Alternate Energy Vehicle Prototype

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**Getting Started:**

Run your car and observe it. Write down two things that you notice about your vehicle.

1.

2.

**Investigate Your Car:**

1. Find the mass of your car. Record in Grams. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. Find the weight of your car. Record in Newtons. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. Find the distance that your car travels in centimeters. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. Calculate the average speed of your car in cm/s using the formula for average speed.

Sav = total distance/change in time

5. Calculate the speed of your car at different intervals. Use the formula: Speed = position/time.

Record your data in the table below.

DATA TABLE:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Intervals | Trial 1 | Trial 2 | Trial 3 | Trial 4 | Average |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

6. Write down two ideas that your group has for improving your prototype.

a.

b.