

Paper recycling



Turn old into new

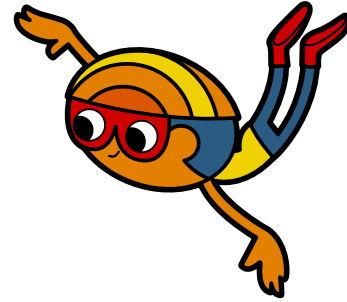
Recycling of paper and cardboard

Research question

You probably collect your wastepaper at home and put it in a dedicated garbage can or take it to the wastepaper bank. But then what happens to it then? **How does paper recycling work?**

You will need

- Wastepaper or thin cardboard, (e.g., an old cereal box)
- 2 plastic bowls
- Measuring jug
- Blender with high bowl
- Rolling pin
- “Sieve”: Fly screen, paper scoop frame or splatter screen (used to cover pans when cooking)
- Tea towels



How to do it

Step by step



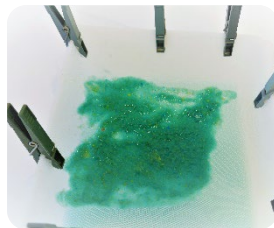
Cut the paper up

1. Find a few sheets of paper or an appropriately sized piece of thin cardboard and tear it into very small pieces. The smaller the pieces, the better the result.
2. Put the pieces of paper or cardboard pieces in a plastic bowl.



Soak in water and blend

1. Add 300 ml of water to the paper shreds and soak them for 5 minutes.
2. Then pour everything into a tall container and blend the mixture until you get a smooth pulp.
3. Now pour everything back into the plastic bowl. Add 1 l of water and mix everything well.



Pour through a sieve

1. Now place your sieve over the second bowl and carefully pour the pulp onto the sieve.
2. When the water has drained completely, place the sieve with the pulp on a tea towel.
3. Cover it with a second cloth. Turn the cloths over 180 degrees together with the sieve. This will transfer the paper pulp to the tea towel.
4. Roll the kitchen roll over the towel. Then you can remove the upper towel and the sieve.



Let pulp dry

1. Place the cloth with the pulp on a flat surface and let both dry overnight.
2. When everything has dried, you can carefully remove the paper layer from the cloth.



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Further information



Context

Conserving resources by recycling used materials is part of sustainable action. Paper recycling is already very well established, but the individual steps are not so well known. We want to show those in this experiment.

Recycling-Process

The first step in the recycling process is always careful waste separation. This is something that even children can contribute to at home. In the recycling process, the collected wastepaper is separated from foreign bodies, shredded and processed with water into a fine paper pulp. Depending on the quality and grade of the starting material, it can then be used to make cardboard again or, in a more complex process, new writing paper. Here we retrace the very basic work steps.

