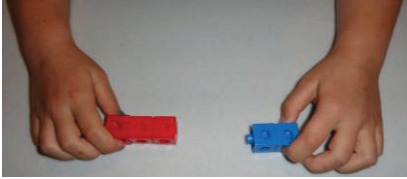## Solving problems

Children will solve simple word problems. In this example, the child used red and blue cubes to understand and solve the problem.
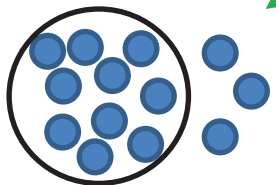
There are some children in a group. Three (3) of the students are girls and two (2) are boys. How many children are in the group?

Working with the Teens Numbers 11 - 19

Numbers from 11 to 19 should be seen as a group of ten ones and some more ones. Kindergarteners record this by a drawing or equation.
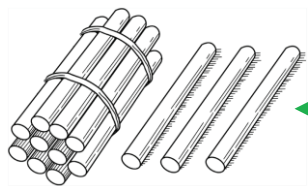
A group of ten ones and three more ones

$$13$$
$$10 + 3$$

Geometry

Along with counting, geometry is another focal area for kindergarten students. They will work with both plane and solid figures as well as learn to identify and describe shapes such as squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres in their environment. They will be able to recognize these shapes regardless of orientation or size.
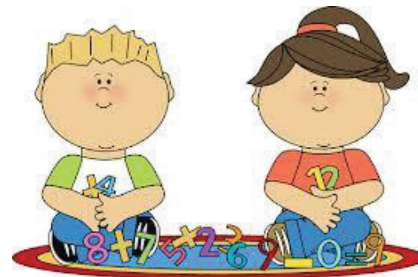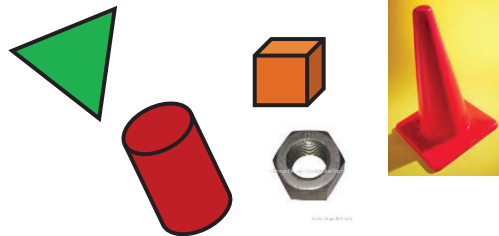
Kindergarten students should see addition and subtraction equations, and student writing of equations in kindergarten is encouraged, but it is not required.
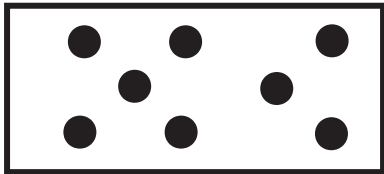
PARENT ROADMAP

Kindergarten

Key Concepts:
**Counting strategies
Geometry**

2013-2014

Math

Early Counting Strategies

Dot Cards

The goal for students is to be able to count all, count on or rearrange the dots in order to add. In this example, a child may start with seeing five dots and count on three more dots to see a total of eight dots. It is also possible to see two groups of three dots to make six dots and then add two more dots to get eight dots.
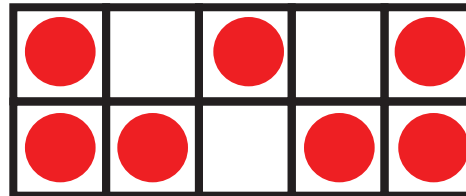
Math Hands

Making 7

and **OR** and
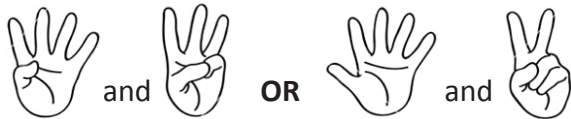
Kindergarteners build numbers using their fingers. They show different combinations or ways to make a number. In this example, the student made 7 with 4 fingers and 3 fingers as well as with 5 fingers and 2 fingers.

Five-Frames

Ten-Frames

The goal for Kindergarteners is to be able to recognize dot arrangements in varying patterns on five- and ten-frames. The use of five- and ten-frames fosters instant recognition of sets of objects (*subitization*), fluency and computation with addition and subtraction. In the above example, the student may see three dots on the top row and four dots on the bottom row to recognize seven dots. They may also see seven as two groups of three dots and one more dot.
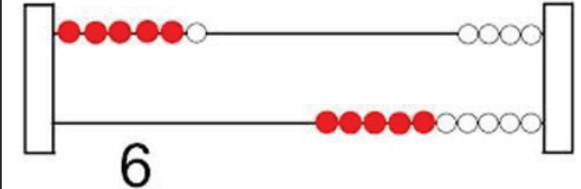
Rekenreks
(Beads used for counting)
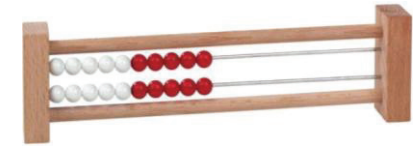
The goal for students is to be able to quickly recognize the quantity of beads using their understanding of 5.

The use of rekenreks fosters subitization, fluency, and computation with addition and subtraction.

6

In the above example, the child should see the number 6 as 5 red beads and 1 white bead.

Counting On

When adding 3 + 5, children are encouraged to start with the largest number and count on as this is more efficient than counting all. A child can do this in many ways – counters, buttons, a number line, etc.

I started at 5 and added 3 more

+1 +1 +1

5 6 7 8