7OU ARE your child's first teacher. Learn how to support the goals of Oklahoma's academic standards and why they are important to vour 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!

FIFTH GRADE

What to expect:

In fifth grade, students will practice more complex math with fractions, decimals and larger numbers using the four basic operations: addition, subtraction, multiplication and division. Fifth-grade math also emphasizes real-world situations to help students strengthen their skills and solve problems that occur in their daily lives. This information is a snapshot of learning in mathematics for Grade 5. For a complete set of mathematics academic standards, click here or visit sde.ok.gov/oklahoma-academic-standards.

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

- Divide multi-digit numbers with remainders. (For example, 432 divided by 11 can be expressed as 39 3/11.)
- Add and subtract decimals and fractions with like and unlike denominators. (For example, 1/8 + 1/4 can be calculated as 1/8 + 2/8 = 3/8.)
- Describe and find the volume of three-dimensional shapes. (For example, a cube with dimensions of 4 inches wide by 3 inches deep and 4 inches tall would have a volume of 48 inches because $4 \times 3 \times 4 = 48$.)
- Construct and analyze double-bar and line graphs and use ordered pairs like x,y where x represents horizontal distance and y represents vertical distance on coordinate grids.
- Find the mean (average), median (midpoint or middle number), mode (number that occurs the most) and range (difference between the highest and lowest number) from a set of numbers.

What to do at home:

- Cook with children using recipes that include fractions, then ask them to double or triple the recipe ingredients.
- Pour the same liquid into containers of different sizes and discuss what your child observes and how to measure the volumes.
- Ask your child to keep track of how many times people do something (leave a room or
 make baskets in a basketball hoop, for example), then ask them to create a graph of that
 data and explain it to you.
- Give your child five numbers for example, 26, 30, 32, 32, 35. Ask your child to use the data to find the mean, or average (31); median, or middle number (32); mode, or number that occurs the most (32); and range, the difference between the highest and lowest number (35 26 = 9).



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. Play is a wonderful way to spark curiosity, so be sure to allow plenty of playtime. Encourage your child to ask questions, be creative, discover answers and explore their world.

Support your child's curiosity with questions like these:

- What would happen if houses were shaped like pyramids? How big would they have to be for our family to live comfortably?
- Who do you think knows the largest number in the world, and how did they figure it out?
- If we didn't have coins or bills to use for money, what would we do?

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:

- Where did you see examples of math today? Do you think everyone agrees what you saw is math?
- What went well in math today? What didn't go as well? What can you do to make tomorrow better than today?
- What was your favorite part of math class this week and why?
- How did you help 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 be able to start on the problem?

WHILE YOU SOLVE

- Is there other information that would make this problem easier?
- What do you do when your strategy doesn't work?
- What resources can you use to understand math you aren't familiar with?

AFTER YOU SOLVE

- Does your answer make sense?
- Where else would we see something similar to this?
- What problems did you have with this?
- What was the solution to your challenges?

Join the conversation!