Recycled Paper

In this program children get to participate in the steps it takes to create paper and make their own paper creations. Once the paper is dry students can use their paper just like the real thing!

Prepare or gather:
Tear apart newsprint or egg cartons
Soak newsprint (or egg cartons) in white bucket of water overnight
Blend up newsprint (egg cartons) with emersion blender to make pulp
Make copies of take home instructions
Glue sticks (12)
Scissors (6)

Checklist to take:
- FT to Go box
- How Long Does it take to Disappear game
- Printed paper cut in strips
- Trays (6)
- Eric Carle collage stuff

Supplies in FT to Go box:
Emerson blender
2 Towels
Wooden Deckels
Shaped molds and deckels
Mixing bucket
Felt squares (large and small)
Shredded paper
Glitter
Colored shredded paper
Tubs for pulp
Rolling pins (4)
Folder of paper samples
Pyrus pictures
Paper plates

Set up
Stations
Pour pulp into tubs and mix up with different mediums
Trays for rubbing the deckles
Felt for wrapping
Spread out towels for rolling stations

Lesson

Introduction:
Hello everyone thank you for having me in your class today. Today we are going to make our own paper. But before we get to that we are going to talk a little bit about why recycling and reusing things is so important.

Facts about paper
Paper recycling is the process of recovering waste paper and remaking it into new paper products. There are three categories of paper that can be used as feedstocks for making recycled paper: mill broke, pre-consumer waste, and post-consumer waste.
Mill broke is paper trimmings and other paper scrap from the manufacture of paper, and is recycled internally in a paper mill.

Pre-consumer waste is material which left the paper mill but was discarded before it was ready for consumer use.

Post-consumer waste is material discarded after consumer use, such as old corrugated containers, old magazines, old newspapers, office paper, old telephone directories, and residential mixed paper.

Paper suitable for recycling is called "scrap paper". The industrial process of removing printing ink from paperfibers of recycled paper to make deinked pulp is called deinking, an invention of the German jurist Justus Claproth.

The United States Environmental Protection Agency (EPA) has found that recycling causes 35% less water pollution and 74% less air pollution than making virgin paper. Pulp mills can be sources of both air and water pollution, especially if they are producing bleached pulp. Modern mills produce considerably less pollution than those of a few decades ago. Recycling paper decreases the demand for virgin pulp and thus reduces the overall amount of air and water pollution associated with paper manufacture. Recycled pulp can be bleached with the same chemicals used to bleach virgin pulp. However, recycling mills may have polluting by-products, such as sludge. De-inking at Cross Pointe's Miami, Ohio mill results in sludge weighing 22% of the weight of wastepaper recycled.

**Stations**

Paper beads- Instead of tossing out scrapes of paper, **reuse** them to create paper beads that can be worn. The longer the paper the fatter the bead.
- Printed paper cut into triangle strips
- Pencils
- String
- Glue sticks

Eric Carle collage- Paper with paint on it can not be recycled so we are going to reuse it to reduce waste. Demo how to make a picture out of cut up paper scraps.
- Collage paper
- White paper
- Glue sticks
- Scissors

Disapear game OR recycle game - Students fill out sheet or practice sorting to learn about different materials.

Making paper- Using pulp we will create new paper from old paper.