

Teaching and Learning

Family Roadmap to Math Success in Louisiana

Kindergarten Overview

In Kindergarten, students begin developing a solid foundation for the understanding of numbers and shapes. Students learn to count, write, and compare numbers up to 20. They also learn early addition and subtraction by using objects, pictures, and stories. Students investigate two- and three-dimensional shapes by identifying, describing, and comparing their attributes. They also work with measurement and data through activities that involve sorting, classifying, and comparing objects. Students build number sense and mathematical thinking through hands-on activities and problem-solving that contribute to their foundation of mathematics.

By the end of the grade, your child will be able to:

- Count to 100 by tens and ones.
- Read and write numbers 0-20.
- Count out 0-20 objects and count groups of objects up to 20.
- Count to answer “How many?”
- Subitize (i.e., instantly recognize without needing to count individually) groups of images or objects to recognize the quantity.
- Compare two numbers between 1 and 20 to identify which is greater or less.
- Fluently add and subtract within five.

How can families help at home?

- Count objects around the house together (for example, “How many pieces of mail are in the mailbox?”).
- Ask your child to show numbers with toys, blocks, or snacks (“Can you give me 9 goldfish?”).
- Play “Which is more?” by comparing groups of objects (for example, “Who has more balls? Who has blocks?”).
- While shopping, have your child count cans or fruits as you put them in the basket.
- Use coins to practice counting and sorting by size or value.
- Play simple addition and subtraction games with everyday items (for example, “We had 5 strawberries, you ate 2, how many are left?”).
- Look for shapes around the house or outside. Ask your child to name and describe them (“That’s a rectangle door — it has 4 straight sides!”).
- Read books about numbers or play board games that use counting.
- Use words like *longer/shorter*, *heavier/lighter*, *more/less* in everyday conversations.

Building reasoning and problem-solving through word problems

Working through word problems helps students develop both their mathematical vocabulary and their reasoning abilities. Word problems support critical thinking, improve problem-solving strategies, and help students apply math concepts to real-world situations. Here are example word problems that Kindergarten students might work on:

- Lila has 3 oranges. Her friend gives her 2 more. How many oranges does Lila have now?
- William sees 5 frogs at the pond. Two hopped away. How many frogs are left?
- Jill has 4 green cars and 3 red cars. How many cars does she have in all?
- Bella has 6 toy magnets. She shares them equally with her friend. How many magnets does each person get?
- Chris sees a rectangular television and a round mirror. How are the shapes the same? How are they different?
- Fred has 3 markers. His teacher gives him 1 more marker. How many markers does Fred have now?
- Ann has 5 cookies. She eats 1 cookie. How many cookies are left?
- Max has 6 blocks. Rick has 4 blocks. Who has more blocks? Who has fewer blocks? How many more blocks does Max have than Rick?

Family Engagement Tips

- Talk positively about math and encourage your child to maintain a growth mindset.
- Encourage your child to share/show you a different way to solve a math problem than you are familiar with and explain the reasoning for their approach.
- Celebrate mistakes as learning opportunities. Remind your child that making mistakes is part of learning and praise their efforts.
- Stay in touch with your child's teacher to learn what your child is learning and how to support it at home.
- Create a learning space for your child with supplies such as paper, pencils, rulers, calculators, and age-appropriate math manipulatives.

How does Kindergarten math build on Pre-Kindergarten math?

Kindergarten math builds on the early skills children develop in Pre-Kindergarten by helping them deepen their understanding of numbers, operations, and shapes. In Pre-Kindergarten, children learn through play, counting small groups of objects, noticing shapes and patterns, and using words like “more,” “less,” and “same.” These playful experiences set them up for the more structured learning they encounter in Kindergarten.

As they grow, Kindergarteners learn to count, read, and write numbers to 20 and beyond, strengthening their sense of what numbers mean and how they relate to one another. They begin exploring addition and subtraction with hands-on materials, pictures, and simple stories. Students also learn to identify, describe, and compare two- and three-dimensional shapes. During Kindergarten, they sort, classify, and measure objects by size, length, and other attributes, skills that build a strong foundation for future math learning.

Math Conversations

Communicate with your child about math using open-ended questions:

- How did you solve that problem?
- How do you know that your answer makes sense?
- How did you figure that out?
- What do you notice about these numbers/shapes?
- Which group has more? How do you know?
- What would happen if we added one more?

Online Resources

- [Family Math Resources](#)
- [Family Literacy Resources](#)
- [School System Parent and Family Engagement Resources](#)