

DEHYDRATION OF GRAPES

QUESTION:

Does the color of the grape's skin impact the amount of time it takes for the grapes to dehydrate?

MATERIALS NEEDED:

- 10 Green Grapes
- 10 Red Grapes
- 10 Black Grapes
- Parchment paper
- Cookie sheet
- Oven
- Scale that measures in grams
- Timing device
- Data table

RESEARCH IDEAS, METHODS AND TIPS:

Make sure that the grapes that are used in the experiment are fresh and ripe. The weight should be recorded in grams and the time should be recorded in 30-minute increments. Make sure that you measure accurately and record carefully.

PROCEDURE:

Step 1: Rinse all of the grapes.

Step 2: Weigh and record the weight in grams of each group of grapes.

Step 3: Set the oven temperature to 100 degrees and line the cookie sheets with parchment paper.

Step 4: Place all 3 groups of grapes on the cookie sheet.

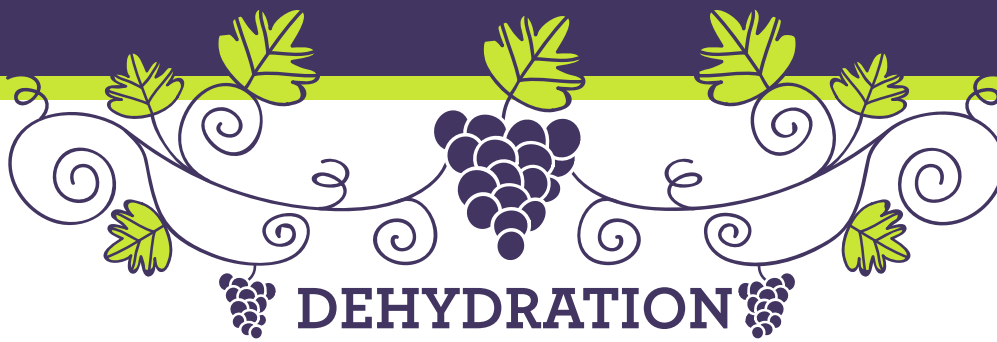
Step 5: Place the cookie sheet in the oven. After the first 30 minutes, take the cookie sheet out of the oven. Weigh each group of grapes, and record your results.

Step 6: Repeat step 5 every 30 minutes or until all of the grapes are completely dehydrated. Remember to record your results (it could take several hours). If one group of grapes is completely dehydrated before the others, you can remove the group of grapes from the cookie sheet.

Step 7: In order to figure out the water content of each group of grapes tested, you will need to figure the difference between the weights of the grapes at the beginning and the end of the experiment.

Step 8: You will then compare the time it took for each of the groups of grapes to completely dehydrate.





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RESULTS:

Analyze your data/results, explain your results, construct a graph of your results and write a conclusion.



PREDICTION:

DATA TABLE:

<i>(weight in grams)</i>	Weight before dehydrating	30-minutes	60-minutes	90-minutes	120-minutes	150-minutes	180-minutes
Red Grapes							
Green Grapes							
Black Grapes							

GRAPH YOUR RESULTS:

EXPLAIN YOUR RESULTS/CONCLUSION:
