**Sample Lab Procedures Handout**

Sample # \_\_\_\_

SAMPLE NAME: ­­­­­­­Sample #\_\_\_\_ with \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Group \_\_\_\_\_\_\_\_\_

Before you conduct your procedures, as a group you will need to decide:

* How much of your assigned ingredient you will add to your sample (document in the reaction scheme),
* Where in the procedures you will add your ingredient and/or how you will add your ingredient to sample (document this in the procedures below)

Reaction Scheme

|  |  |
| --- | --- |
| Corn Starch | 10 g |
| Water | 60 ml |
| Vinegar | 5 ml |
| Glycerin | 5 ml |
| Phosphorescence Solid | 0.6 g |
|  |  |

Make sure you document your quantitative and qualitative observations as you move through each procedure step.

|  |  |
| --- | --- |
| **Procedures** | **Observations** |
| 1. Pre-heat hot plate to 400°C |  |
| 2. Label the top and bottom of a clean petri dish with the sample name and group number |  |
| 3. In a 1000 ml beaker add 10 g of cornstarch (using weigh paper and a balance) |  |
| 4. Add 5 ml of vinegar (using a 10 ml graduated cylinder) to the same beaker |  |
| 5. Add 5 ml of glycerin (using a 10 ml graduated cylinder) to the same beaker |  |
| 6. Add 60 ml of water (using a 100 ml graduated cylinder) to the same beaker.  |  |
| 7. Stir the mixture using a silicon spatula until the corn starch is dissolved and mixture is thoroughly combined |  |
| 8. Measure out 60 ml of the mixture (using a 100 ml graduated cylinder) and dispense into to a clean 250 ml beaker |  |
| 9. Add 0.6 grams of the phosphorescence solid to the 60 ml mixture in the 250 ml beaker (from step 8 using weigh paper and a balance) |  |
| 10. Stir the mixture using a clean silicon spatula until the phosphorescence solid is completely dissolved throughout. |  |
| 11. Heat the mixture in the 250 ml beaker using a hot plate preheated to 400°C |  |
| 12. Continuously stir the mixture with the silicone spatula while it is heating.  |  |
| 13. Continue to heat and stir the mixture for 6 minutes and 30 seconds.  |  |
| 14. Transfer the heated mixture into the labeled petri dish using the silicon spatula and heat glove. |  |
| 15. Allow the sample to dry and harden overnight. Do not cover! |  |