

## **Ecology Lab**

### **Observations/ Research:**

- Observe the natural world around you to help come up with a good question. Do some research on the things you are interested in to come up with good ideas. A good, testable question is the basis for all good research.

### **Problem/Question:**

- Be CREATIVE!! I will not give you examples so you can come up with your own idea of what to test. Please do not share your idea with those around you until everyone has decided. This will help ensure that everyone has a unique idea!

### **Hypothesis:**

- If... , then... statement.

### **Procedures:**

- Identify the constants, control, independent and dependent variables
- Make sure your collecting quantifiable data.
- Make procedures very precise.

### **Materials:**

- You have various lab instruments and materials to use in your experiment. If they are not provided, you may bring your own.
- Handle things with care and remember your lab safety rules.
- You must clean your station and put everything back when finished.

### **Data:**

- Observe and collect data regularly at the beginning of class. Compile this into a table or chart to make analyzation easy.

### **Results:**

- Create a graph using the collected data
- The type of graph you use is important. Remember:  
Line graphs: show changes over time  
Bar graphs: compare different sets of similar data.

### **Conclusion:**

- Accept or reject your hypothesis
- What would you change if you were to conduct the experiment again?

### **Share your results**

You will use your notes from your interactive notebook to write up a formal lab. Type or write up your lab neatly on lined paper in order for it to be turned in on May 23rd. You will have to do a quick speech (no props necessary) describing your research.