

## Tips for Helping at Home

- Questions to ask:

What is it that you don't understand (have the student be specific)?

What about putting things in order?

Can you guess and check?

Does this make sense?

- Look for things in your everyday life that you can count with your child. How many kittens are in the picture? Could you put ten crackers on this plate?

- Keep in mind that children this age vary widely in what size quantities they are comfortable counting—between 10 and 15 may be about right.



- Look for chances to compare amounts: Are there the same number of forks and spoons on the table? Are there more kittens or more puppies in this picture?

## Mathematical Emphasis

### **Investigation 1—Counting and Measuring**

- Counting up to about 20 objects
- Representing quantities with pictures, numbers and words
- Repeating a non-standard measure

### **Investigation 2—Six Tiles**

- Becoming familiar with combinations of six
- Recording strategies for counting six things grouped in different ways
- Determining the larger of two amounts, up to about 20

### **Investigation 3—Story Problems**

- Making sense of stories that involve combining and separating
- Developing strategies for solving story problems
- Finding the total of two quantities up to about 6 (with totals up to about 12)

### **Investigation 4—Blue and Red Crayons**

- Finding combinations of 5, 6, and other numbers
- Using pictures, numbers and words to record solutions to a problem
- Finding the total of two or more single-digit numbers

## Websites

<http://cms.everett.k12.wa.us/math/Kinder>

### **Color Counting**

<http://www.little-g.com/shockwave/colorcount.html>

Count Us In Game 3

<http://www.abc.net.au/countusin/games/game3.htm>



## **Kindergarten**

# **How Many In All?**

## Counting and the Number System



**Everett Public Schools**

## Vocabulary

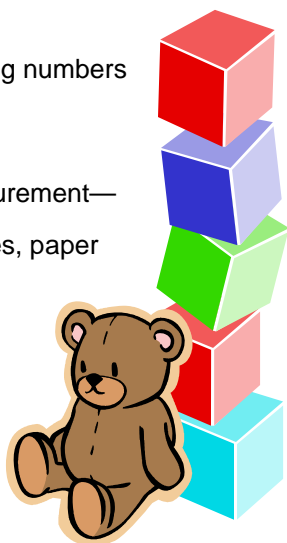
Comparing—determining which is more or greater, how much more

Number combinations—identifying numbers that combine to make another number, for example:  $2 + 3 = 5$  and  $1 + 4 = 5$

Combining—putting two or more numbers together

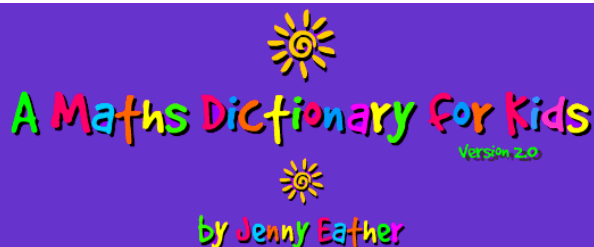
## Separating—breaking numbers apart

Non-standard measurement—  
measuring with cubes, paper  
clips, etc.



## Glossary

<http://www.amathsdictionaryforkids.com/>



## Counting is More Than 1, 2, 3

Counting is the basis for understanding our number system and for almost all the number work in the primary grades. It involves more than just knowing the number names, sequence, and how to write each numeral. Counting is actually quite complex and involves interplay between the following concepts.

**Rote Counting:** knowing number names and sequence

**One-to-One Correspondence:** counting accurately means a student must know that one number name stands for one object that is counted.

**Keeping Track:** another part of counting accurately is being able to keep track of what has been counted and what still remains to be counted.

**Connecting Numbers to Quantities:** using numbers to describe the quantity of objects counted.

**Conservation:** understanding that three is always three, whether it's three objects pushed or linked together, objects spread apart in a line, or some other formation.

**Counting by Groups:** counting a set of objects by equal groups.

Kliman, M. Investigations in Number, Data, and Space: How Many in All? Dale Seymour Publications, 1998.

## Game

## Counters in a Cup

Materials: Cup and counters (6—10)

Players: 2

Object: Determine how many of the counters have been hidden.

One player secretly hides some of a set of counters in an overturned cup. The other partner uses the remaining counters to determine how many have been hidden.

TOTAL NUMBER:

[illegible]