Name _____ Date _____

116	HotWheels Experiment Conservation of Energy

Purpose: To determine if potential energy is converted to kinetic energy.

To do this experiment, you will let a Hotwheels car go down a Hotwheels track. Theoretically, the potential energy the car has at the beginning will be equal to the kinetic energy at the bottom. This is what you will test today. You will let the car go from 5 different heights. Using conservation of energy, you will calculate the expected speed of the car. You will then take the time it takes for the car to go 2 m after it hits the ground. From this information, you will calculate the actual speed of the car. You can record your data below.

Mass of car: _____ kg

Height (m)	Potential Energy(J)	Expected Speed (m/s)	2 m Time (s)	Actual Speed (m/s)

Questions

1) How do your expected speeds compare to your actual speeds?

2) Give examples of errors that could have taken place in this experiment.