Gummy Bear Lab

What do you think will happen to a gummy bear when you put it in water overnight?

Procedure:

Day 1:

1. Choose one gummy bear.
2. Measure the length, width, thickness in millimeters of your gummy bear and record it in the data table for day 1.

 Length- should be measured from the top of its head to the bottom of its feet

 Width – should be measured at the widest point across the front of the bear

 Thickness- from the front of the bear to the back of the bear at its widest point

1. Measure the mass of the gummy bear in grams.
2. Calculate the volume of the gummy bear to the nearest hundredth and record it in the data table.
3. Calculate the density of the bear and record it in the data table.
4. Put the bear in a beaker labeled with your name and block. Add 150 ml of water to the cup and allow it to sit overnight.

Day 2:

1. Remove the gummy bear and gently dry it off.
2. Repeat steps 2-5 above.

Gummy Bear Data

|  |  |  |
| --- | --- | --- |
|  | Day 1 | Day 2 |
|  | L | W | Thick | Vol | Mass | Den | L | W | Thick | Vol | Mass | Den |
| Red |  |  |  |  |  |  |  |  |  |  |  |  |
| Orange |  |  |  |  |  |  |  |  |  |  |  |  |
| Yellow |  |  |  |  |  |  |  |  |  |  |  |  |
| Green |  |  |  |  |  |  |  |  |  |  |  |  |

1. Was your hypothesis correct? Why or why not?
2. Which change is greater, the length or volume? Why?
3. Was there a change in density? Why?
4. Is there a significant difference in any of the data for different colored bears?
5. Design an experiment to test the variable of bear color.