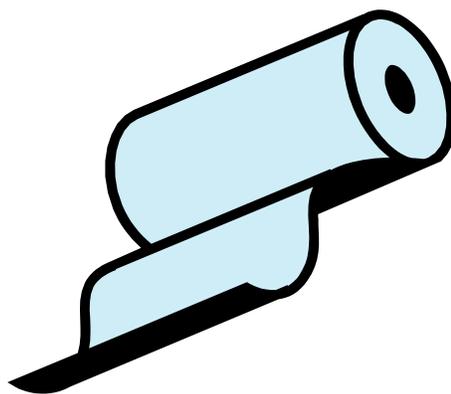


Curriculum-Embedded Performance Task
Elementary School Science
Content Standards 3.1, 3.2 or 3.4



Soggy Paper

Student Work

Connecticut State Department of Education
2011 Edition

Soggy Paper

A Guided Exploration of Properties of Different Papers

Look around the room. Many things are made of paper! How many different kinds of paper can you find? Is all paper the same? What are some differences you notice? In this activity, you will explore properties of paper.

1. Get samples of different papers, such as paper towels, tissues, napkins, newspaper, notebook paper and toilet paper.
2. OBSERVE the properties of different papers with and without a magnifier. Record your words and drawings in this chart:

PAPER TYPE	Properties Observed Without Magnifier	Properties Observed With Magnifier
Paper towel		
Tissue		
Napkin		

NAME: _____

3. List properties that might be related to how much water the paper can hold:

Absorbency means how much water a material can hold.

4. Choose ONE property that you think affects absorbency. Write the property here: _____

5. Explain how you think this property affects absorbency. I think that:

6. Which of the papers you observed have this property? _____

7. Predict which paper will be MOST absorbent and which will be LEAST absorbent.

Most: _____ Least: _____

Now you're ready to test your prediction by doing an experiment. Write the question you are investigating: _____

NAME: _____

Investigation 1: WHICH TYPE OF PAPER HOLDS THE MOST WATER? In this activity, you are going to pour water onto a plate. Then you will count how many squares of each paper type it takes to soak up all the water. The more absorbent paper will require fewer squares to soak up the water.

1. Label a plastic cup for each paper type. You will use the cups for storing the wet paper squares.
2. Measure _____ mL of water and pour it onto a plate.
3. Decide which paper you want to test first.
4. Lay one _____ cm paper square over the water spill, and leave it there until you can tell that it is not absorbing any more water.
5. Pick up the wet paper square with the forceps, and hold it over the plate until it stops dripping. Put the wet paper square in the labeled cup.
6. Keep using and counting squares until there is no more water left in the plate.
7. Count how many paper squares you used to soak up all the spilled water.
8. Record the number of squares you used for each paper type in a data table on the next page.
9. Repeat Steps 4 to 8 with the other paper types.



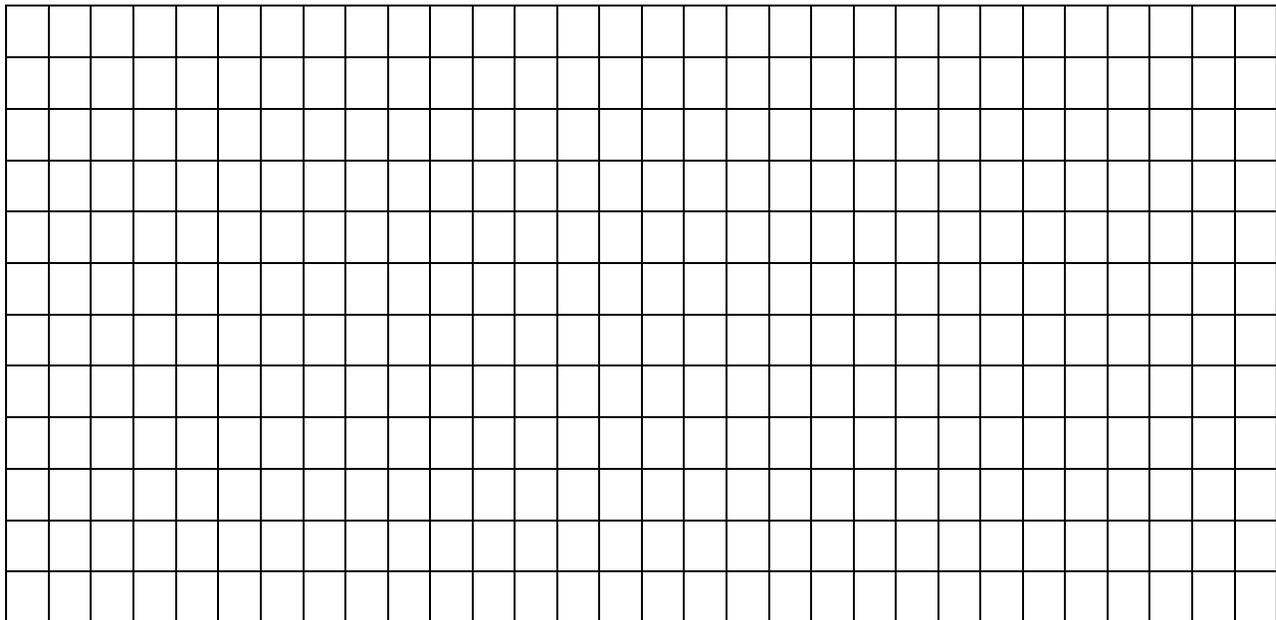
NAME: _____

Record your results in the data table:

Type of Paper	Amount of Water on Plate	Number of Squares Used

Make a bar graph to compare how many squares of each paper type were needed to absorb _____ mL of water:

Water Absorbency of Different Paper Types



Inquiry Component IV – Communicating Conclusions

NAME: _____

1. Which paper type used the **fewest** squares to soak up all the water?

Which paper type used the **most** squares to soak up all the water?

2. Which paper type is the most absorbent? _____

3. Does the paper have the property you thought would affect absorbency?

4. Which paper type is the least absorbent? _____

5. Does the paper have the property you thought would affect absorbency?

NAME: _____

Read more about paper, trees and conservation of natural resources

Read books, magazines or Internet sites to find out how paper is made from trees, and why it is important to conserve trees. Get started by reading below:

Many things we use every day are made of paper. We cut down trees and chop them into tiny pieces to make different kinds of paper. It takes many trees to make enough paper for all the things we use.

Trees are important to people and our environment in many other ways. People and animals eat the nuts and fruits that grow on trees. Birds, squirrels and other living things make their homes in trees. The roots of trees keep the soil from being washed away by rain. Many other plants grow in the soil.

We can conserve trees by using less paper. This can be done by recycling old paper or by reducing the amount of paper we use.



NAME: _____

INVESTIGATION 2: WHICH PAPER TOWEL IS BEST?

You may have seen TV commercials that claim that a brand of paper towel is the “best.” Don’t believe everything you hear on TV! What does “best” really mean? You’re the scientist, so you decide how you will define “best.” In this investigation, you can explore which brand of paper towel is “most absorbent” or which brand is “strongest.” Use what you learned in Investigation 1 to make your observations and design your experiment.

1. OBSERVE and COMPARE the properties of different brands of paper towels.

Record your observations in a labeled chart:

2. Write the question you will investigate here: _____

NAME: _____

5. Record your findings in a data table that includes a title and labels. Your data table from Investigation 1 will give you ideas for making your new data table:

6. SHOW your paper towel absorbency data in a bar graph.

