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## **Gamerz**

# Experimental Design

### **Purpose:**

The purpose of this experiment is to see what the barometric pressure is at different altitudes. We want to find out how an accepted model equation for pressure compares to our data.

### **Research:**

The air pressure will rise while an object increases in altitude and fall while an object decreases in altitude. The barometric pressure at ground level constantly fluctuates due to changes in the air pressure.

### **Tests:**

1. The barometric pressure graph should decrease and then stabilize as we make orderly pauses while letting out the line.
2. The final pressure level on the graph should be very close to the original level of pressure starting on the ground.
3. The barometric pressure data should match all of the observations taken note of in the experiment log. (i.e. clouds, wind, and other weather variations)

### **Hypothesis:**

1. The beginning barometric pressure will not be exactly the same as the ending pressure level because of variations in the weather that take place while the balloon rises.
2. The barometric pressure will decrease with altitude.
3. The weather will have a direct effect on the barometric pressure.

### **Experimental Method:**

During this experiment we will be using a barometer that we send up on a tethered weather balloon that will record the barometric pressure. We will stop at intervals of 100ft, and hold there for two minutes. The Labpro should take data samples with a speed of one collection every fifteen seconds.