

# Making the most of paper

Exploring ways to reduce paper use in the classroom and school

**Grades:** Middle

**Time:** 35-45 minutes

## Overview

Students examine the amount of paper found in the classroom recycling bin. They sort, classify and count the paper. They discuss ways to reduce the amount of paper they use, increase the amount they reuse and expand their recycling efforts.

### Teacher prep

One week prior to this activity, tell the class that they need to begin collecting paper that they find in the recycling bin to use for an upcoming activity. Create a large chart called Pile 1 that has two columns: 1) Estimate and 2) Actual. Label the rows in the chart according to the student groups (i.e., Group A, Group B, etc.) and leave the last row for Totals. Create similar charts for Pile 2 and Pile 3. Later in the activity, you will post these charts on a whiteboard for students to fill in.

## Materials

- One week's worth of paper found in the recycling bin.
- Markers (for teacher)
- White Board
- Large box
- Colored pencils, markers, and/or crayons
- Glue stick or tape

## Procedure

Warm-up: Ask the students, "Do you think we are conserving, 'reusing, and recycling paper as much as we can?" Get the students' responses and explain to the class, "We're going to examine the paper that we collected from the classroom's paper recycling bin for a week to see how well we reduce, reuse, and recycle paper."

Divide the students into groups and give each some of the paper collected. Ask them to notice that all the paper is written or drawn on one side, then instruct them to look at the other side of the paper and sort the paper into three piles:

- 1) one side is completely clean,
- 2) less than half of one side is used,
- 3) more than half of one side is used,

Post the three charts that you prepared earlier, Ask each group to estimate the amount of paper in each pile and have them write their estimates on the row for their group.

Then ask the students to actually count the paper in each of their piles and write their answers in the appropriate column and row on the three charts. Ask the class to compare the estimates with the actual figures. Then have the students put all the appropriate piles together, ending up with three large piles. Place each of the three large piles underneath the appropriate chart.

Ask the class to look at the three large piles and estimate how much paper is in each. Have them write their estimate in the row for totals on each chart. Then ask them to calculate how much paper is actually in each large pile by adding all the numbers in the actual column on each chart.

Ask the class, "Is there any way we can reuse paper that's completely clean on one side?" Record their responses on the Board.

Next ask, "Is there any way to reuse paper that has writing on less than 1/2 of one side?" Again, record their responses.

Then ask, "Is there any way to reuse paper that has writing on more than 1/2 of one side?" and write the responses.

Wrap-up: Ask the class, "How can we reduce our classroom paper use?" Look over the three charts on the Bulletin Board. Brainstorm ways the class can reduce the amount of paper they use. Then ask the class to estimate or calculate how much paper would be saved by each option. Continue by asking, "What do we need to do in our classroom to make this happen?" Place a large box in the classroom and ask the students to decorate it using themes from the class discussion. The class can use the box to collect paper to reuse for RRR or other activities.