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## Solar-Powered Cars Worksheet

## Data Table A.

| Trial | Distance (m) | Time (s) | Speed (m/s) |  |
| :---: | :---: | :---: | :---: | :---: |
| 1 |  |  |  |  |
| 2 |  |  |  |  |
| 3 |  |  |  |  |
| 4 |  |  |  |  |
| 5 |  |  |  |  |
| Average |  |  |  |  |

## Data Table B.

| Trial | Distance (m) | Time (s) | Speed (m/s) |
| :---: | :---: | :---: | :---: |
| 1 |  |  |  |
| 2 |  |  |  |
| 3 |  |  |  |
| 4 |  |  |  |
| 5 |  |  |  |
| Average |  |  |  |

## Post-Lab Questions and Calculations

1. Describe the final design of your group's solar car and give a reason for each modification.
2. Calculate and record the speed of the car in Data Table B for each of the five trials and determine the average speed.
3. Was your final design from Part B faster than the prototype built in Part A? If so, by how much?
4. If allowed to make other changes, and more materials were available, what else might be done to improve the car's performance?
5. Describe the types of energy involved and how energy is transferred in making a solar car run.
