



# GETTING READY FOR 1ST GRADE MATHEMATICS

Have your child count items up to 120 (or more!). If they seem to have that down, ask them to skip count (counting by fives or tens) to count larger groups of items quickly. Use any item such as blocks, pasta pieces, toothpicks or buttons.

**Working on:** Knowing the number names in order (one, two, three...up to 100 at least), learning to keep track and organize items when counting (putting things in groups of 10, then counting the groups), understanding that when you count you only count each item one time.

Have your child tell you a number story for a given addition or subtraction number model, such as  $3 + 5 = 8$ . For example, "I had 3 dogs. Then I got 5 more dogs. Now I have 8 dogs." Wow! That is lot of dogs!

**Working on:** Understanding that every number represents something (dogs) and reasoning about what is happening when they add or subtract. Ask your child if the story they made up makes sense or is it silly? If the story is silly or unrealistic, can they think of something more practical? Eight dogs may make sense for a ranch but not for other situations. Maybe they are small dogs; what if they were large dogs?

Select a number less than 10. Have your child name the other number needed to make a sum of 10. For example, if you say 7, your child should say 3. Use your fingers to help your child practice. For example, show both hands with only 2 fingers up and the rest closed. Your child should tell you that you have 2 fingers up and 8 fingers down to make a total of 10. Continue with different finger combinations. You can also practice doubles facts this way by placing a number of fingers up, and asking your child to tell you the double for that number of fingers.

**Working on:** Knowing all the ways to make 10 and beginning to work on addition strategies that will be extended in 1st grade.

Gather symmetrical objects (mirror, piece of paper, circle, etc.). Ask your child to show you one half of the object, perhaps by using string to mark the halfway point or by folding a paper circle. Use this opportunity to explain how parts are equal in size. Extend this by discussing one whole and one quarter too.

**Working on:** Dividing a simple shape (rectangle, square, circle) from a whole into two equal halves or four equal-sized quarters or fourths. Note: Some children may make quarters that are equal in area (size) but have a different shape. This is great if they come up with it on their own!

Help your child to engage in real life problem solving at home. Ask: "We need six oranges to make juice, and we have only two. How many more do we need to buy?" or "Two friends are coming to eat lunch with us. How many plates will we need? How many utensils?"

**Working on:** Solving basic addition and subtraction using problems that naturally arise at home. Students may use any strategy to solve, including counting, counting on from one number, counting back, drawing a picture, writing a number model ( $6 - 2 = ?$  or  $2 + ? = 6$  from the orange juice problem above).

Ask your child to look for two-dimensional shapes, such as circles, squares, triangles, rectangles, and hexagons on objects at home or outside. For example, help your child find a variety of street signs and name the shapes on them. For an extra challenge, help your child to find three-dimensional shapes (cubes, cones, cylinders, and spheres) too!

**Working on:** Recognizing and naming geometric shapes. Look for different types of triangles and rectangles. Remember that a square is a rectangle too and that some triangles are long and skinny, yet others have all sides the same length. There are so many different ones!

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Discuss examples of numbers in everyday life: road signs, recipe measurements, time, TV listings and so on. Count aloud together by 5s and 10s when doing chores or riding in a car or bus. Occasionally count down, for example: 90, 80, 70, 60, and so on. Count numbers of objects around the house or while shopping. For example, count the number of items in a cabinet. Have your child keep track by using tally marks (4 lines down and one line across to show 5). Cut out numbers from a grocery ad that tell the prices of different foods. Have your child tell which numbers are the highest and the lowest, and have them order the numbers from smallest to largest.

**Working on:** Using and recognizing numbers in many situations to understand that they can represent so many different things.

Have your child count by 10s to count all of the fingers in your family. Check the answer together by counting by 1s. Help your child write the number of fingers. Next, can your child guess how many toes are in your family? Check by counting.

**Working on:** Counting and writing numbers. Practice writing numbers to 20. If your child is able to write the numbers to 20, see if they can write the numbers to 120. This is a goal during the 1st grade year!

Go on a Three-Dimensional Shape Hunt. Help your child look for 3-D objects: cubes (such as dice), cones, spheres (such as balls), prisms (such as boxes), pyramids, and cylinders (similar to soda cans). Talk about how a soda can or a paper towel roll is *like* a cylinder. Play I Spy with your child by asking them to guess an object you identify by its shape: “I spy something that is round” or “I spy something that has a cylinder shape.” Make this game more challenging by stating two shapes: “I spy something that is round like a *sphere* and has a *hexagon* on it” (a soccer ball).

**Working on:** Recognizing 3-D shapes in our world. Tell why a paper towel roll looks like a cylinder but isn’t an actual cylinder. Cylinders are solid with no holes or rim.

Help your child build shapes and structures with toothpicks and marshmallows or gumdrops. Begin with flat 2-dimensional shapes, and then try building 3-dimensional shapes such as cubes, pyramids, and prisms. Discuss the number of sides and corners.

**Working on:** Making shape models and understanding words used to describe shapes. Children may construct a simple house using a square and a triangle. Have them name and describe each shape. Note: Children are building structures that look like 2-D and 3-D shapes. These are models of shapes, not the actual shapes themselves.

Adapted and Revised from the Ontario Ministry of Education’s *Doing Mathematics with Your Child* and CESME, The University of Chicago Parent Resources

## More resources on the web:

[Washoe County School District Family & Community Page](#)

[The Math Learning Center: Math at Home](#)

[Bedtime Math \(5 minutes of math at three different levels including “Wee Ones”\)](#)

[Problem Solving & Reasoning through Coding \(code.org\)](#)

[Helping Your Child Learn Math \(English\)](#) or [Helping Your Child Learn Math \(Spanish\)](#) Free Book!

[Online math tools & manipulatives](#)

