

Science Fair Projects

6th Grade to 8th Grade

Title: Plants

"Juicy Fruit"

Stating the Problem - The Big Question

What do you want to find out about the amounts of juice in pieces of fruit? Write one question which asks what you want to learn from your experiment.

Forming a Hypothesis - A Smart Guess

Before you do your experiment, make some predictions about the expected results. Will some fruits have a greater percentage of water content than others? Write a sentence that states what you predict will be the answer to your Big Question.

Planning the Procedure

Some questions and helpful hints that will help you prepare for your research project are listed below.

Make a list of the different kinds of fruit that you would like to test.

You will need a sensitive scale, one that weighs to the tenth of an ounce or gram. By weighing fruit before and after drying, you can determine the percentage of water in the fruit.

Decide on the method which you will use to dry your fruit. An easy and inexpensive way is to slice, dice or grate your fruit. Place the fruit in an aluminum pie plate and let it dry in a warm place such as on a radiator, a heat register or a warm window sill. Another method of drying fruit is by using a food dehydrator. If you don't own a dehydrator, you may be able to borrow one.

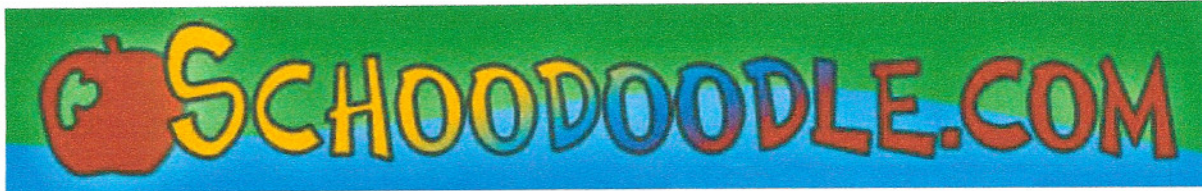
Make a list of the materials that will be needed for your experiment.

Make a graph to be used for recording the data from your experiment. One similar to the following chart.

Chart

Weight of fruit	Day 1	Day 2	Day 3	Day 4	Day 5

This project is from Daryl Vriesenga's book, *Science Fair Projects, Grades 4-6*, Michigan, Schaffer Publications, 1990. The Guide is available on line at: SchooDoodle.com



Science Fair Projects

6th Grade to 8th Grade

Title: Plants

"Juicy Fruit" (continued)

Recording Results

Collecting the data from your experiments can be the most exciting part of your project. Remember to keep very careful records of your experiment. Record the results of your experiment on the chart that you made.

How long should you dry your fruit? This will depend on the kind of fruit, the method of drying and how small you cut the pieces of fruit. Keep drying the fruit until it stops losing weight.

To calculate the percentage of water in your fruit, you must first find the weight of the water in the fruit. To find the weight of the water, use the formula below:

$$(weight\ before\ drying) - (weight\ after\ drying) = weight\ of\ water$$

To find the percentage of water, use this formula:

Weight of water

$$Weight\ before\ drying \times 100 = percentage\ of\ water\ in\ the\ fruit$$

Drawing a Conclusion

Read the predictions that you made before you started your experiment. Did you find that some of your predictions were correct? Did you observe any unusual patterns? If you tried dehydrating more than one sample of the same kind of fruit, were the results the same? If they were different, what do you think caused the difference?

Write a short report that explains what you found out in your research project. Your report should include your Big Question, hypothesis, a brief description of your experiment, data from your experiment and what you learned by studying the results of your experiment.

Display

Make a display of your research project. You should include your report, samples of the different kinds of fruits, samples of the dried fruits, equipment used in your experiment and any other information that you found in your research which would add interest to the display.

This project is from Daryl Vriesenga's book, *Science Fair Projects, Grades 4-6*, Michigan, Schaffer Publications, 1990. The Guide is available on line at: SchooDoodle.com