# Parental Reference Guide Kindergarten 

A mathematics guide for parents
[Including website resources]

2013-2014

## Parental Reference Guide:

## Kindergarten Mathematics

Educators throughout the country are working to improve teaching and learning to ensure that all students master skills they need to be successful. In mathematics, three significant changes will be reflected in this shift:

- Teachers will concentrate on teaching a more focused set of major math concepts and skills.
- Students will have time to master concepts and skills in a more organized way, building deeper-level understanding from one grade to the next.
- Teachers will use rich and challenging math content and will engage students in problem solving that reflects the real world.


## Kindergarten Mathematics

## *Please see Vocabulary Guide as appropriate

Kindergarten mathematics will primarily focus on two areas:

- Learning numbers and what they represent.
- Learning addition and subtraction.

Within these two areas students will engage in:

- Counting objects and numbers.
- Comparing numbers.
- Putting together objects and numbers (addition).
- Taking away objects and numbers (subtraction).
- Building/breaking down numbers less than or equal to 10.
- Representing word problems using objects and pictures.
- Solving word problems adding up to, or subtracting from " 10 ".


## Examples of skills and strategies kindergarten students will develop:

- Students use images and manipulatives to solve word problems using numbers through 10:

| Addition | Two red apples and four green apples are on the table. |
| :---: | :--- |
| $\mathbf{+}$ | How many apples are on the table? |

$$
\begin{array}{cl}
\text { Subtraction } & \text { Mom has ten apples. She gives two away. } \\
- & \text { How many apples are left? }
\end{array}
$$

Your child will use pictures and models to understand addition and
subtraction problems.


- Students will find "partners" that make ten for any number (For example: $6+4,7+3$, etc.)

The following shows if you have 8, 2 more are needed to make 10.

|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |

$$
8+2=10
$$

- Students will learn to think of 10 as a unit, breaking teen numbers into ten and left over ones.
o Example: 14 can be broken down to $10+4$.
14


Students learn to think of ten as a unit and to break all teen numbers down to a ten and leftover ones.


10


4

Parents are an important part of a child's education. Examples of mathematics activities you can engage in with your kindergarten child outside of school:

- Invite your child to count and group everyday objects.
- Encourage your child to construct the number 10 in multiple ways ( $5+5,6$ $+4)$.
- Invite your child to create addition and subtraction story problems.
- Encourage your child to stick with a challenging problem, allowing your child to see that everyone can learn math.
- Praise your child's effort.


## Mathematics Reference Websites

## http://www.engageny.org/parent-and-family-resources

## http://www.corestandards.org/math/practice

http://www.ixl.com/math/ http://illuminations.nctm.org/Activity.aspx?id=3565 http://illuminations.nctm.org/Search.aspx?view=search\& type=ac\&gr=Pre-K-2

## http://www.sheppardsoftware.com/

http://www.mathplayground.com/common core state standards for mathematics.html
*These guides were created with the help of many resources available on EngageNY.org including, but not limited to Parent Roadmaps to Common Core Standards from the Council of the Great City Schools.

