Moving Beyond Simply Counting Numbers to Understanding What They Represent

Supporting Kindergarten Math Learning at Home

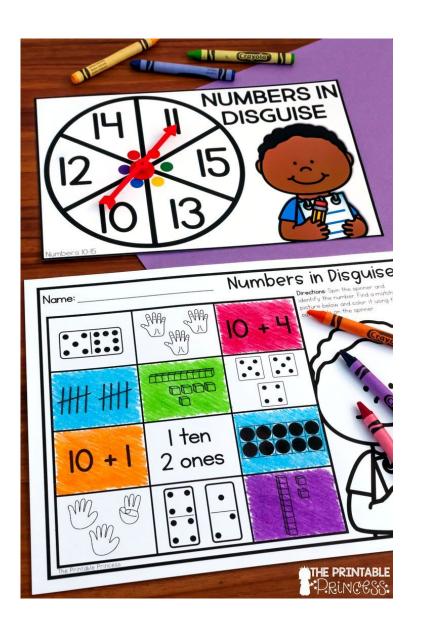
Parents are a child's first teacher, and research suggests that increased participation from parents enhances a child's ability to succeed.



Why is it important for your child to learn math?

In our everyday lives, understanding math enables us to:

- manage time and money, and handle everyday situations that involve numbers (for example, calculate how much time we need to get to work, how much food we need in order to feed our families, and how much money that food will cost);
- understand patterns in the world around us and make predictions based on patterns (for example, predict traffic patterns to decide on the best time to travel);
- solve problems and make sound decisions;
- explain how we solved a problem and why we made a particular decision;
- use technology (for example, calculators and computers) to help solve problems.



How will your child learn math?

Children learn math best through activities that encourage them to:

explore;

think about what they are exploring;

solve problems using information they have gathered themselves;

explain how they reached their solutions.

Get Ready for Math

- While kindergarten may have changed since you were a child, it still forms the foundation of your child's schooling.
- Math skills are important to a child's success both at school and in everyday life. Understanding math also builds confidence and opens the door to a range of career options.
- In math, students will learn the basics of how numbers work while exploring place value and the concepts of addition and subtraction.
- More advanced mathematical skills are based on an early math "foundation".

Key Math Skills for School

- Number Sense This is the ability to count accurately—first forward. A more complex skill related to number sense is the ability to see relationships between numbers—like adding and subtracting.
- Measurement Technically, this is finding the length, height, and weight of an object using units like inches, feet or pounds. Measurement of time (in minutes, for example) also falls under this skill area.

- Spatial Sense- It is introducing the ideas of shape, size, space, position, direction and movement. Later in school, children will call this "geometry."
- Estimation- This is the ability to make a good guess about the amount or size of something. This is very difficult for young children to do. You can help them by showing them the meaning of words like more, less, bigger, smaller, more than, less than.
- **Problem-solving** The ability to think through a problem, to recognize there is more than one path to the answer. It means using past knowledge and logical thinking skills to find an answer.

Five Math Skills Your Child Will Learn in Kindergarten

- Count to 100 At home: To support your child's counting skills, encourage your kindergartner to count as high as possible. This is a great task to give your child in the car or even at bedtime!
- 2. Answer "how many?" questions about groups of objects -At home: Ask children to tell you how many toys they are playing with and watch how they keep track of each object that is counted. If your kindergartner counts the same object twice or skips an object, encourage another try.

Five Math Skills Your Child Will Learn in Kindergarten

- Solve basic addition and subtraction problems At home: Present two groups of blocks (less than 10 in all) and have your child add the blocks together. As your child develops understanding, you can ask simple addition or subtraction problems without using the physical objects as a support.
- 4. Understand the numbers 11-19 as a ten plus some ones -At home: When counting blocks or lego bricks at home, make a group of ten. Then add on extra "ones" to make the numbers 11-19. You can even talk about place value when looking at written two-digit numbers.

Five Math Skills Your Child Will Learn in Kindergarten

• Name shapes - At home: Help your child by having them spot squares, cubes, spheres, rectangles, etc. Challenge your kindergartener to draw pictures using basic 2D shapes, then talk to you about the drawings. Making and continuing shape patterns is another fun way to help engage your kindergartner as they learn about shapes.

Tips for Everyday Activities to Support Math Learning

- Create a pattern with blocks, pegs, or beads and ask your child to copy or continue the pattern.
- As you prepare for a snack with playmates, ask your child, "How many crackers do we need so that you and your friends can each have two?"
- Talk about measurement words teaspoons, tablespoons, one cup, a half-cup – as you cook together.
- Play counting games in the car or as you walk down the street. "Let's count how many dogs we will see between home and school." "Lets count how many trucks we can see on the way to the store."
- Play board or card games together that involve counting, moving a certain number of spaces, or matching numbers.
- Start a growth chart of your child's height and weight that your child can check frequently, and discuss changes as he or she grows.

Tips to Support Kindergarten Math Learning Fun at Home

- Give your child plenty of opportunities to count
- Help your child recognize shapes and size relationships
- Find ways to collect and organize objects
- Help your child develop reasoning skills
- Make math a part of your child's day
- Be positive about math



Resources on the Website

- Tips to Support Kindergarten Math Skills
- Kindergarten Math Tips
- Math Tips for Parents
- PowerPoint for Session III