

Designing Recycled Paper

設計再生紙

Did you know?

People often throw waste right into the trash bin without a second thought. Most of the time, the things that we throw out can be recycled! We need to be more aware of our actions and realize how much goes to waste on a daily basis!

What are the 3Rs?

Reduce, Reuse, and Recycle are three practices that we can observe to lessen the amount of trash we produce. Reusing is about looking for ways to use materials again. For starters, we talk about the most commonly recycled material – paper!

Activity: Making paper from recycled materials

While most recycling is done in recycling factories, the process itself doesn't require complex machinery! For this activity, we're going to make recycled paper from old newspaper! By ourselves!

Fun Fact:

The paper we write on is made in a very similar way. Wood from trees is ground into pulp (pulp is a "watery soup" of wood fibers mixed with water). The pulp is then sprayed onto mesh screens which go through heat rollers to squeeze all the water out.

你知道嗎？

人們常常不假思索地將廢物直接扔進垃圾桶。而很多時候，我們扔掉的東西是可以回收再利用的！我們需要更加了解自身行為，才能察覺每天有多少資源被浪費掉了！

3Rs 是什麼？

減少、重複使用和回收是我們可以減少垃圾量的三種具體行為。重複使用是尋找再次利用材料的方法。首先，我們可以討論最常見的回收材料——紙！

活動：用再生材料造紙

雖然大多數回收工作都在回收工廠中進行，但該過程本身並不需要複雜的機器！因此，我們將使用舊報紙製作再生紙！自己動手做！

有趣的事實

我們寫字用的紙是用非常相似的方法製作的。樹木中的木材被研磨成紙漿（木纖維與水混合而成）。接著，將紙漿塗到篩網上，並透過加熱滾輪將水擠出。

ASK + IMAGINE 提問 + 創思

There's so much old paper! What can we do with it?
有好多舊的紙！我們可以拿來做什麼呢？



PLAN 計畫

We have to use water, but how much starch should we add?
我們必須用水，但是我們應該添加多少澱粉？



CREATE 創作



We took old paper, tore it into small pieces and added water and starch to make a pulp.
我們把舊紙撕成小塊，加水和澱粉製成紙漿。

IMPROVE 改進

Some paper wasn't smooth enough. We had to make it thinner and smoother.
有些紙不夠平滑。我們必須讓它們更薄更平滑。

