



# Homemade Paper

**Objective:** To minimize use of virgin paper, while gaining a better understanding of the processes involved in creating paper, something that is often taken for granted.

**Abstract:** The amount of paper consumed by Canadians has been on the rise over the past few decades. Between 1983 and 2003, the amount of paper consumed per person doubled! In 2003, the average Canadian consumed 91.4kg of paper per year, that's 20,000 sheets!<sup>1</sup>

To curb the use of industry-made paper, make your own from old, used paper. Recycling at home, while learning the fun and easy process of paper-making! It may turn into a fun hobby, and can even be a way to make gifts or items to sell at a fundraiser.

**Number of participants:** 1+

**Total planning time:** 2 hours (+ 1 day if pre-soaking)

**Total time for participants:** 3 hours (+ 1 day for drying)

**Appropriate age of participants:** 8+ years

## **Materials:**

- A picture frame for the deckle (the belt that controls the size of the paper produced)
- A smaller frame for the mould (the hollow block where the raw materials will go)
- Nylon mesh (the kind you find in window screens)
- A blender or mortar & pestle
- Used paper (used computer printout, newsprint, egg cartons, etc.)
- A piece of felt the size of the paper you want to make
- A spatula
- A sponge
- Staples and/or thumb tacks

**Note:** Some of these items (i.e. blender and spatula) should not be used for food once they have been used for this project, so make sure to get permission before using them.

## Action Plan:

- 1) To create your deckle, carefully remove the glass from your picture frame and attach the nylon mesh by stapling it or tacking it down at the edges of the frame. To make the mould, simply remove the glass from the smaller picture frame.
- 2) Tear up your used paper into small pieces, and place it in a blender with about twice as much water as you have paper (you can experiment to see what works best). Blend the paper and water mix until it has the consistency of a thick soup. If you are using a mortar and pestle to grind the paper, pre-soaking the paper in water for a day or two will make this step much easier.
- 3) Place your deckle over a sink, and then place the mould on top of the mesh, in the centre of the deckle.
- 4) Pour the paper mixture into the mould, spreading it as evenly as possible. You can use the spatula at this point to make it smoother, but be sure not to press too hard!
- 5) Remove the mould and place a piece of felt over the smoothed mixture. Using a sponge, gently dab the opposite side of your deckle to remove the moisture through the mesh. Wring out the sponge as you proceed.
- 6) Once the sponge does not seem to be absorbing any more water, carefully remove the felt from the deckle. The paper should come off with the felt at this point.
- 7) Leave the felt to dry for a day or so. Once it is dry, detach the paper from the felt, and you're done!
- 8) If you have leftover paper mixture, do not pour it down the drain, as it might clog! You can either freeze it to use later, or drain the liquid, let it dry, and then recycle the paper.
- 9) Once you've gotten the hang of it, try different variations by making different-coloured paper with food colouring, or adding items such as glitter or dried flower petals. You can even make paper out of different raw materials such as rice and dryer lint!

Return your paper to the Earth by making **plant-able** paper! All you have to do is add plenty of seeds (flat seeds work best, such as tomato, hollyhock, chili pepper, and forget-me-not) to your paper and water mixture before pouring it into the mould.

- 10) There are endless possibilities of what you can do with your homemade paper! Make greeting cards, journals, or bookmarks which can be given as gifts or sold as a fundraiser for your favourite green charity!

**11)** Share your experience with Roots & Shoots by uploading your project report onto the online Project Database [<http://www.janegoodall.ca/members-project-registry.php>].

**Resources to get you started:**

Paper Making: <http://www.papermaking.net/category/how-to-make-paper/>

Folding Trees: <http://foldingtrees.com/category/papermaking/>

Nash/Renfrow Productions: <http://papermakingresources.com/basic.html>

\*The Jane Goodall Institute is not responsible for the content of external websites.

**Contact:**

For more information about this project, contact [roots\\_shoots@janegoodall.ca](mailto:roots_shoots@janegoodall.ca)

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<sup>1</sup> <http://www.cbc.ca/technology/story/2006/11/10/tech-paperless.html>