

Rollaway Pumpkin

Supplies Needed:

- Material to make a ramp - for example: long cardboard box or a wood plank
- Small pumpkins

Directions:

1. Create a ramp by leaning the cardboard box on a wall, chair or on something else
2. Roll down or push up the pumpkins on the ramp and observe what happens. See how far each pumpkin rolls.



During your experiment, adjust the angle of the ramp and change the force you use for rolling or pushing the pumpkins down or up the ramp. Observe if there is any difference in the speed and distance for each pumpkin when you make each change.

Questions to think about

1. What happens when you let the pumpkin roll down the ramp without using any force?
2. How far would each pumpkin roll down if you use force or if you don't use force?

What is the science behind this experiment?

We can observe the physical action of movement of an object when there is force causing it. Such force could be a push, a pull or gravity. In our case, when we push or pull the pumpkin, we use force to make it move and set in motion. Gravity is a type of force that attracts any object with weight toward the center of the earth or to another object with body mass. The force of gravity pulls down the objects and therefore it could set them in motion.

