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## OBJECTIVES

- To plan a test to compare the absorbency of different papers.
- To decide what evidence to collect, considering what evidence to collect, what to change, and what to measure.
- To make comparisons and draw conclusions.

## MAIN IDEAS

Following a class discussion, in small groups, the children will plan and carry out a test.

## CLASS ACTIVITY

### Resources needed

- A wide selection of used papers in different sizes. Include: some of the children's 'recycled paper' from the previous unit; some kitchen towels; some non porous papers such as grease proof paper, tracing paper; sugar paper etc.
- Water
- A variety of simple fluid measuring devices such as teaspoons, plastic measuring syringes, cups, measuring cylinders etc.
- A variety of waterproof containers, such as buckets, bowls etc.
- Scissors, rulers, pencils
- Enlarged copy of the worksheet
- A flipchart/chalk board
- A copy of the worksheet for each child

Remind and monitor the progress of the 'worm test' from Unit 9. Remind children of the tests they carried out on paper in Unit 11 and how the children decided that some of the tests could be improved.

Give each child a copy of the worksheet and use each question to structure the teaching session.

Tell the children that they are going to find out which kind of paper is best for mopping up spills.

Focus on the word **best**.

Ask the children what they think it means. (Some children will probably focus on what they think is the answer to the test. They may say kitchen towels are best.)

Direct the children carefully then elicit, and write on the flipchart/chalkboard a variety of answers, such as:

- The paper that will soak up the most water;
- The paper that will leave the surface driest;
- The paper that will soak up the spill with the least rubbing or wringing out.

Choose one of these sentences and rewrite it in the answer rectangle to question 1 of the enlarged worksheet.

Discuss with the children how they would devise a test stressing: what evidence they need to collect; what needs to change or stay the same; what to measure.

Elicit the children's help to complete question 2 on the enlarged worksheet.

Having decided on an appropriate test demonstrate it on a single sample of paper.

Show the children how you measured the result and write the result as a sample in question 3 on the enlarged worksheet.

Show the children how to complete the final question on the worksheet. Encourage them to rank the performance of the papers.

In small groups, let the children plan and carry out their test.

When the tests are complete make sure the children deposit wet waste paper in a central separate collection.

In the plenary discuss children's tests. Praise aspects of the tests that demonstrated fairness.

Discuss how the class should deal with the wet paper waste. It could be used in papier mâché art work or biodegraded in a compost heap. Don't throw it straight in the recycling box! Paper recycling organisations prefer to collect dry paper.

# Which paper is best for mopping up spills?



1. What are you going to try and find out?

2. What are you going to do in your test?

3. What are your results?

4. What did you find out?