Examples of Testable Questions

Remember, in order for it to be a “testable question” you must be able to measure the results, such as length, weight, distance, time, temperature, etc.

It should also follow this sentence frame,

“How does \_\_\_\_\_\_\_\_\_\_\_ affect \_\_\_\_\_\_\_\_\_\_\_?”

 Independent Variable Dependent Variable

 (The ONE thing that is being changed) (What is being measured)

PLANTS:

* How does the amount of water affect the growth of plants?
* How does the amount of light affect the growth of plants?
* How does the type of dirt (sand vs. potting soil) affect the growth of a plant?
* How does music affect the growth of a plant?
* How does temperature affect the growth of a plant?
* How does sugar added to water affect the length of time before cut flowers begin to wilt?
* How does fertilizer affect the growth of a plant?

FOOD:

* How does the ratio of salt added to an ice cream maker affect the amount of time it takes to make ice cream?
* How does eliminating half of the butter in a chocolate chip cookie recipe affect the cookie’s height?
* How does the temperature of an oven affect how long it takes for a cookie to bake?
* How does the diameter of a container affect the height of a baking soda/vinegar reaction?
* How does temperature affect the length of time it takes for mold to grow on bread?
* How does moisture affect the length of time it takes for mold to grow on bread?

PAPER AIRPLANES:

* How does the amount of weight added to the nose of a paper airplane affect the length of its flight?
* How does the length of the wing span affect the length of paper airplane’s flight?
* How does the type of paper (copy paper vs. construction paper) affect the distance a paper airplane will fly?

BALLS:

* How does the size of a rubber ball affect the height of its bounce?
* How does the type of surface affect how far a ball will roll?
* How does the size of a ball affect the distance the ball will roll?
* How does the height of a ramp affect the distance a ball rolls?
* How does the type of surface affect the height a ball will bounce?
* How does the amount of air pressure in a ball affect the height a ball will bounce?
* How does the height from which I drop a ball affect the height of the initial bounce?

TOY CARS:

* How does the weight of a toy car affect the distance the car rolls down a ramp?
* How does the size of the wheels affect the distance a toy car rolls down a ramp?
* How does the height of a ramp affect the distance a toy car rolls?
* How does adding weights affect the distance a toy car travels?

MISCELLANEOUS:

* How does the type of surface you use to stick a suction cup to affect the amount of time the suction cup will remain on the surface?
* How does the speed that I approach a jump with (standing, jogging, sprinting) affect the length of a jump?
* How does the type of material (cotton, plastic, rubber) affect the amount of water it can absorb?
* How does the length of a string affect the amount of times a pendulum will swing before coming to a rest?
* How does the design of a bridge affect the amount of weight it can hold?
* How does the type of liquid used to make ice cubes affect the rate at which it melts?
* How does the kind of sugar affect the size of a crystal?

 A TESTABLE QUESTION NEEDS TO INCLUDE ALL OF THE FOLLOWING:

**CONTROLLED VARIABLES**- The things in the experiment that will stay the EXACT same.

**INDEPENDENT VARIABLE** – The ONE thing that will be changed in the experiment.

**DEPENDENT VARIABLE** – What is being measured ( in length, weight, distance, time, temperature, etc).