OU ARE your child's first teacher. Learn how to support the goals of Oklahoma's academic standards and why they are important to your child. Please be in regular communication with your child's teachers and ask how vou can support math learning at home. When schools and families work together as partners, it helps your child achieve academic success!

# SIXTH GRADE

# What to expect:

In sixth grade, the mathematical skills and understanding your child is developing will be key foundations for success in high school math and college and career readiness. These include working with ratios and rates and with the building blocks for algebra, variables and variable expressions. This information is a snapshot of learning in mathematics for Grade 6. For a complete set of mathematics academic standards, <u>click</u> here or visit <u>sde.ok.gov/oklahoma-academic-standards</u>.

# By the end of the school year, your child will:

- Develop stronger skills in addition and subtraction of whole numbers and in multiplication and division of fractions, decimals and mixed numbers.
- Make connections between real-world and mathematical problems involving ratios (a comparison of two or more numbers that indicates their sizes in relation to each other), area (the amount of flat space a shape takes up), mean (average), median (middle number or midpoint), mode (number that occurs the most) and range (difference between the highest and lowest number).
- Represent real-world situations and word problems as expressions, equations and inequalities. (For example, "Clara ran 10 miles, which is twice as far as Nina ran. How far did Nina run?" can be represented by 2x = 10, with x being how far Nina ran.)
- Determine the likelihood or probability that events will occur. (For example, if you have 12 marbles in a bag and all 12 of them are green, it is certain in other words, there is a 100% chance you will pull a green marble from the bag.)

### What to do at home:

- Ask your child to look at the same item at the store in two different sizes and determine which size is a better buy for the money.
- Pick out four items for sale at a store and ask your child to calculate the mean (average) cost of the four items and how the mean changes if an item is removed.
- Show your child how fast you are driving and ask how long it will take to get home at that rate of speed if you are 20 miles away.
- Ask your child to calculate how much money they would save when given a sale with a percentage of savings. (For example, ask your child, "If the shirt is 20% off and originally cost \$40, how much will we pay?")



# FOR FAMILIES

# **Fostering Curiosity**

Children are naturally curious and motivated to learn about things that interest them. Since curiosity helps students be successful in the classroom, it is important to encourage it at home. Provide opportunities for your child to ask questions, be creative, discover answers and explore their world.

Support your child's curiosity with questions like these:

- Do you think there are fake numbers? Why or why not?
- What would happen if we didn't have the number zero?
- If you could give one gift to every child in the world, what gift would you give and why?

Your child will have plenty of questions. It's okay if you don't always have the answer. The best response is always, "Let's find out together."

### **Fostering Communication**

Build your child's vocabulary, thinking skills and curiosity by using new words and having conversations that include questions to make your child think. Communicating with others gives children a chance to see and understand that there can be more than one point of view about a given subject. Accepting these different ideas helps children learn how to get along with others, encouraging positive relationships with other children and a strong self-image.

Support your child's communication skills with questions like these:

- What goals can you set to help you understand math better?
- What is your favorite math concept and why?
- How can you make a positive difference for someone using math today?

# **Fostering Comprehension**

Comprehension in math can be thought of as making sense of a problem or real-world situation. Children often have difficulty seeing how math connects to the real world or struggle to be sure their answer makes sense. Help your child with math comprehension by asking if their solution actually answers the problem. Asking children, "Does your answer make sense to you?" helps them stop and think deeply about the solution.

### BEFORE YOU SOLVE

- What do you notice about this math problem?
- What does it make you wonder about?
- What do you need to know to tackle the problem?

#### WHILE YOU SOLVE

- How does this problem remind you of a problem you have already solved or something you already know?
- What resources can you use to understand ideas you aren't familiar with?

#### AFTER YOU SOLVE

- Could this have been solved a different way? Which way is more efficient?
- Where would we see this in the real world?
- Could you help solve it when we see it again?