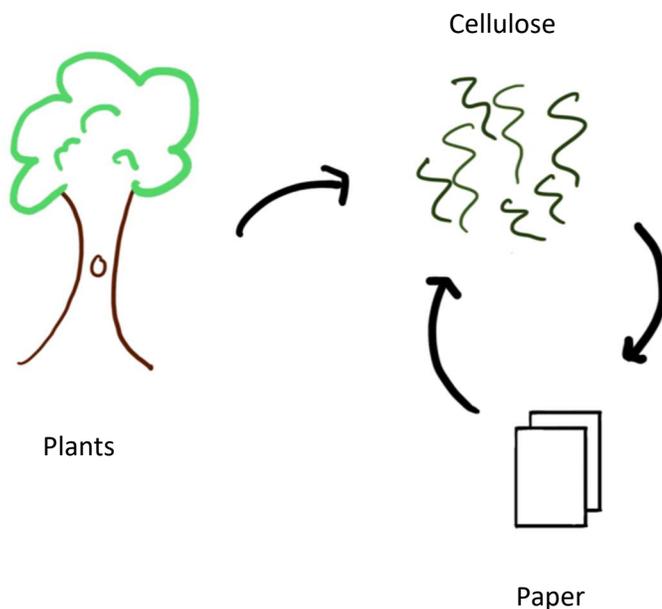


Husky at Home Science
Recycled Paper Activity
August 3, 2021

Note to Students

- Cellulose is a polymer that makes up the cell walls of many plants. It is made up of glucose building blocks, just like a lot of the foods that we eat, but because of how the glucose blocks are connected, our bodies can't use the cellulose for food.
- Cellulose has lots of other uses for us, though! A big one is paper. Paper is made through an elaborate process of extracting the cellulose from plants and squishing the extracted pulp-like cellulose into thin sheets to form paper.
- While extracting cellulose from plants requires chemicals and equipment we don't have access to at home, we can recycle paper into new paper in a way like how paper is recycled in the real world.
- Remembering to recycle means less new materials like cellulose are required to be extracted from plants and the earth. This helps us protect our environment which leads to a better life for us all.
- Today, we are going to take old paper, soak it in water to break down some of the structure, and reform it to form new paper!



Note to Parents:

- Cellulose is a polymer made up of thousands of linear glucose chains. Cellulose is found in the cell walls of plants. Unlike the glucose in foods, the glucose in cellulose cannot be digested by humans.
- One of the most common uses for cellulose is paper! This is done by breaking down the cell walls of wood chips with steam and other chemicals to extract the cellulose fibers and other wood waste. After much cleaning and screening the pulp is able to be pressed into paper.
- Since many of us do not have access to the machinery and chemicals needed to make paper from plants, we are going to recycle used paper! This is to demonstrate how the cellulose fibers in paper can still break down and then re-bond to form recycled paper.
- Today, we are ripping up used paper, soaking it in warm water to break down the cellulose fibers, then pressing it on our mesh screens to create new paper! Meanwhile, we are also learning about the abilities and impact on recycling.

To Google:

Cellulose

Glucose

Paper pulp

Recycling