1. The basic premise of this activity is as follows: You will want to secure at least 1 (if possible, 2 or even 3) R.C. cars to drive for specified distances and collect their times in covering those distances. The data will then be used in a linear regression activity within Navigator.

2. The grouping part here is up to the teacher. If only one car can be secured, then give as many jobs out to the students as possible (3-4 timers, some recorders, etc). If more, then the jobs become easier to give out. You will want to setup a seldom used hall or portion outside where you will be left alone (or not, if you want to make a lot of buzz about it!!). Collect the time it takes the car to drive 10, 25, 50, and 100 feet. The time (in seconds) belongs on the X-AXIS, and the distance (in feet) belongs on the Y-AXIS.

3. Set up the Activity Center so that students can enter the time data in L_1 and the distance in L_2. Set the window to allow all of the points from the lists to be visible. Discuss any trends/patterns you may see. See if students can estimate what the slope of the line may be, and interpret what it will mean. Then, have students exit Navigator, find the regression line (while you set up the Activity Center to accept an equation), and come back to Navigator to enter their line. (You could have sent back the lists you wanted them to use, but by having them create equations from their data, you have more lines to compare and discuss).

4. Discuss whether or not the lines seem like a good fit for the data? What does the slope mean in the context of the situation? (should be speed in ft/sec.). What does the y-intercept mean in the context of the situation? (should theoretically be 0 seconds for 0 feet traveled, but it won't be, discuss why not?). Discuss anything else peculiar about the data (such as taking into account acceleration before top speed is attained).

5. To extend, you can convert into Miles/Hour for a more realistic speed measurement.