

Name _____ Date _____ Block _____

Capillary Action Lab

Background:

Capillary action can be seen when a corner of a paper towel is touched to spilled water. The water soon spreads into other parts of the towel because loose fibers have spaces between them that act as capillary tubes. The drying action of a bath towel is also due to capillarity. Kerosene rises in the wick of a lamp through capillary action.

Problem:

A paper towel absorbs water because of capillary action - the ability of liquids to be drawn up into narrow spaces. Will all types of paper absorb a liquid equally well?

Materials:

250ml beaker

Ruler

Masking tape

Colored water

Scissors

1 pencil

5 paper samples

Sample A	Sample B	Sample C	Sample D	Sample E

Variables:

Independent Variable: _____

Dependent Variable: _____

Control Variables: _____

Hypothesis:



Procedure:

1. Cut 2cm x 10cm strips of each of the paper samples. Using a pencil, Label each sample with a letter
2. Look at each of your samples. Make a detailed sketch of the paper's surface below.

Sample A	Sample B	Sample C	Sample D	Sample E

3. Tape one end of the paper to the pencil.
4. Make a mark with the pencil at 8cm.
5. Fill up the beaker with 25ml colored water.
6. Put the strip of paper in the beaker, so that bottom of the strip touches the water.
7. Time how long it takes the water to get to the 8cm mark.
8. Record your data in the data table.
9. Repeat 4 more times and average your trials.
10. Do the same for each of the remaining four paper samples.



Data Table:

	Sample A	Sample B	Sample C	Sample D	Sample E
Trial 1					
Trial 2					
Trial 3					
Trial 4					
Trial 5					
Average					

Data Analysis:

What patterns do you see? What do you know about the effect of the independent variable on the dependent variable? Do you see a relationship?



Graph



