

What your child will learn in Grade 4 Mathematics

Number

Your child will work with place value to understand how numbers are built. When you write 3,456, each digit holds a different value depending on where it sits: the 3 means three thousands, the 4 means four hundreds, and so on. Your child will use this understanding to read and work with decimal numbers like 12.45, where the digits after the decimal point represent tenths and hundredths. [See the curriculum.](#)

Addition and subtraction will expand beyond whole numbers. Your child will add and subtract numbers up to 10,000 and will also work with decimals to the hundredths place, like $5.23 + 3.14$. This means your child can solve money problems, recipe measurements, and other real-world situations that involve decimal amounts. [See the curriculum.](#)

Multiplication and division will help your child understand how numbers break apart and fit together. Your child will multiply and divide whole numbers within 10,000 and will learn about prime numbers (numbers that can only be divided by 1 and themselves, like 7 or 11) and composite numbers (numbers that can be divided by other numbers, like 12 or 15). [See the curriculum: 1, 2.](#)

Fractions will be explored in different ways. Your child will learn that $\frac{1}{2}$ is the same as $\frac{2}{4}$ and $\frac{3}{6}$, these are equivalent fractions, or different names for the same amount. Understanding equivalence helps your child compare fractions and solve problems involving parts of a whole. [See the curriculum.](#)

Percentages will be introduced as a way to describe parts of a whole. Your child will learn that 50% means half, 25% means one quarter, and 100% means the whole thing. This helps when reading sale signs, sports statistics, or survey results. [See the curriculum.](#)

Algebra

Your child will work with equations and equality. An equation like $5 + 3 = 8$ shows that two sides are balanced and equal. Your child will learn to represent and use equality in different ways, such as finding the missing number in $5 + ? = 12$, and will understand that equations express relationships between quantities. [See the curriculum.](#)

Geometry

Your child will analyze shapes by looking at their properties. Properties are the features that make a shape what it is: how many sides it has, whether the sides are equal in length, what kinds of angles it has (corners that are sharp, right angles, or wide). Your child will explain why a square is different from a rectangle and why a triangle is different from a quadrilateral. [See the curriculum.](#)

Measurement

Your child will learn to measure and calculate area, which is the amount of space inside a flat shape. If you have a rectangular garden that is 4 metres long and 3 metres wide, the area is 12 square metres. Your child will interpret area measurements and express them using square units like square centimetres or square metres. [See the curriculum.](#)

Angles will be measured using standard units called degrees. Your child will learn that a right angle (the corner of a square or a book) is 90 degrees, that a straight line is 180 degrees, and that a full turn is 360 degrees. Your child will determine angles in the classroom and at home using tools and will express them in degrees. [See the curriculum.](#)

Patterns

Your child will explore sequences, which are lists of numbers that follow a rule. In an arithmetic sequence like 2, 4, 6, 8, each number increases by the same amount. In a geometric sequence like 2, 4, 8, 16, each number is multiplied by the same amount. Your child will interpret these sequences and explain the pattern to predict what comes next. [See the curriculum.](#)

Time

Your child will work with time as a measurable quantity. Your child will communicate duration, how long something takes, using standard units like seconds, minutes, hours, and days. This skill matters for planning, scheduling, and understanding how long activities take. [See the curriculum.](#)

Statistics

Your child will look at how data is shown in graphs and charts. When someone creates a graph, they choose a scale (the numbers on the side) that can make data look more dramatic or less dramatic than it really is. Your child will evaluate whether a graph's scale is fair and whether it represents the data honestly. [See the curriculum.](#)

How to help at home: Number

Ask your child to explain the value of each digit in a number like 2,345 or 12.67. You can write numbers on paper and ask, "What does the 3 mean in this number?" This builds understanding of place value. [See the curriculum.](#)

Play a game where you give your child a starting number and ask them to add or subtract a decimal amount. For example, "You have 10.50 dollars. If you spend 3.25 dollars, how much is left?" Use real money or prices from grocery shopping to make it concrete. [See the curriculum.](#)

Look for prime and composite numbers together. Ask your child to find factors of a number by asking, "What two numbers multiply to make 12?" This helps your child see how numbers break apart. [See the curriculum: 1, 2.](#)

Show your child equivalent fractions using food. Cut a pizza or cake into different numbers of pieces and ask, "Is 2 slices out of 4 the same as 1 slice out of 2?" This makes equivalence visible. [See the curriculum.](#)

Point out percentages in real life: sale signs that say "50% off," weather forecasts that say "80% chance of rain," or sports scores. Ask your child what the percentage means in everyday language. [See the curriculum.](#)

How to help at home: Algebra

Write simple equations on paper and ask your child to find the missing number: $7 + ? = 12$ or $? - 3 = 5$. Start with small numbers and work up. This builds the idea that equations express relationships. [See the curriculum.](#)

How to help at home: Geometry

Look at shapes around your home: the rectangle of a door, the triangle of a roof, the circle of a plate. Ask your child to describe the properties: "How many sides does it have? Are the sides equal? What kind of angles does it have?". [See the curriculum.](#)

How to help at home: Measurement

Measure a rectangular space in your home, like a bedroom or a garden plot. Ask your child to calculate the area by multiplying length times width. Then check the answer by counting square units (tiles, graph paper squares, or imaginary squares). [See the curriculum](#).

Use a protractor or a speed square (a tool shaped like a triangle) to measure angles around your home: the corner of a book (90 degrees), the angle of a roof, or the corner of a staircase. Your child can record the angles and compare them. [See the curriculum](#).

How to help at home: Patterns

Create a number sequence together and ask your child to find the rule. Start with 3, 6, 9, 12 and ask, "What is the pattern? What comes next?" Then switch roles and let your child create a sequence for you to solve. [See the curriculum](#).

How to help at home: Time

Ask your child to estimate how long everyday activities take, then measure them with a timer or clock. "How long does it take to brush your teeth? To eat breakfast? To get ready for school?" Compare the estimate to the actual time. [See the curriculum](#).

How to help at home: Statistics

Find a graph in a newspaper, magazine, or online. Ask your child whether the scale seems fair. For example, if a graph shows sales from 90 to 100, it might look like a huge increase even if it is only a small change. Talk about whether the graph tells the true story. [See the curriculum](#).