

Balloon Powered Race Cars

Objective:

- Create a balloon powered race car for maximum speed and distance.
- To learn how to use the formula $\text{Speed} = \text{Distance}/\text{Time}$.
- To learn how to write proper physics labs.
- To learn and to use proper graphs and units.
- To learn to work and take rolls in group activities.



Materials:

- 12 inch standard balloon (provided by Mrs. Hill on race day)
- Various materials to construct the race cars (from your home)Try not to purchase any items!!
- Metric rulers
- Stop watch

Rules:

- The car must be powered by no more than 2 balloons and only balloons(air).
- It must have at least three wheels. Wheels are defined as anything that is round and goes around. ***The wheels **cannot** be wheels from a toy car. They must be made out of something that was not originally meant to be used as wheels.
- The car may not leave the ground, it will be disqualified
- The car must be capable of traveling at least 5 meters. (If the car doesn't make 5 meters then your car will be disqualified.
- Failure to turn in your rubric with project during the beginning of your period will result in a loss of 5 points from final grade.

Procedure:

- You and your partner will assemble your car at home and will NOT be given a day in class to work on car.
- On race day we will set up the track in our classroom.
- Make rough drafts of your lab report. (You may turn in before the due date if you want (no later than 5-6 days before due date, for help)
- Write up proper lab report.

Due Date:

- Races will take place on: _____
- Final Lab report on: _____