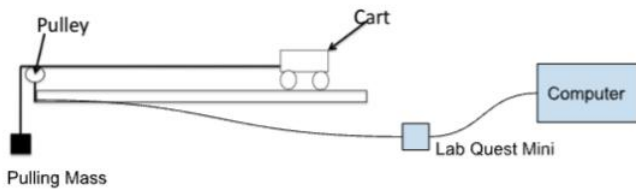# Newtons Second Law Lab Report

In this lab, we will test Newton's Second Law and see how closely we can match its predicted behavior. **We claim that a body's acceleration will be proportional to its pulling force based on the following math:**

We're going to test that claim with this apparatus:

The pulley in this system also records the cart's velocity. So, we will change the pulling masses and record the acceleration. We'll then predict the acceleration and compare the result to our experiment.

Gathering the Data

We simulate gathering the data by calling `labData()`

```
ourData = labData();
```

```
ourData = 4×1
    1.2247
    2.5716
    3.5152
    4.8719
```