Water Cycle Observation Lab

Name(s) \_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_

Pre-Lab Questions:

1. What is the goal of the lab?
2. What materials do you need? (5 or more)
3. What resources can you use to help you answer the analysis questions? (Outside of the lab)

Procedure:

1) Place \_\_\_\_\_ of water in a graduated cylinder.

2) Pour the water in the bag.

3) Blow into the bag until it’s full of air and seal it.

4) Place the bag under a heat lamp and record your initial observations.

5) In 20-30 minutes return to the bag and record your final observations.

Hypothesis: What do you think will happen to the water in the bottom of the bag

**and** WHY? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Complete the table below:

|  |  |
| --- | --- |
| Water Cycle Observation Table | |
|  | Observations |
| Bag at the beginning of lab |  |
| Bag at the end of the lab |  |

Analysis:

1) How did the conditions inside the bag change over time? (Describe what happened to

the water)

2) What water cycle processes are occurring in the bag?

3) What is the light from the lamp important in this lab?

4) Draw a picture of the bag and lamp. Label the a) surface water b) water vapor

c) heat d) condensation

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Class\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Weather Cycle Observation Lab Day 2**

Part 1: Complete the table below with class data from yesterday’s lab. Record the other groups observations based on the amount of water they used.

|  |  |
| --- | --- |
| Class Water Cycle Observation Table | |
| Water Amount | Final Observations |
| 5mL water |  |
| 10mL water |  |
| 15mL water |  |

Part 2: Answer the questions below using the information from the Class Observation Table.

1. How were your group’s observations similar to the other groups’?
2. How were your group’s observations different from the other groups’?
3. Which water amount produced the best results (showed the most change)? Why?

Part 3: Evaluate the success of yesterday’s lab. Did you get the results you expected? Why or why not?

Part 4: If you could change any part of yesterday’s lab procedure to get better results, what would you change and why? (Consider amount of water, length of wait time, strength of light bulb, etc.)

Part 5: What happens when scientists have problems with their experiments? List 3 things that they might do to get better results.

1.

2.

3.