

Lesson Plan: Recycling!

Subject: Physical Science

Age Group: 4-5th Grade

Supplies Needed:

- 4-5 sheets of newspaper.
- Glass bowl
- Hot water
- Wooden Spoon
- Scissors
- Aluminum Foil
- Corn Starch
- Measuring Spoons
- Sharp Pencil

Introduction:

- Ask the students if they recycle at home (particularly paper).
- After explaining the importance of recycling, begin the experiment.

Pre-Experiment: (Do before leaving for the school to have ready for the students.)

- 1) Cut the newspaper into small pieces.
- 2) Put the newspaper scraps into bowl, cover them with hot water, and mix until all paper is wet.
- 3) Let paper sit for a few hours, until mushy; stir it occasionally.
- 4) When it looks and feels like oatmeal, you're ready to make new paper.

Instructions:

- 1) Add a few tablespoons of cornstarch and a little more hot water. Mix it all up again.
- 2) Now that you have pulp, you need to get rid of extra water; make a strainer to do that.
- 3) Take a piece of aluminum foil and fold into a square or rectangle about the size of the paper you want to make.
- 4) Punch holes in the aluminum foil with a sharp pencil.
- 5) Now take a new sheet of aluminum foil and put it on top of extra newspapers.
- 6) Cover aluminum foil with layer of pulp and use strainer to press out the extra water. Pulp left over will become your new sheet of paper.
- 7) Pinch together any holes in the paper.

- 8) Lastly, put aluminum foil and books on top of your paper and press it flat.
- 9) Remove books and the top layer of foil and ask the teacher if they can leave the paper overnight and retrieve the paper the next morning.
- 10) The next day, peel the paper from the aluminum foil.

Follow-up:

- Recycling paper is good for the environment.
- It cuts down on the amount of garbage you throw away and as a result, fewer trees have to be killed to make new paper.

Source: <http://pbskids.org/zoom/activities/sci/recyclingpaper.html>