**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Cut Flower Preservation Lab**

When ever you buy or pick a floral bouquet you want it to last as long as possible. In this lab you will experiment with different solutions in order to preserve cut flowers. You will be working with **Carnation** flowers. You will have one control flower and one experiment-based flower.

**Question**

How can I best preserve my flower till Monday?

**Materials**

* 2- 100mL graduated cylinders
* 2-Carnation Flowers
* Tap Water
* Distilled Water
* Sticky Notes
* Coca-Cola
* Sugar
* Table Salt
* Floral Preservative
* Lab Notebook
* Lab Guide
* Pencil/Pen

**Methods**

1. Open up your lab notebook, and title your page “Cut Flower Preservation Lab.”
2. Title the section Question, and write the lab question, “How can I best preserve my flower till Monday?”
3. Create background knowledge of cut flower preservation. In another title section titled, “Background Knowledge,” create a minimum of 5 sentences of background knowledge of cut flowers. This can be knowledge of either the cut flower industry and/or cut flower preservation.
4. Research the effects of different floral preservatives. Create an experiment on floral preservation using the material available (distilled water, Coca-Cola, sugar, salt, and/or floral preservative).
5. After determining what material’s, you are going to use to preserve your flower, title your next section hypothesis, and create a hypothesis. This hypothesis should be detailed, stating changes you predict to see in your flowers.
6. Label your next section Experiment. In this section write a step by step process of what you will put into your graduated cylinder to preserve your flower.
7. On your post-it notes write your name, and re-state your experiment on your post-it notes. You will place your post-it note in front of your graduated cylinders when you complete your experiment.
8. Grab two graduated cylinders of the same size. In one graduated cylinder create a control experiment. For your control experiment fill it half way full of tap water. Luke warm water is best. Make sure your cut at the bottom and amount of foliage on your leaf is the same
9. In your other graduated cylinder follow your procedure you created and create your experiment. Make sure to note the amount of solution, cut on your stem, and amount of foliage.
10. In your next section titled Analysis, write a detailed analysis of the condition of your flowers today.
11. Take a quick walk around the room and look at what your peers included in their preservative solution.

**STOP HERE TODAY**

1. Create an analysis of the condition of your flowers today. Make sure to be detailed are straight up, any color changes, if yes how much color change, etc.
2. In your lab notebook create a section titled Data. Create a graph or chart of differentiating your control flower from your preservative experiment flower. Make sure to indicate what it was on Friday to what it looks like today.
3. For your next section title it, Conclusion, create a conclusion of your results from your experiment. Make sure to state if your hypothesis came true or not. Also make recommendations for future flower preservation experiments.
4. Next complete your Forked Road Comparison guide.
5. Have both your lab notebook and Forked Road Comparison guide ready to turn in at the end of class.