



Math Solutions®

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Financial Literacy

Starting Early with Young Children

Jane Crawford

NCTM 2011 Presentation

Before now . . .

- Traditionally economics has been taught at high school and college—not in the lower grades, and certainly not in Pre-K through second grade.

Now . . .

The Great Recession

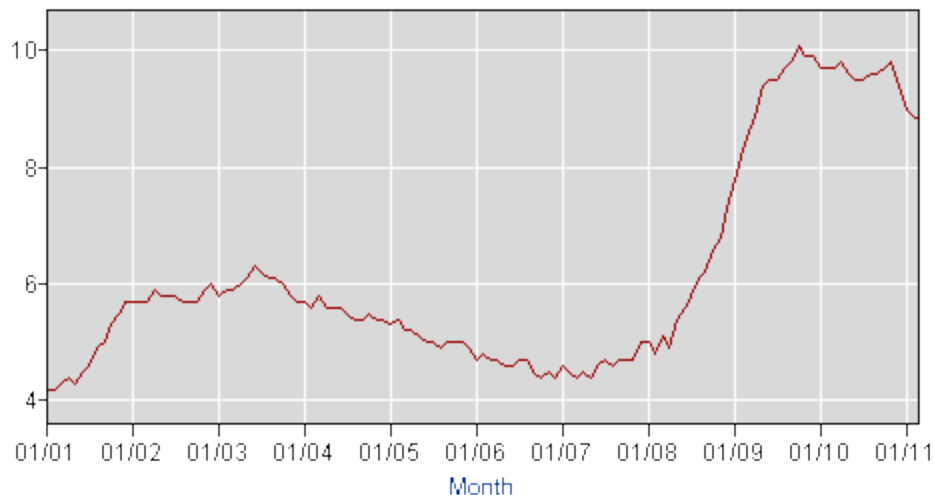
A severe ongoing global economic recession began in December 2007 in the United States.

It affected the world economy.

Economists believe it was over at the end of 2009, but . . .

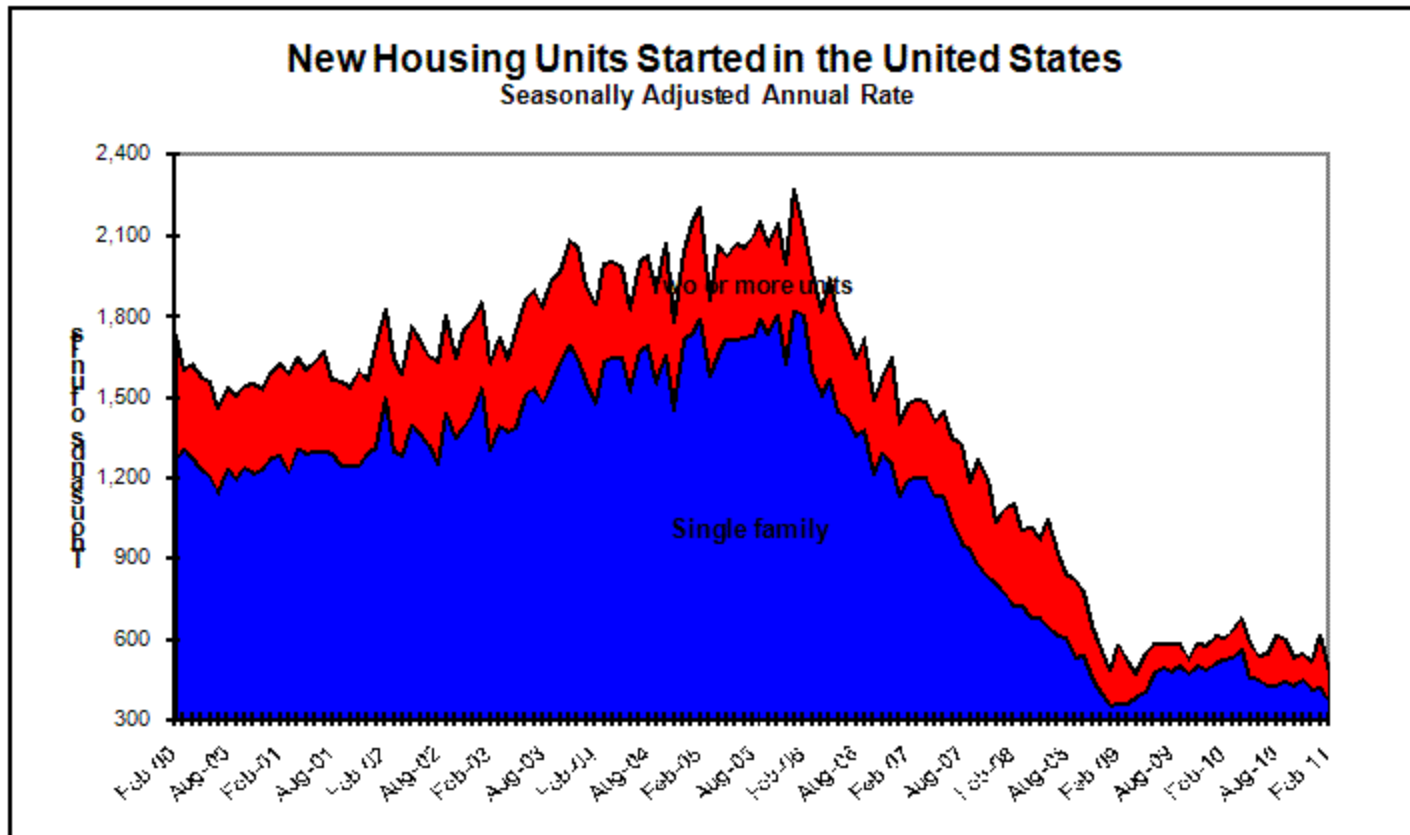
Unemployment Rate Chart

Bureau of Labor Statistics Unemployment Rate charted from January 2001–January 2011:



New Housing Starts 2000 to 2011

(U.S. Census Bureau Chart)



Why economic education for our young children?

- 2002: The U.S. Treasury established its Office of Financial Education.
- 2003: Congress established the Financial Literacy and Education Commission.
- 2006: That Commission published its National Strategy on Financial Literacy.

The President's Council on Financial Literacy

Definition of Financial Literacy:

“the ability to use knowledge and skills to manage financial resources effectively for a lifetime of financial well-being.”



COUNCIL FOR
**Economic
Education**

Teaching Opportunity

VOLUNTARY NATIONAL CONTENT STANDARDS IN ECONOMICS

2nd Edition



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Voluntary National Content Standards in Economics, 2nd Edition

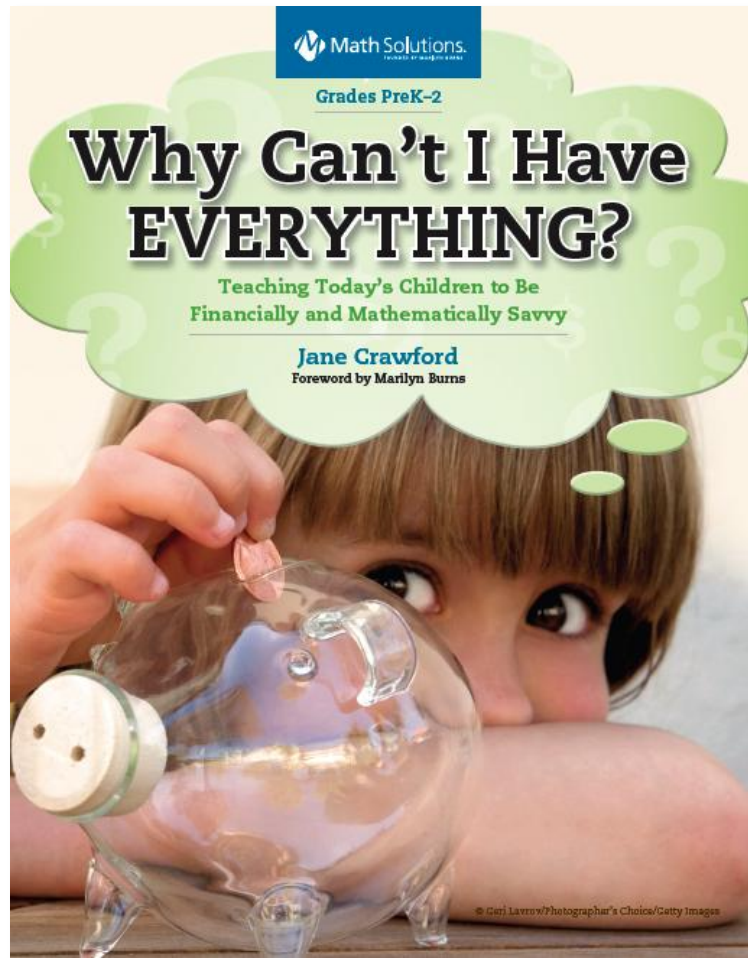
The *Voluntary National Content Standards in Economics* provide a tool for educators, specifying what students, kindergarten through grade 12, should learn about basic economics and the economy as they go through school, so that they will be better-informed workers, consumers and producers, savers and investors, and most important, citizens.

Page ix, Council for Economics Education

Voluntary National Content Standards in Economics, 2nd Edition

- www.councilforeconed.org/standards
- Benchmarked at grades 4, 8, and 12

Introducing . . .



The Chapters (Big Ideas)

1. What is Money?
2. Where Do We Get Our Money?
3. Do We Have Enough money?
4. Why Can't We Have Everything?
5. How Do We Earn Money?
6. Should We Spend, Save, or Share?
7. Where Do We Keep Our Money?

The Chapters (Big Ideas)

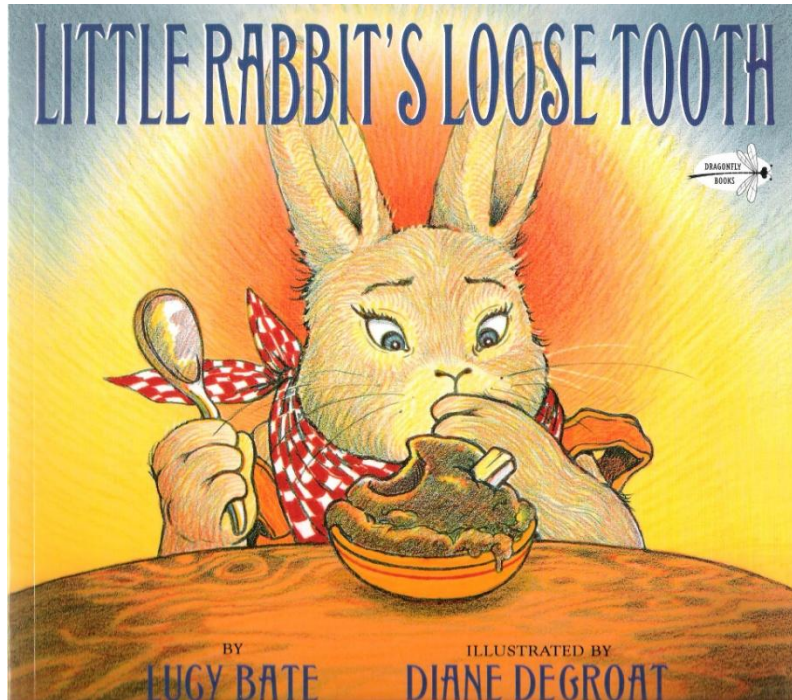
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- 2. Where Do We Get Our Money?**
3. Do We Have Enough money?
4. Why Can't We Have Everything?
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Where Do We Get our Money?

- Many young children get money from:
 - Gifts
 - Allowances
 - Tooth Fairies

Where Do We Get our Money?

Suggested Literature



Little Rabbit's Loose Tooth
by Lucy Bate

How much did the tooth fairy leave?

A graphing lesson

- Before the lesson:
 - Mark the place to stop in the book
 - Prepare a graph
 - Have post-it notes for student responses

Graphing Questions to Ask

- Which column has the most responses?
- Which column has the least responses?
- Are there more students who thought Little Rabbit would get one nickel or one dime?
- How many more?
- How many different answers do we have?
- What is the smallest amount that anyone guessed?
- What is the largest amount that someone guessed?



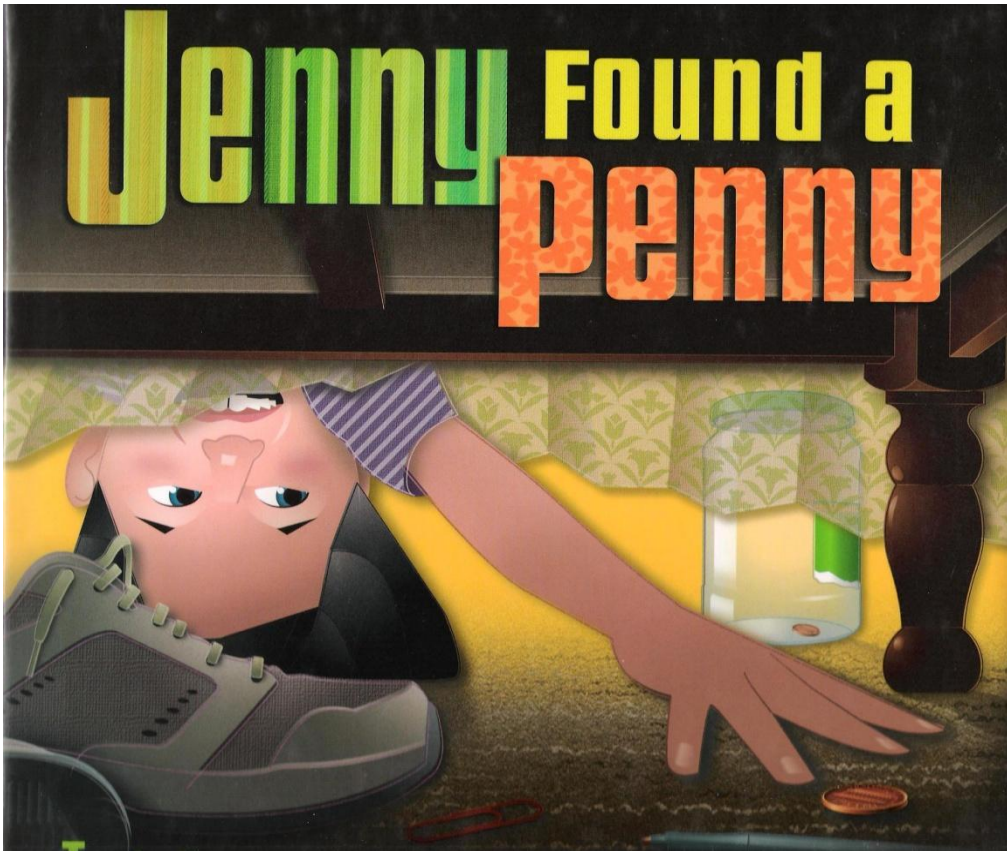
Student working on the graph.

The Chapters (Big Ideas)

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Do We Have Enough Money?

Suggested Literature



Jenny Found a Penny
by Trudy Harris

The Penny Hunt

- Before the lesson:
 - Hide the pennies
 - Make number cards
 - Have ten-frames available

The Penny Hunt

- Ask students to:
 - Draw a card
 - Search for that number of pennies
 - Put pennies on a ten-frame
 - Record the ten-frame arrangement
 - Write an equation



Student working on his ten-frame.

Penny Hunt – Student Work

Name: DAVID ANZIMMO

Ten-Frame

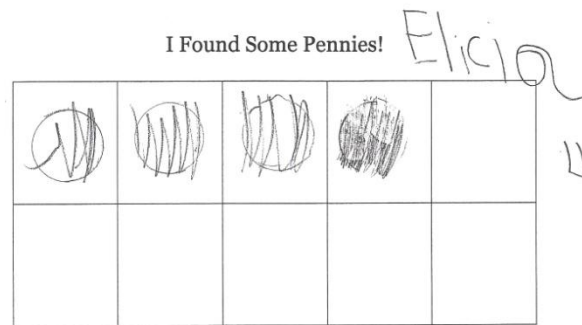
Reproducible 3-3

0	0	0	0	0
0	0	0		

My Equation:

$$5 + 3 = 8$$

Penny Hunt – Student Work



Connections to Common Core Standards for Mathematics

Penny Hunt Lesson

- Counting and Cardinality K.CC.1.2.4.a.b.c.5
 - Know number names and the count sequence
 - Count to tell the number of objects
- Operations and Algebraic Thinking 1.OA.7
 - Work with addition and subtraction equations

The Chapters (Big Ideas)

1. What is Money?
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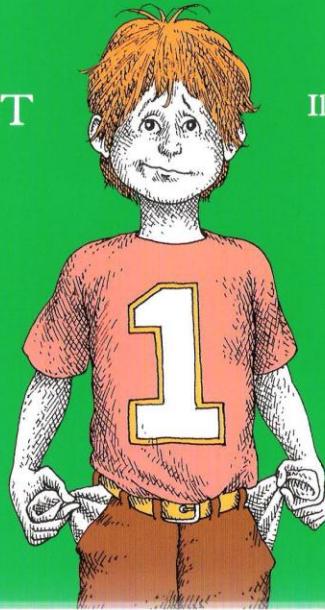
Why Can't We Have Everything?

Suggested Literature

Alexander, Who Used to Be Rich Last Sunday

JUDITH VIORST

Illustrated by RAY CRUZ



*Alexander, Who
Used to Be Rich
Last Sunday*
By Judith Viorst

Economics Goals

Alexander, Who Used to Be Rich Last Sunday

Students will show:

Understanding of the Concept of Wants and Needs by:

- explaining that individuals and families cannot have everything they want
- identifying examples of wanting more than we have
- explaining why wanting more than we have requires people to make choices

Why Can't We Have Everything?

- Before the lesson prepare 1 bag of coins (7 dimes, 4 nickels, 10 pennies) for each child or each pair of children.
- Read the story.
- Hand out the coins and a copy of the grid.
- Reread, asking students to remove coins throughout the story. Always ask: “How much does he have now?”
- Ask students to write to Alexander.

Student Work

Reproducible 4-3a

Alexander's Money

Recording Sheet							
Name <u>Jaylin M.</u>							
Place all your coins on the graph. Count the coins and record:							
Alexander had <u>7</u> dimes, worth <u>70</u> cents.							
Alexander had <u>4</u> nickels, worth <u>20</u> cents.							
Alexander had <u>10</u> pennies, worth <u>10</u> cents.							
How much were Alexander's coins worth altogether? <u>\$1.00</u>							
Dimes							
Nickels							
Pennies							

Listen to Alexander's story. As he spends his money, remove it from your graph.

Student Work

Reproducible 4-3b

A Letter to Alexander

Name

Joshua

Dear Alexander,

Next time put your money in a bank.

So you can add up your money.

And the next time you need the money

go get it from the bank.

From Joshua

Student Work

Reproducible 4-3b

A Letter to Alexander

Name Maureen

Dear Alexander,

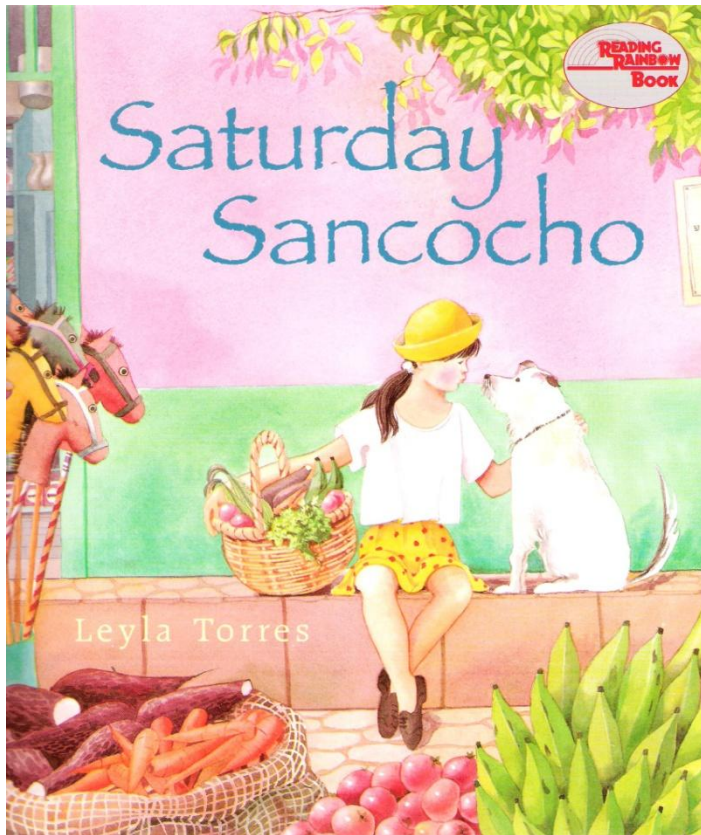
My advice is to be good^{and} to get two dollars and put one dollar in the bank and ~~spend~~ ^{save} one dollar. I am doing this and it's why I want you to do it too. Your welcome for the advice.

P.S. Don't say bad words and don't kick your brothers.

From, Maureen

Why Can't We Have Everything?

Suggested Literature



Saturday Sancocho
By Leyla Torres

Economics Goals

What will we find in the store today?

Students will show:

Understanding of the concept of goods and services by:

- Explaining the difference in purchasing and bartering for goods and services

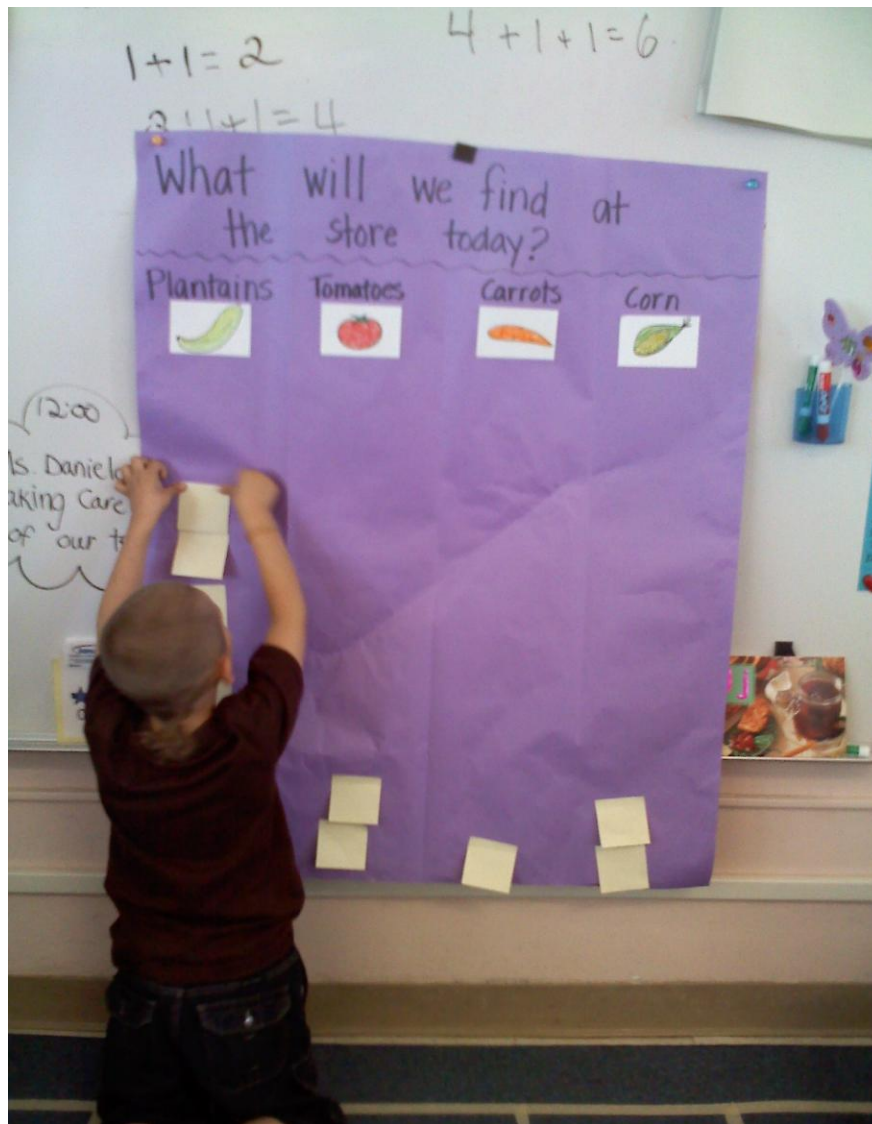
Understanding of the concept of wants and needs by:

- Explaining why wanting more than we have requires people to make choices

What will we find in the store today?

A counting and graphing lesson

- Materials:
 - Graph
 - Post-it notes
 - Sock with 5 snap cubes:
 - Green
 - Red
 - Orange
 - Yellow
 - White



Student working on the graph.

What will we find in the story today?

Small group and independent exploration

- Students take turns drawing one cube from the sock.
- Students mark their graph:
 - Green – Plantain
 - Red – Tomato
 - Orange – Carrot
 - Yellow – Corn
 - White – cue to begin to chant and count
- When a white cube is drawn, students say: “What will we find in the store today?” Then say the number of each item on their graph.



Students working on their graphs.

Student Work

$$1 + 1 + 3 = 5$$

Serena

What will we find in the store today?

Plantains					
Tomatoes					
Carrots					
Corn					

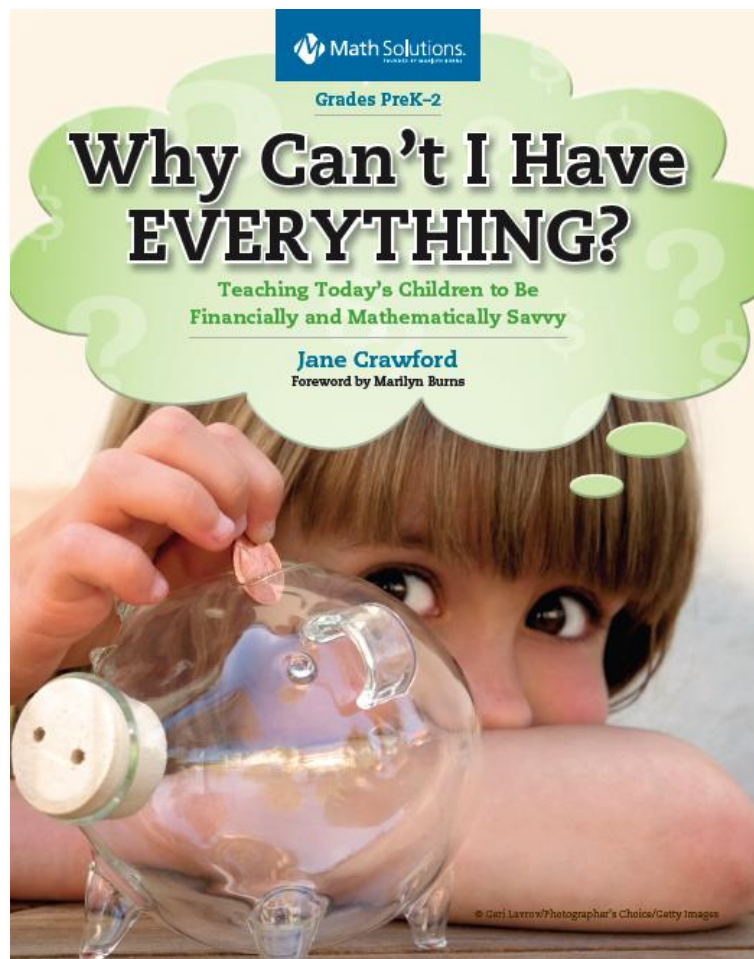
Carrots & the MoS

Connections to Common Core Standards for Mathematics

Saturday Sancocho

- Counting and Cardinality K.CC.4.a.b.c.5
 - Count to tell the number of objects
- Operations and Algebraic Thinking 1.OA.5.6
 - Add and subtract within 20
- Measurement and Data 1.MD.4
 - Represent and interpret data
- Measurement and Data 2.MD.10
 - Represent and interpret data

For More Lessons and Ideas . . .



*Why Can't I Have Everything?
Teaching Today's Children to
Be Financially and
Mathematically Savvy*
By Jane Crawford

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