**Procedure**

NAME:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**PART ONE**

1. Obtain a paper towel, one gummy bear, and a ruler
2. Measure each bear (in cm) from top to bottom (length) and from side to side (width) and from front to back (height)
3. Record the dimensions in centimeters in the data table.
4. Find the mass of the bear by using an electronic balance. Record the mass of the gummy bear in the data table (in grams).
5. Place the bear on a paper towel and set aside

**PART TWO**

1. Obtain 1 Gummy bear in tap water, 1 gummy bear in salt water, and 1 gummy bear in distilled water
2. Gently pour the water off of each gummy bear and into a sink **(make sure you catch the bears before each falls into the sink!!)**
3. Blot dry by placing the bear on a paper towel.
4. Measure the length, width, and height of each bear **(just like you did in part 1)** and record each in the data table.
5. **Be CAREFUL not to break the bears, they are very fragile**
6. Obtain a small weigh boat and find its mass on the electronic balance
7. Zero the balance before you set one gummy bear onto the weigh boat.
8. Record the gummy bears mass in the data table
9. Turn the scale off and remove all items from the scale.
10. Repeat steps 6-8 for the other two gummy bears
11. Record the mass of each gummy bear in the data table
12. Clean up your work station and complete the conclusion questions

**Data Table**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Dimensions** | **Initial Measurements** of Gummy Bear | **Final Measurements**  of Gummy Bear in *distilled water* | **Final Measurements**  of Gummy Bear in *tap water* | **Final Measurements**  of Gummy Bear in *salt water* |
| **Length (cm)** |  |  |  |  |
| **Width (cm)** |  |  |  |  |
| **Height (cm)** |  |  |  |  |
| **Mass**  **(g)** |  |  |  |  |
| **Volume (cm3)**  **LxWxH** |  |  |  |  |

**Answer the conclusion questions below:**

\*\*Answer the following using complete sentences\*\*

1. What happened to the bears that were placed in distilled water? Why? (Use terminology related to osmosis) Draw a picture illustrating the movement of water.
2. What happened to the bears that were placed in the tap water? Why? (Use terminology related to osmosis) Draw a picture illustrating the movement of water.
3. What happened to the bears that were placed in the salt water? Why? (Use terminology related to osmosis). Draw a picture illustrating the movement of water.
4. Briefly explain how the process of osmosis works in the cell contributing to the overall success and homeostasis of the cell.

5.) Why does drinking salt water cause dehydration?