like the case of this project, including the most basic method of filtering and the method of reverse osmosis, we need to view the pros and cons from different aspects including practicality as well as efficiency. |