

PAPER MAKING SET - 314-550

Teaching
Resources



Middlesex
University

Steps in paper making

- tear up some soft paper such as kitchen towel and put this in a liquidiser approximately two thirds full of water. (The amount of paper is down to trial and error but try four sheets first)
- liquidise the contents for about 1 minute or until no further change of state is apparent

[NOTE: the paper fibres in the pulp will clump together. This is normal and is known as flocculation. If you hold most papers – including banknotes – up to the light you will see the variation in density that results from flocculation in the pulp.]

- fill up a washing bowl with water (warm for comfort) and then pour in the pulp
- cut several pieces of mesh to the width of the clips and to a suitable length for your bowl.
- fasten one clip to each end of a piece of mesh
- stir up the pulp solution (each time just before the mesh goes in)
- dip the stretched mesh into the pulp edge-on and lift slow from the bottom of the bowl with a scooping action. The mesh will pick up a mat of fibres
- let the mesh drain for a few seconds and then lower it onto a pad of old newspaper. Remove the clips, and allow the embryonic paper to partially dry out. After some drying, the paper can be peeled off the mesh to be hung up for dry complete drying
- if the stack method is used, each new embryonic sheet of paper is overlaid with a second mesh, and covered with more newspaper. When the stack is complete, a heavy weight – e.g., several books – is placed on top. The stack might be left for 24 hours before removal of the new paper sheets.

Paper making variables

The density of the pulp can be altered to give thicker or thinner papers – remembering, of course, that each mesh gathering leaves the remaining pulp thinner.

The basic pulp feedstock can be altered and might include newspaper, cardboard, card egg boxes, plant fibre etc.

Other materials can be added to the pulp for functional effect including, for instance, fibrous materials such as chopped carbon fibres for enhanced tensile strength.

Other materials can be added to the pulp for decorative effect including (traditionally) dried flower petals. Chameleon nanoflakes can be added to give spectacular visual effects.