

PK4 & Kindergarten *DC Recycle Right!* Lesson Plan Making Recycled Paper

Lesson Plan

Approximately 45 minutes of instruction

Brief Lesson Description:

Summary: Students will learn how one of our natural resources – paper- is made and how it can be reused. By recycling students will help reduce the world's need for new paper and move toward the Sustainable DC target by reducing paper waste within our schools. Rather than discarding old catalogs, used writing/drawing paper or construction paper scraps, students will recycle them into beautiful new paper for reuse.

Big Idea: Paper is so plentiful in the United States that it is easy to forget that making paper consumes trees and energy. By recycling paper helps make sure we get the most out of every tree we use and it helps keep paper from clogging up our landfills.

Written by Alva Braxton, pre-k teacher at Van Ness Elementary School through the DCPS Recycles! Curriculum Project in partnership between DC Department of General Services and District of Columbia Public Schools, Office of Teaching and Learning



| Materials and Supplies | Purpose | When used | |
|--|-----------------|-----------|--|
| Screen e.g., sliding window screen 2 large tubs Washcloth/rag/large piece of felt Water Torn paper from newspaper, tissue paper, magazines, etc. Be sure it's staple and tape free. Blender Small seeds (optional) | To create paper | Explore | |

Key Standards

K-ESS3-3 Communicate solutions that will reduce the impact of humans on the land, water, air and/or other living things in the local environment. [Clarification Statement: Examples of human impact on the land could include cutting trees to produce *paper* and using resources to produce bottles. Examples of solutions could include reusing *paper* and recycling cans and bottles.]
K-PS3-2 Uses tools and materials provided to design and build a device that solves a specific problem or solution to a specific problem.



Lesson Plan

Explain

What do we know about reducing, reusing, and recycling paper? What do we want to find out? How can we reuse paper?

Engage

Whole Group/Small Group

Students/Teacher: Shred the paper up into little pieces (roughly 2" squares)

1. Teacher: Add paper to the blender, cover it with water, and run the blender on a low speed. Since you'll squeeze all the water out of the paper pulp, you can't really have too much water.

Note: If the blender doesn't move easily, add more water.

- 2. **Teacher:** Run the blender a little bit faster until you get the paper mixture into a nice, smooth pulp. **Note:** Add more water if pulp is still chunky.
- 3. **Students:** Cover this with a rag/washcloth to absorb the extra water, while also pushing the water through the screen into the tub.
- 4. **Students:** Place one hand firmly on top of the cloth and flip the screen over onto a work surface.
- 5. **Students/Teacher:** Remove the screen and put the cloth plus paper pulp in a spot where it can dry, undisturbed for about a day. **Note:** The thicker the paper, the longer it will take to dry.

Explore

Students will use drawing tools to write/draw a picture on their recycled paper.

Evaluate

- Recall the learning experience events/record responses
- Review the questions
- Reflect on the learning experience: What were the most engaging parts of the experience?
- Are there any other topics that might be worth investigating?



Key Resources:

Partnerships:

Art Teacher – collaborative resource to support the lesson Maintenance Team – share with students where does the paper goes once it leaves our classrooms.

Related Resources:

Classroom Papermaking - http://www.paperrecycles.org/schoolrecycling/index.html

Children's Books:

Trash-to-treasure papermaking (Arnold Grummer) The Great Paper Caper (Oliver Jeffers) My Bag and Me (Karen Farmer) A Box Can Be Many Things (Dana Meachen Rau) Recycle Everyday (Nancy Elizabeth Wallace)

Family Engagements: Invite families to contribute old newspapers, magazines, wrapping paper and boxes of various sizes that can be used to create something useful.