

Fun with Ramps

Change the gradient and observe what happens

What You Will Need

DUPLO cars
Ramp
Tape Measure



Method

Place a car at the top of the ramp and let it go without pushing.

Measure how fast the car travels using the tape measure.

Change the gradient and repeat the process.

What do you notice?

Experiment with gradients and with the carpet cover on and off the ramp, is there a difference in the distance the car travels?

Why does this happen?

The cars should travel further if the gradient is steeper, because a steeper gradient allows the car to pick up more speed.

Our cars travelled less far when we used the carpet surface than when we used the smooth surface. This is because there is more friction between the car and carpet than between the car and smooth surface.

