

Middle School Wednesday

2-5-14

Too Many Cups?

Objective: Students will calculate the amount of paper cup waste accumulated in a week. Then create a sculpture using the cups to bring attention to this issue.

Schedule:

8:10 – 8:30 Advisory

8:30 – 9:00 Warm-up activity: Cup Relay

9:00 – 9:30 Count wasted cups, group graph and analysis

9:30-9:40 Black Box Intro Build

9:40- 10:30 Cup Build (Rooms: Rozmairik, Huggins, Rollo, White, Yeoman)

10:30 – 11:00 Brain Break

11:00-11:30 Finish Build

Share: Do we have a problem?

12:00 – 12:30 Lunch

Normal lunch rooms

12:30 dismissal

Cup Challenge Groupings/ Rooms

Monday	Tuesday	Wednesday	Thursday	Friday
Huggins Room *Weishaar *Vorsteg	Rozmiarek *Britcher	White *O'Connor	Yeoman *Lawhon	Rollo (no 1st) *Lesh *Gnann
James Faajah John E. Bradley Roman Sawyer	Matt Johnny Dylan Magnus Julia T. Nolan	Liam Max C Cat Brenna Loye	Will Max JP Kayla Caroline Julia P	Julian Sean Grace Kyron Mia Sa'eed





Cup Build

Wednesday 1/23/13

Objective: Students will use their imagination to build a sculpture using wasted cups, tape, and hot glue to inspire the community of Baltimore Lab School to use fewer paper cups.

Expectations:

1. Use all cups to build a portable sculpture attached to rectangular base
2. Use as few additional materials as possible
3. Write a description of your sculpture and explain how it will be influential

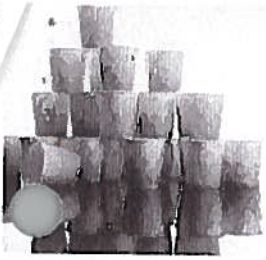
Materials :

Hot glue

Week's worth of cups (one floor)

Planning sheet

Description of sculpture for public



Day: Wednesday

Cup Waste Data

Directions:

- 1.) Count cups per floor and record numbers
- 2.) Calculate number of inches cups equal and record
- 3.) Cut sections of paper that represents each floor
- 4.) Place a piece of tape along the top of each section labeled with the floor #

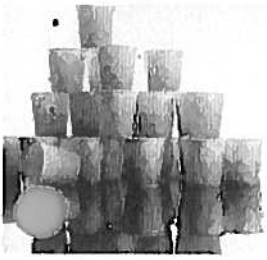
Key:

**5 cups =
1 Inch**

FLOOR	Number of Cups	Inches on Graph
Ground	27	5.4 inch
1 st Floor	70	14 inch
2 nd Floor	72	14.4 inch
3 rd Floor	103	20.6
Total	272	54.4

**Extra: Calculate total cost

\$13.60



Day: Thursday

Cup Waste Data

Directions:

- 1.) Count cups per floor and record numbers
- 2.) Calculate number of inches cups equal and record
- 3.) Cut sections of paper that represents each floor
- 4.) Place a piece of tape along the top of each section labeled with the floor #

Key:
5 cups =
1 Inch

FLOOR	Number of Cups	Inches on Graph
Ground	6	1.2
1 st Floor	32	6.4
2 nd Floor	8	1.6
3 rd Floor	82	16.4
Total	128	25.6

****Extra: Calculate total cost**

128 x .05

$$\begin{array}{r}
 128 \\
 \times .05 \\
 \hline
 640 \\
 0000 \\
 \hline
 \$6.40
 \end{array}$$

$$\begin{array}{r}
 46 \\
 82 \\
 \hline
 128
 \end{array}$$

Julian Sa'eed, Grace, Kyron, Mia, and Sean

Day: Friday

Cup Waste Data

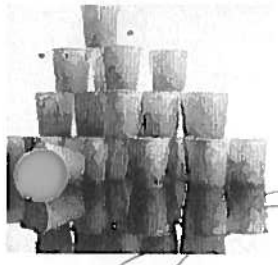
Directions:

- 1.) Count cups per floor and record numbers
- 2.) Calculate number of inches cups equal and record
- 3.) Cut sections of paper that represents each floor
- 4.) Place a piece of tape along the top of each section labeled with the floor #

Key:
**5 cups =
1 Inch**

FLOOR	Number of Cups	Inches on Graph
Ground	28	5.6
1 st Floor	25	5
2 nd Floor	69	13.8
3 rd Floor	34	6.8
Total	156	31.2

**Extra: Calculate total cost



Day: _____

Cup Waste Data

Directions:

- 1.) Count cups per floor and record numbers
- 2.) Calculate number of inches cups equal and record
- 3.) Cut sections of paper that represents each floor
- 4.) Place a piece of tape along the top of each section labeled with the floor #

Key:

**5 cups =
1 Inch**

FLOOR	Number of Cups	Inches on Graph
Ground	21	4.2
1 st Floor	34	6.8
2 nd Floor	44	8.8
3 rd Floor	15	3
Total	114	22.8

**Extra: Calculate total cost

Write a 3-5 sentence explanation of your sculpture and how it reminds people to conserve resources.

Brenna This is a tree made of cups
and paper is made of trees

Liam This represents that if we waste this many cups, there will be less trees. So we don't want to waste cups so that we don't have to cut down more trees. That will affect the air we breathe.
This sculpture is made of 272 cups. We were running out of room for the cups because there were so many.

Brenna Hopefully, when people look at this sculpture, they will think about the trees.

Cup Build

Wednesday 1/23/13

Objective: Students will use their imagination to build a sculpture using wasted cups, tape, and hot glue to inspire the community of Baltimore Lab School to use fewer paper cups.

Expectations:

1. Use all cups to build a portable sculpture attached to rectangular base
2. Use as few additional materials as possible
3. Write a description of your sculpture and explain how it will be influential

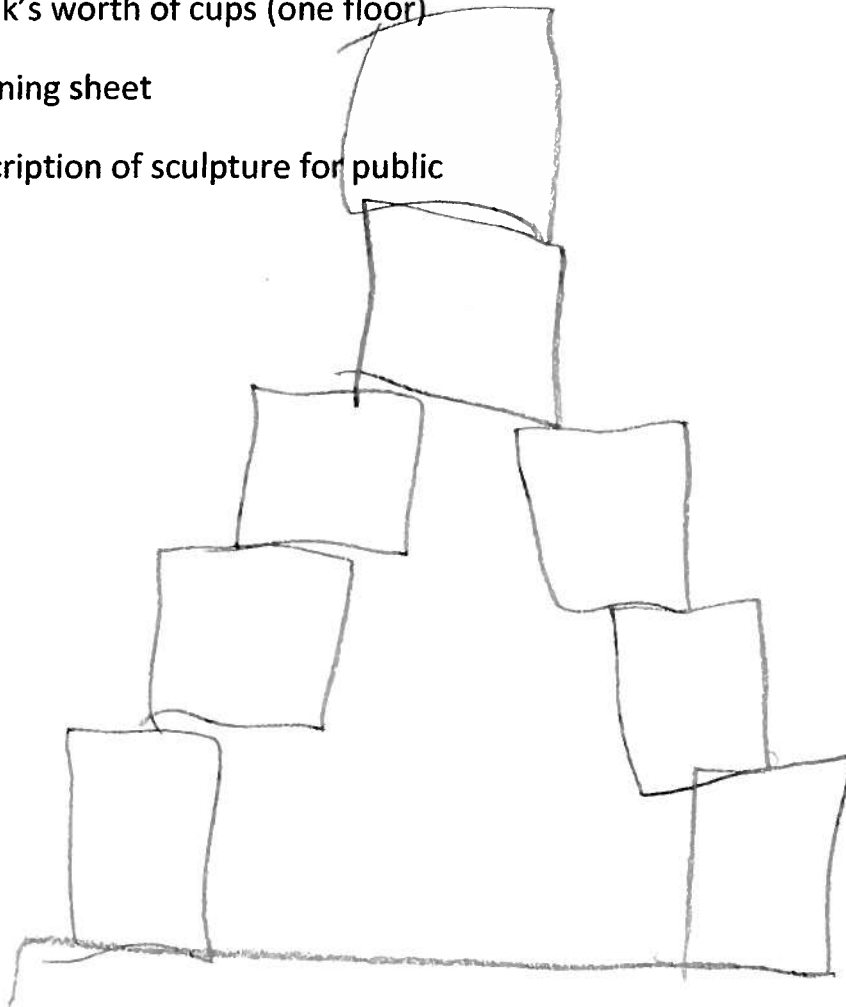
Materials :

Hot glue

Week's worth of cups (one floor)

Planning sheet

Description of sculpture for public



Sketch a Sculpture Plan

When creating a sculpture concept consider the following:

- What are the cups made out of?
- Where does this stuff come from?
- Are there alternatives to using them?



Sketch a plan for a sculpture to remind people to conserve resources:

