



KINDERGARTEN MATHEMATICS – Unit 1

Dear Parents,

During Unit 1, your children will use numbers to 10, including written numerals, to represent quantities and to solve quantitative problems, such as counting objects in a set; counting out a given number of objects; comparing sets or numerals; and modeling simple joining and separating situations with sets of objects, or eventually with equations such as $5 + 2 = 7$ and $7 - 2 = 5$.

INTRODUCING THE NUMBERS 0-10

Your child needs to:

- Count to 100 by ones and tens
- Count forward from a number other than 1
- Write the numbers 0-10 and represent an amount of object with a written numeral
- Count up to 10 objects one at a time, giving each object a number name
- Understand that the last number said names the total amount for a group of objects
- Understand that each successive number name refers to a quantity that is one larger
- Count to answer “how many?” questions about as many as 10 things arranged in a line, a rectangular array, or a circle, or a scattered configuration
- Count out a set of up to 10 objects
- Identify whether the number of objects in a one group is greater than, less than, or equal to the number of objects in another group
- Compare two numbers between 1 and 10 presented as written numerals
- Represent and solve addition and subtraction word problems and add and subtract within 10 (e.g. using objects or drawings to represent the problem).
- Separate a number into two parts and understand that there is a relationship between the parts and the whole for numbers 0-10 and record with a drawing or equation and understand that the values on each side of the equal sign are the same
- For any number from one to nine find the number that makes ten when added to the given number
- Begins to work towards goal of fluently adding and subtracting within 5 by applying knowledge of decomposition.

WAYS PARENTS CAN HELP

- Practice counting forward with your child to 100
- Practice counting forward starting with a number other than 1
- Practice putting number cards in order
- Count things around the house (steps, toys, food items...)
- Use a die to see if your child can name the number without counting the dots
- Practice writing the numbers up to 10
- Build sets representing a number 0-10 together using things around the house
- Practice adding and subtracting things around the house (i.e. 3 red grapes and 3 green grapes - how many grapes in all or start with 6 grapes eat two - how many are left)

KEY WORDS AND PHRASES

Add/Addition	Most
As many as	Number path
Compare	One less
Equal	One more
Fewer than	Part-part-whole
Five frame	Plus
Greater than	Put together
Join	Same
Least	Separate
Less/Less than	Subtract
More	Subtraction
More than	Take apart
	Ten frame

BACKGROUND INFORMATION AND EXAMPLES FOR PARENTS

Ten frames:

<http://video.carrollk12.org/view/YINGERSUBITIZE>

<http://video.carrollk12.org/view/ROTHSCHILDUSINGTENFRAMES>

Decomposing:

<http://video.carrollk12.org/view/KNIGHTDECOMPOSING>

Problem Solving:

<http://video.carrollk12.org/view/GROFTPROBLEMSOLVING>

Addition and Subtraction:

<http://video.carrollk12.org/view/ROTHSCHILDSOLVINGADDPROBLEMS>

<http://video.carrollk12.org/view/ROTHSCHILDSOLVINGSUBTPROBLEMS>