



MATHEMATICS GRADE 4

By the end of fourth grade, students will have had an opportunity to engage with the core concepts listed below.

- Use whole-number arithmetic to solve word problems, including problems with remainders and problems with measurements.
- Add and subtract whole numbers quickly and accurately, using a variety of strategies for numbers up to 1 million.
- Multiply and divide multi-digit numbers in simple and complex cases, using a variety of strategies.
 - For example, multiplying $1,638 \times 7$ or 24×17 , and dividing 6,966 by 6.
- Understand and apply equivalent fractions.
 - For example, recognizing that $1/4$ is less than $3/8$ because $2/8$ is less than $3/8$.
- Add, subtract, and multiply fractions and decimals in simple cases (like $2 \frac{3}{4} - 1 \frac{1}{4}$ or $3 \times 5/8$), and solve related word problems.
- Understand simple decimals in terms of fractions (like rewriting 0.62 as $62/100$).
- Measure angles and find unknown angles in a figure.
- Solve problems involving measurement, and convert measurement units



QUESTIONS TO ASK YOUR STUDENT

- "How many times older am I than you?"
- "We need half a cup of milk for this cake. How many times should we fill the $1/4$ -cup measure with milk?"
- "What time is it?"
- Ask questions which include elapsed time.
 - For example: "You woke up at 7:00. It took you 5 min. to eat, 10 to dress, and 15 to pack up. We need to leave by 8:00. How much free time do you have?"



WAYS TO CHALLENGE THEIR THINKING

- Provide word problems that require multi-step solutions, including handling remainders and using different operations (addition, subtraction, multiplication, division).
- Provide larger, multi-digit numbers for multiplication and division problems and create word problems.
- Explore equivalent fractions, multiplying fractions, and converting fractions to decimals.
- Increase the complexity of measurement problems by working with angles and converting between units.