

# What Will my Kindergartener Learn During Math?



In kindergarten, learners spend a large amount of their math time learning about the following three critical areas:

1. Representing and comparing whole numbers, initially with sets of objects.

- Learners use numbers, 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.
- Learners choose, combine, and apply effective strategies for answering quantitative questions, including quickly recognizing the cardinalities of small sets of objects, counting and producing sets of given sizes.
- Learners understand “teen” numbers are ten ones and some more ones.

2. Understanding addition as putting together and adding to, and subtraction as taking apart and taking from.

- Learners begin to model simple joining and separating situations with sets of objects, or eventually with equations such as  $5 + 2 = 7$  and  $7 - 2 = 5$ . (Kindergarten learners should see addition and subtraction equations, and learners writing equations in kindergarten is encouraged, but it is not required.).
- Learners apply effective strategies for counting the number of objects in combined sets, or counting the number of objects that remain in a set after some are taken away but are not expected to work above 10.

3. Describing shapes and space.

- Learners describe their physical world using geometric ideas (e.g., shape, orientation, spatial relations) and vocabulary.
- Learners identify, name, and describe basic two-dimensional shapes, such as squares, triangles, circles, rectangles, and hexagons, presented in a variety of ways (e.g., with different sizes and orientations), as well as three-dimensional shapes such as cubes, cones, cylinders, and spheres.
- Learners use basic shapes and spatial reasoning to model objects in their environment and to construct more complex shapes.