

Experimental design 1 (Solutions)

Full Name, Period, AP/Honors: Instructor-All

1 Stuff, and Things

You have the following materials

- A production car (speedometer cannot be assumed to be accurate)
- 4 identical tires
- A section of road with brand new asphalt
- A 100m tape measure
- A scale large enough to weigh a car
- As much bright red tape as you want
- Stopwatches

Devise an experiment to determine the coefficient of static friction between the tires and the asphalt. Ignore air resistance and friction with the axels.