Experimental Design

Practice Round 1 Analysis

1. In what sections did your team score all of the points?
2. In what sections did your team lose the most points? (choose 4)
3. For each section you mentioned in number 2, write what you think your team can do to improve your score.
4. After completing the first practice run, how do you think you could better organize your team? Be sure to think about your different member’s strengths and weaknesses. How could you get the work done more efficiently? Who should do what sections?

Common Strategies:

* Know the scoring rubric well
* Start by brainstorming possible experiments, but give yourself a time limit for doing so.
* Keep your experiment simple
* Be sure to do 3-5 trials
* Try to spend only 15-20 minutes collecting data for the experiment
* Know who is doing which sections before the competition starts
* If the experiment goes horribly wrong, focus on the report. Explain why the experiment was bad and where it went wrong. Have a good report can cancel out a bad experiment.

Now it’s time to share your answers with your group. Listen to your team members and their ideas with an open mind.

Next, as a group, decide on and write up your ideal timeline and roles for the event. (everyone needs to copy it on their own worksheet) Remember, you only have 50 minutes to come up with an experiment, carry it out, fill out the record sheet and clean up. Tell the order in which you will complete the steps as well as how long each step should take. Also write down who will be doing what jobs.

Next, tell the three things your group will focus on to increase your score. (Where do you get the most bang for your buck?) Of course you can still increase your score in other areas too.



Do you have any questions for your teacher?

Is there any research that team members need to carry out tonight in order to allow you to score better in this event?