$\qquad$

## Design Worksheet:

Part 1: Answer the following two questions in your own words:

1. What is your goal for the project today? $\qquad$
$\qquad$
2. What are the constraints on your design? $\qquad$

Discuss with your group members what car body design, what size wheels, and how many wheels you want to use.
3. What car body did you choose (what number)?
4. Circle the size wheels you want to use: small, medium, large

Part 2: Send one student from your group to get materials. Using the instructions provided, build your first prototype of the front of the car.

Part 3: Select a motor unit to test your car with. Test your car, and make changes to your car until it starts moving, or to make it move faster. As you do your testing, please answer the following questions:

1. Did your car work on the first try? $\qquad$
2. What changes did you make your car work or go faster? $\qquad$
3. List one thing about your car that works really well: $\qquad$
4. List one thing about your car that you would change if you could:
5. How fast do you think your car is going (guess)? $\qquad$
6. Draw a sketch of your car.

Part 4: Calculate the real speed of your car by measuring the time it takes to travel a fixed distance. Remember, speed equals distance divided by time.

1. How is the maximum speed of your car? $\qquad$
