

Transcript of The Occurrence of Water in Living Things

The Occurrence of Water in Living Things

Question

Which organic material has the greatest percentage of water: grapes, carrots, or apples?

Hypothesis

If we cut grapes, carrot and apple slices in half, then after two nights, grape's mass will shrink the most by percent change, and carrot's mass will shrink the least by percent change.

Procedures

1. Measure the mass of one apple slice. Record the data.
2. Measure the mass of one carrot slice. Record the data.
3. Measure the mass of one grape. Record the data.
4. Cut the grape in half and place it on a large piece of paper towel to dry over the next two nights.
5. Cut the apple slice in half and place it next to the grapes on the large piece of paper towel to dry over the next two nights.
6. Cut the carrot slice in half and place it next to the other fruit/vegetable on the large piece of paper towel to dry over the next two nights.

Conclusion

by Vona

Independent Variable (I.V.): Type of fruit

Dependent Variable (D.V.): Shrinking of mass

Controlled Variable (C.V.): length of experiment, environment of the fruit/vegetable drying process, temperature of the fruit/vegetable, moisture of the fruit/vegetable (must be original dryness of each fruit)

Data and Observations

Mass of one apple slice: 10.2 g

Mass of one carrot slice: 8.5 g

Mass of one grape: 5.7 g

Mass of one apple slice after it was left to dry over two nights: 7.5 g

Mass of one carrot slice after it was left to dry over two nights: 6.5 g

Mass of one grape after it was left to dry over two nights: 4 g

Mass shrunk after two nights:

Apple slice: 2.7 g (-24.5%)

Carrot slice: 2 g (-23.5%)

Grape: 1.7 g (-29.8%)

Grape shrunk the most by percent change (-29.8%), and carrot shrunk the least by percent change (-23.5%).

Data Analysis

These were my variables...

My hypothesis was supported!

In my hypothesis I predicted if we cut grapes, carrot and apple slices in half, then after two nights, grape's mass will shrink the most by percent change, and carrot's mass will shrink the least by percent change.

My data showed the grape's mass shrunk the most by percent change (-29.8%), and carrot's mass shrunk the least by percent change (-23.5%)!

What I Learned...

1. How to design, and carry out a science lab.
2. How to use the scientific method to design a lab.
3. How to find the percentage change.

Bi-bili-oh-gra-fy

<http://www.wendys.com/en-us/fries-sides/apple-slices>

<http://www.wallpapersgalaxy.com/various-fruit-slices-wallpaper/>

<http://courtneymandryk.com/2009/07/07/food-body/>

<http://sweetclipart.com/magnifying-glass-silhouette-877>

http://commons.wikimedia.org/wiki/File:Single_apple.png

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<http://www.grapescience.com/concord-grapes-and-health/>

http://www.3d-diva.com/page16_transparent.html

<http://s206.photobucket.com/user/kotorixana/media/Question.png.html>

<http://openclipart.org/detail/169922/kitchen-icon---scale-by-studiofibonacci>