

Name: _____

Period: _____

Newton's Laws Activity Stations

Station 1: Newton's First Law of Motion

Activity 1:

Stack 4 pennies one on top of the other so that you form a tower of pennies. Place the stack of pennies on top of the table or the floor so you have a smooth, slick surface. Aim one washer at the bottom of the stack of four pennies and give it a good hard flick with your finger or hand. What happens? Try again with a stack of two pennies into the stack of four pennies.

Activity 2:

Set the card on top of the beaker, stack the pennies on top of the card. Flick the card straight out from under the pennies. What happens to the pennies?

Station 2: Newton's Second Law of Motion:

Newton's second law is often referred to by its accompanying formula which is:
Force = mass x acceleration or $F = ma$.

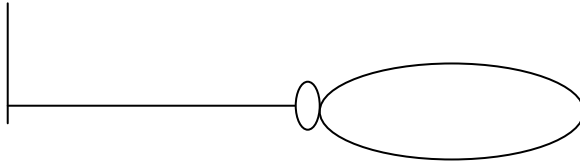
In this activity, we will be exploring the effect mass has on the distance an object travels. We will assume the acceleration of the car is constant because they are using the same ramp.

Mass of car	Distance			Average distance
	Trial 1	Trial 2	Trial 3	

Station 3: Newton's Third Law of Motion:

Attach a balloon to the end of flexible straw with tape. Choose the end that is furthest away from the bend.

Blow up the balloon and bend your straw to a 90° angle before allowing the air to escape. What happens?



Blow up the balloon and leave the straw straight at a 180° angle. Release the air in the balloon. What happens?

