

3. Making paper

Children think about the importance of recycling and follow simple instructions to make their own recycled paper.

OBJECTIVES

- To describe the simple physical properties of a variety of everyday materials
- To identify and compare the suitability of a variety of everyday materials for particular uses.

KEY IDEAS

- Paper can be recycled
- A 'recipe' is used to make recycled paper

Recycling is a theme in the story, e.g. the bedroom's wooden floorboards from the ship, and the paper woven into the bird's nest. These examples can be discussed before asking the children if they can think of other things which are recycled today, such as milk bottles, newspaper, glass, plastics, paper, drinks cans, etc.

A display can be made of 'new' and recycled paper products, e.g. kitchen roll, toilet roll, writing paper and envelopes. The recycled and new products can be compared in terms of colour, texture and cost.

This novel paper recipe produces circular paper, which can be coloured and perfumed. Rectangular paper can be made using wire mesh (available from Halfords).

Copy a shortened version of the recipe, shown overleaf, onto large paper. Add photocopied drawings to the recipe beside the appropriate stages. An adult can provide additional support for children to complete the recipe.

Quantities given in the recipe are a guide. Accuracy is not essential.

Samples of all the ingredients and utensils can be labelled and displayed on a table top below the illustrated recipe.

Note: *Mixing the pulp in a liquidiser produces a very fine pulp, but leaves the machine black with print. Therefore, use only a liquidiser that won't be used for food!*

Children can use the paper to write letters, poems, etc. or draw pictures. Alternatively, the paper is compared with school paper for strength (how easily does it tear) or absorbency (does the ink spread when you write with a pen).

Resource ideas:

paper (printer paper, newspaper or shredded paper) packet of paper towels muslin embroidery ring food colouring essential oil - optional (e.g. from Body Shop) hand whisk instant starch bucket rolling pin electric iron



This recipe will produce approximately 4-5 sheets of paper per medium-size embroidery ring.

Paper recipe

Ingredients

4-5 sheets paper (50 g)
4 plastic cups water (800 ml)
1/2 - 1 teaspoon food colouring
5-10 drops essential oil
1 tablespoon instant starch

1. Tear paper into tiny pieces, if not pre-shredded.
2. Using a spoon, mix the paper and water in a bucket.
3. Finish the mixing with a hand whisk.
4. Mix in the perfume and colouring.
5. Place the muslin in the embroidery ring.
6. Spoon the pulp onto the muslin and squeeze out the water, using the spoon then paper towels.
7. Remove muslin and paper from ring and place between paper towels to roll out excess water. Repeat as necessary.
8. Iron (on a warm setting) the paper towel 'sandwich', peel out the paper and dry for 24 hours.

Safety Note

An adult must iron the paper and children can observe.