

Rally Round the Room

Math Skills

- a. Measuring length and weight
- b. Problem Solving
- c. Graphing
- d. Range, median, mean

Science Processes

- a. Observing
- b. Recording data
- c. Comparing data
- d. Interpreting data

Materials

Cars- Hot Wheels or Match Box

Inclined Plane (Can be built from wood scraps, OR by using textbooks and pieces of cardboard such as cereal boxes or regular corrugated cardboard boxes)

Meter Tape

Triple Beam Balance or Balance Scale

Management Suggestions

1. Create teams of 2 or 3 (based on number of set-ups you have). It would be helpful to discuss and agree upon "job descriptions" with the students. (Driver and Pit Crew. Driver releases car, and the Pit Crew measures the distance it travels and makes suggestions to driver on how to release car.)
2. Agree upon fair ways to measure distance. You may wish to suggest measuring from the bottom of the ramp to the front bumper or wheels of the car.
3. Before handing the cars to the students, you may want to paint or write numbers onto the cars for the students to use in the registration form.
4. Before beginning activity, it may be a good idea to have the cardboard cut with the Points already labeled on them to hand out to students to build their ramps.

Procedure

1. Set up the track using the inclined plane of your choice. Mark the inclined plane at four evenly spaced intervals and label: Point A, B, C, and D. These will serve as release points for each of the cars.

2. Have students “register” for the rally by identifying their cars by number, name of driver, and crew members.
3. Students will record specifications of their cars: type, color, length, and weight.
4. Students will release cars from each marked point on the incline plane three times and record the distance traveled. They will then figure out the average distance.
5. Construct a bar graph to show distances traveled from each release point.
6. Show range, median, and mean distance from each release point in Technical Data Table.
7. Enter average distances in class “Car and Driver Test Results” table.
8. In order to enter the “Rally”, the students must have everything on their activity sheet completed.