

Suck It Up!

LOOKING AT THE WORLD

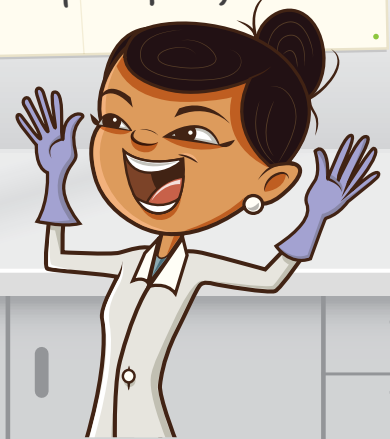
Different materials have the ability to suck up liquids. This is called 'absorption' and is a property of certain porous materials. Properties of absorptive materials can be measured by how much liquid they can absorb. Let's investigate!

AIM

To investigate materials and their absorptive properties.

SCIENTIST'S NOTE

You will need to make sure any liquids used are prevented from spilling.



Method

1. Fill the pan with water until it is half full. Carefully pour the water from the pan into the measuring cylinder. Place the measuring cylinder on a table, wait for the water to level, then measure and record the volume of water. Once you have recorded the volume, pour the water back into the pan.
2. Place the kitchen sponge into the water and start the stopwatch. After one minute, carefully remove the sponge (taking care not to squeeze it). Put the sponge into the bucket without spilling any water.
3. Pour the water remaining in the pan into the measuring cylinder. Place the measuring cylinder on a table, wait for the water to level, then measure and record the volume of water.
4. Repeat this process for the three other materials being tested. Be sure to record all data from each test in the table.

Equipment

- 1 x measuring cylinder
- 3 x different materials, cut to the size of a kitchen sponge
- 1 x kitchen sponge
- 1 x shallow pan
- 1 x stopwatch
- 1 x bucket

Name _____

Date _____

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Variables: (Which variables will stay the same and which variables should be changed?)

Variables that we could change:	Variables that we will change:
	Dependent variable that we will measure:

We are going to measure _____

by changing _____

Hypothesis: (What do you think will happen during the experiment?)



Name _____

Date _____

Diagram: (Draw an accurate picture of the experiment and label all the parts.)



Results: (What happened during the experiment?)

Absorptive Material	Remaining Tray Volume	Equation	Absorption Volume
kitchen sponge			



Name _____

Date _____

Discussion: (What do the results tell you?)

1. Discuss any patterns, trends or relationships you noticed in the data you collected.

2. What explanations could there be for these patterns, trends or relationships.

3. Can you think of another way this experiment could be performed to measure absorptive properties of different materials?



Name _____

Date _____

Conclusion: (Was your hypothesis correct? How do you know?)

Restate the aim of the experiment.

Explain what the experiment is trying to find out.

Interpret the results of the experiment and what they show.

Discuss the uncertainties, errors or uncontrolled variables.

Describe what you have learned and how your new knowledge can be used.

