Oreo Cookie Challenge Lab

**Problem:** You want to determine whether or not double stuff oreos really have double the stuffing.

**Equipment:** scale, beaker, rulers, oreos (regular and double stuff)

**Your Group’s Hypothesis:**

In the space below write the list of the steps you took to test your hypothesis. Be sure that you are very detailed so that another group could follow your steps and get the same results.

\*\*\* Hint: Take note of the data that you should be collecting as you begin designing your experiment so that you can be sure to write that into your procedure.\*\*\*

**Procedure:**

**Data Collected:**

Mass of weigh boats empty:

Weigh boat 1 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ , Weigh boat 2\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Mass of weigh boats with stuffing:

Weigh boat 1 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ , Weigh boat 2\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Difference in masses of weigh boats:

Mass of Regular Oreo Stuffing: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Mass of Double Stuff Oreo Stuffing: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Difference in Masses (Mass Double – Mass Single): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Your Group’s Conclusion:**

Oreo Cookie Challenge Lab - M

**Problem:** You want to determine whether or not double stuff oreos really have double the stuffing.

**Equipment:** scale, beaker, rulers, oreos (regular and double stuff)

**Your Group’s Hypothesis:** Circle One

We believe that the double stuff oreo (does / does not ) have double the stuffing of regular oreos.

**Procedure:** Follow the directions in the space below to test your hypothesis.

1. Obtain one of each oreo (regular and double stuff)
2. Carefully break apart each oreo so that you don’t drop or lose any of the stuffing.
3. Grab two weigh boats (label each one as 1 and 2) and measure their mass. **Record** each mass in the data collected section.
4. Using a scoopula scrape as much of the stuffing as possible into each of the weigh boats. All of the stuffing from the regular oreo should go in boat 1 and all of the stuffing from the double stuff should go in boat 2.
5. Be sure that all of the stuffing is off of the scoopulas and inside the weigh boats
6. Weigh each boat and **record** the mass of the boats with the stuffing in the data collected section
7. Throw the weigh boats with stuffing in the trash and clean up your lab area.
8. After you have cleaned your area you may now begin to work on the data you’ve collected.
9. First, subtract the mass of the boats with stuffing minus the mass of the boats empty in order to determine the mass of the stuffing for each type of oreo.
10. Next, subtract the mass of the double stuffed stuffing minus the regular oreo stuffing to determine the difference in the stuffing’s masses.
11. Look at the difference in the stuffing’s masses to come to a conclusion and either confirm or reject your group’s hypothesis.
12. **Record** your conclusion in the space provided

**Data Collected:**

Mass of weigh boats empty:

Weigh boat 1 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ , Weigh boat 2\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Mass of weigh boats with stuffing:

Weigh boat 1 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ , Weigh boat 2\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Difference in masses of weigh boats:

Mass of Regular Oreo Stuffing: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Mass of Double Stuff Oreo Stuffing: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Difference in Masses (Mass Double – Mass Single): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Your Group’s Conclusion:**