

Name: _____ Date: _____

DESIGN

Fill in the information below to help you plan your investigation.

Independent Variable (IV): Variable you are changing; manipulated variable.

My independent variable: _____

Changes of independent variable:

1. _____
2. _____
3. _____

Dependent Variable (DV): Variable you are measuring; responding variable.

My dependent variable: _____

Measurement of dependent variable: _____

Constant Variable(s): Something that is constant and unchanged in an experiment; things that must not be changed throughout an experiment.

My constant variable(s): _____

Number of trials: _____

Experimental Question

What is the effect of (IV) _____
on the (DV) _____
_____?

PREDICT

Before heading out to conduct your investigation, use the information below to make some predictions about what will happen.

Hypothesis

If (level of IV I change) _____

then (resulting measurement of DV)

because _____

OBSERVE

Use the space below (and any additional pages needed) to record the data from your experiment. The Playground Physics app may display some of your data but you will want to have a written record of it and come up with a visual way to organize it for your records. Creating a graph or table may be helpful.

EXPLAIN

Claim

In this investigation, the hypothesis (was/was not) _____ supported.

Claim that answers the experimental question: _____

Evidence

Data/evidence that supports claim (include relationship statements about your app data and your analysis): _____

Reasoning

Scientific reasoning that supports your claim (based on background research/readings):

Reflection

Possible sources of errors: _____

Ways to prevent possible errors in the future: _____

New questions raised: _____

Ideas for future investigations: _____
