

Environmental Education: 3Rs (Reduce, Reuse, Recycle)

Make Your Own Recycled Paper

Background Information

Recycling is a process where materials are collected, sorted and reprocessed into new things. When we recycle, we reduce the amount of materials going to the landfill, conserve natural resources (like trees), and reduce the amount of energy and water needed to create products from new natural resources.

The CRD curbside program has three streams of recycling: paper and cardboard, mixed containers and glass. Did you know that the paper and cardboard collected through the curbside program is made into all kinds of new things? Paper (newspapers, flyers, envelopes, office paper) can be recycled into new paper or cardboard, the paper cover for drywall, molded paper egg cartons and insulation. Paper packaging (cardboard boxes, paper towel rolls, paper bags) can be recycled into new boxes, paper towels, tissues, paper-based plant pots, and brown paper products including paper towels.

Make your own recycled paper!

There are many different methods for making your own recycled paper at home. Some methods require more equipment or more specialized tools. The materials and method listed below is the simplest way to make your own paper using items that most people would have at home. Feel free to search online for different options and pick the one that works best for you.

Materials

- Blender or egg beater
- Newsprint, scrap paper, wrapping paper, toilet paper, etc.
- Rolling pin or sponge
- Mixing bowl (if using egg beater)
- Framed screen (old window screen, wire mesh screen) or sieve
- Flat, shallow dish or pan (slightly larger than your screen)
- Water (warm)
- Optional mix-ins (seeds, thread, flower petals, leaves)

Notes

1. If you use coloured scrap paper, construction paper or tissue paper, the colours will dye your final product.
2. The more or longer you blend, the finer the paper fibres, and the more uniform your final product will be. If you would like to see the pieces of paper do not blend as much.
3. The screen method allows for a thinner final product.
4. When rolling out and flattening, any patterns from the paper towel, towel or surface you are rolling on will transfer to your paper. If you would like the final paper to be smooth make sure you are using a smooth surface.

Method

1. Gather and tear paper products into small pieces. If you are using a blender, place pieces in blender and cover with warm water. If using an egg beater place pieces in mixing bowl and cover with warm water.



2. Beat or blend the water and paper until you have broken down the paper pieces into fibres.
3. **If using a screen**, pour the mixture into the flat dish. Place your frame into the mixture and pull up to allow the water to drip through. Shake the screen around gently to distribute the pulp fibres evenly.
4. **If using sieve**, pour the mixture into the sieve and allow water to drain away. You might need to gently press the mixture to help get water out.



5. Once you have your wet pulp fibres, and the optional mix-ins.
6. There are a few options drying. Whichever method you choose, this is also the time to shape your paper (size, shape and thickness).
 - a) turn the pulp over onto some dry paper towel or newspaper, cover the top with paper towel and use a rolling pin to press down and squeeze excess water out.
 - b) flip the pulp out onto your counter top or a cutting board, press down with a sponge all over removing excess water.
 - c) if you used a screen you can leave the pulp in the screen to dry — this will take longer.



7. Allow paper to air dry on a flat surface.
8. Use your new recycled paper!

Expand

Try different methods to see if the resulting paper has different characteristics.

- Change the blending time. Blend until you can still see tiny pieces of paper versus until you cannot see any distinct pieces
- Use only printer paper, only cardboard, newsprint, or mixed paper types
- Use a rolling pin and compare to using a sponge
- Let the paper dry in the open versus leave it to dry with something heavy on top

If you have any questions about this activity or recycling in the region, or are looking for ideas on how to connect this topic with other learning opportunities, please contact us at education@crd.bc.ca.