


Cereal MATH



NCTM 2000 Principles and Standards


- Number and Operations
- Algebra
- Geometry
- Measurement
- Data Analysis and Probability
- Problem Solving
- Reasoning and Proof
- Communication
- Connections
- Representation

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NCTM Standards


Activity	NCTM Standards									
	1	2	3	4	5	6	7	8	9	10
Cereal From A to Z	*	*	*	*	*	*	*	*	*	*
Cereal Day by Day	*	*	*	*	*	*	*	*	*	*
Cereal Abstract	*	*	*	*	*	*	*	*	*	*
Groups of "O's"	*	*	*	*	*	*	*	*	*	*
Fruity Flakes	*	*	*	*	*	*	*	*	*	*
Tea Scoops	*	*	*	*	*	*	*	*	*	*
A Scrumptious Sort	*	*	*	*	*	*	*	*	*	*
Cereal Venn Diagram	*	*	*	*	*	*	*	*	*	*
Colorful Cereal Pattern	*	*	*	*	*	*	*	*	*	*
Sugar Is Sweet	*	*	*	*	*	*	*	*	*	*
Our Favorite Cereal	*	*	*	*	*	*	*	*	*	*
Cereal Sizes	*	*	*	*	*	*	*	*	*	*
A, B, C and 1, 2, 3	*	*	*	*	*	*	*	*	*	*
Measures by Measure	*	*	*	*	*	*	*	*	*	*
A Handful of Cereal	*	*	*	*	*	*	*	*	*	*
How Many Places in the Box?	*	*	*	*	*	*	*	*	*	*
Fill 'n' Up!	*	*	*	*	*	*	*	*	*	*
Cereal by the Bowl	*	*	*	*	*	*	*	*	*	*
Money Matters	*	*	*	*	*	*	*	*	*	*
Edible Word Problems	*	*	*	*	*	*	*	*	*	*
Berry Likely	*	*	*	*	*	*	*	*	*	*
Why Are the Choco-Bits?	*	*	*	*	*	*	*	*	*	*
The New Cereal on the Block	*	*	*	*	*	*	*	*	*	*
Shapely Packaging	*	*	*	*	*	*	*	*	*	*




Cereal MATH




- Have pre-moistened towelettes or anti-bacterial hand cleanser for children to wash their hands before working with the cereal.
- Give children cereal to munch that is separate from the cereal used for the activity.
- Send a note home asking parents about possible food allergies. Have substitutes on hand for any allergic children.




Cereal MATH



- Ask parents to donate cereal to your classroom. Have tags prepared with cereal requests so that parents can simply pull off the tag and bring it to the grocery store.
- The cereals called for in each activity are only suggestions. Feel free to substitute generic-brand cereals or any other kinds of cereal that you think would work.
- Store cereal in airtight containers or cans or resealable plastic bags.



Cereal MATH




Literature Links


- Literature links recommend appealing children's books that provide natural connections to the mathematics concepts covered in each activity.
- These books can be used to introduce the activity or as a follow-up extension.

Cereal MATH


Cereal Day by Day




Sunday




Saturday




Monday




Tuesday



Wednesday






Thursday




Friday

Cereal MATH

A Scrumptious Sort



A Scrumptious Sort

Children practice classifying, sorting, and estimating fun-shaped, colorful cereal.

Materials

- 16 small cereal, multi-shaped cereal (such as Lucky Charms®)
- 8 small paper cups
- 8 pencils
- 8 Sorting Data Sheet (page 28, attached)
- 8 Sorting Data Sheet (page 22, attached)

Getting Ready

Divide each child into a group of 4-6 students.

What to Do

1. Give each child a different cereal. Have each child take the different shapes to make a data sheet. (If using Lucky Charms®, give each child a cup of cereal.)
2. Give children 5 minutes to sort each cereal into 6 different groups. Have children record their estimates on their Sorting Data Sheet.
3. Ask each child to sort their cereal on their Data Sheet and record the number of pieces in each group. Have them record the actual number of pieces in each container on the Sorting Data Sheet.
4. Provide an opportunity for children to discuss the number of shapes that have been in each category. Have children write or draw a few sentences describing their sorting. For example: "I sorted my cereal into 6 different groups. I estimated that I had 10 pieces of cereal in each group. I counted that I actually had 12 pieces of cereal in each group. I was off by 2 pieces."

Colorful Cereal Patterning

Children create a variety of patterns using colorful pieces of cereal.

Materials

- 16 small cereal, multi-shaped cereal (such as Trix®)
- 8 Sorting Data Sheet (page 28, attached)
- 8 small paper cups
- 8 index cards
- 8 glue
- 8 construction paper (cut into 3- by 12-inch rectangles)

Getting Ready


Divide each child into a group of 4-6 students.

What to Do

1. Give each child a different cereal. Have children sort their cereal to shape their own data sheet. Have children make a record of their sorting. Give each child a cup of cereal.
2. Ask children if they know what a pattern is. Explain that a pattern is a set of objects or shapes that repeat. Give examples of patterns, such as red, blue, red, blue, and blue, red, blue, red, blue.
3. Ask the children to describe a pattern that could be made with the cereal shapes. Have children create a pattern that uses the cereal shapes. Have children record their estimates of the number of pieces in each group. Have them record the actual number of pieces in each container on the Sorting Data Sheet.
4. Have children glue their cereal patterns onto construction paper. Have them record their estimates on the Sorting Data Sheet.
5. Have children create a pattern by using the cereal shapes to make a pattern using their symbols. Explain to children that a pattern is a set of objects or shapes that repeat. Give examples of patterns, such as red, blue, red, blue, and blue, red, blue, red, blue.

Colorful Cereal Patterns

- Have children sort the Trix cereal.
- Explain how children can make a repeating pattern using the Trix cereal.
- Have children glue their cereal pattern on index cards.
- Play a matching game by matching the cereal patterns to the symbolic notation of the pattern. (ABAB...)











Kindergarten students sort and create graphs using Fruit Loops.



Sorting Data Sheet







Name _____ Date _____

		
estimate _____ actual _____	estimate _____ actual _____	estimate _____ actual _____
		
estimate _____ actual _____	estimate _____ actual _____	estimate _____ actual _____
		
estimate _____ actual _____	estimate _____ actual _____	

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Sorting Data Sheet

Name _____ Date _____

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Cereal MATH

Cereal Abacus

Cereal Abacus

d's"

Cereal Abacus

Children practice counting, adding, and subtracting using an abacus to make cereal abacus. Children learn that 1 number through hands-on experience.

Materials

- 10 cereal cereal (such as Apple Jacks®) in plain containers (one per child)
- 10 small paper cups (one per child)
- 10 pencils

Getting Ready

Place two small holes in the bottom of each paper cup. (The holes should be able to allow cereal to pass.) (Use each child's container in a pair.)

What to Do

1. Push one end of the pipe cleaner through one of the holes, so that it extends on the bottom of the cup.
2. Bend the cup upside down and place two pieces of the cereal on the pipe cleaner.
3. Carefully bend the pipe cleaner in half and push the other end of the pipe cleaner through the other hole so that it comes out from the top.

Cheerios

Kindergarten students making an abacus.

Cereal MATH

A, B, C and 1, 2, 3

Cereal Stats

Cereal Stats

Kindergarten students making an abacus.

Cereal Stats Chart

red									
blue									
yellow									
green									
		1	2	3	4	5	6		

Number of pieces

Favorite Cereal Graph

7								Casey
6								Dan Matt
5								Nehal Lasha Dawn
4								Lizette Jordan
3								Megan Freash Andrea Seth
2								Amey MChae Mary Scott Brad Monica
1								Soan Sora Tom Lindsay Will Max Emily

Number of Children

Cereal Brands

Our Favorite Cereal

Cereal	Tally	Total
Corn Puffs		3
Corn flakes		2
Raisin Bran		1
Froot Loops	###	5
Rice Krispies		2
Cheerios	###	7
Alpha-Bits	###	6


A, B, C and 1, 2, 3 Graph

12									
11									
10									
9									
8									
7									
6									
5									
4									
3									
2									
1									


Number of Letters

A B C D E F G H I J K L M










Cereal MATH




Fill 'Er Up!










Measure by Measure



Cereal MATH



Edible Word Problems






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Kindergarten students use their abacus to solve addition and subtraction problems.







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Edible Word Problems

1st graders use Applejacks to make number sentences to show how many apples are in the trees.





Cereal MATH



Who Ate the Choco-Bits?

Clues:

1. Jim and Terace did not eat the Fruity Pops.
2. Amy and Terace did not eat the Granny Bran.
3. Ramon did not eat the Crunchy Munchies.
4. Terace and Ramon did not eat the Choco-Bits.
5. Ramon did not eat the Grainy Bran.
6. _____ ate the Choco Bits.

	Choco-Bits	Fruity Pops	Grainy Bran	Crunchy Munchies
Jim				
Terace				
Ramon				
Amy				



Cereal MATH



Web-sites

- <http://www.kelloggs.com/products>
- http://www.kraftfoods.com/postcereals/post_index.html
- <http://www.generalmills.com/corporate/index.aspx>