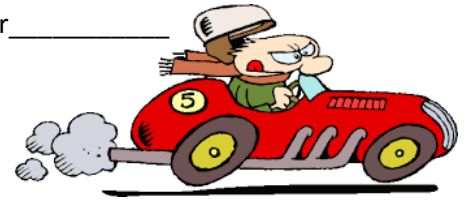


Name _____ Date _____ Hour _____

Can You Go The Distance?



Materials: Toy Car Meter stick Calculator Tape

Procedure

1. Obtain your materials from the teacher. Inspect your kit to make sure all the materials are in your bin. Immediately notify your teacher if you are missing something.
2. Make a start line on the floor using a small piece of tape. This will be the initial point at which you release your toy car each trial.
3. Carefully pull back on your car to wind the gears, release the car.
4. Measure the distance in a straight line from your initial point to the finish point. Record the distance in cm in the data table below.
5. Repeat for five trials.
6. Calculate the average distance the car traveled.
7. Convert your measurements into meters. (Remember there are 100cm in 1 meter)

Data Table:

Trial Number	Distance (cm)
1	
2	
3	
4	
5	

Average	
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Trial Number	Distance (m)

Average	
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Data Analysis:

1. What is the difference between distance and displacement? Which value did we directly measure in lab today?
2. In today's lab, how does the distance your car traveled compare to the displacement of the car?
3. A baseball player leaves the batter's box, overruns first base by 3.0 meters, and then returns to first base safely. If first base is approximately 27 meters from the batter's box, what is the total distance traveled by the player, what is his total displacement? Draw a picture to accompany your explanation.