

WELCOME TO FIRST GRADE MATH!

In first grade, students move beyond basic counting to understanding how numbers work together. They will spend a lot of time "building" and "breaking" numbers to solve problems up to 20 and beyond. By the end of the year, here is what students should be able to do:



Adding and Subtracting

This year is all about strategies. Instead of just memorizing, kids learn why $8 + 7 = 15$ (for example, by making a ten: $8 + 2 = 10$, and $10 + 5 = 15$).

- ✓ **Word Problems:** Solve addition and subtraction stories within 20. They should be able to find the missing number anywhere in the problem (e.g., $8 + ? = 12$ or $? - 3 = 7$).
- ✓ **Fact Families:** Understand that addition and subtraction are related. If they know $4 + 5 = 9$, they also know $9 - 5 = 4$.
- ✓ **The Equals Sign:** Understand that = means "the same as." They should know that $5 + 2 = 7$ is true, but also that $7 = 4 + 3$ or $5 + 2 = 6 + 1$ are also true.
- ✓ **Fluency:** Add and subtract within 10.



Geometry

- ✓ **Defining Attributes:** Explain what makes a shape what it is (e.g., a triangle *must* have 3 closed sides, but it doesn't *have* to be blue).
- ✓ **Creating New Shapes:** Put two-dimensional shapes together to make a new shape (like using two squares to make a rectangle) or three-dimensional shapes (like using a cube and a cone to make a "house").
- ✓ **Partitioning Shapes:** Partition (split) circles and rectangles into two equal shares (halves) and four equal shares (fourths or quarters). They should understand that more shares mean smaller pieces.

Place Value



- ✓ **Counting to 120:** Count, read, and write numbers up to 120, starting from any number.
- ✓ **Tens and Ones:** Understand that a two-digit number is made of "tens" and "ones." For example, 42 is not just a 4 and a 2; it is 4 tens and 2 ones.
- ✓ **Comparing Numbers:** Use the symbols $>$ (greater than), $<$ (less than), and $=$ (equal to) to compare two-digit numbers.
- ✓ **Mental Math:** Quickly find "10 more" or "10 less" than a two-digit number in their head without having to count by ones.

Measurement and Data



- ✓ **Ordering Lengths:** Put three objects in order from shortest to longest.
- ✓ **Measuring with Units:** Measure how long something is by using a smaller object (like "this book is 10 paperclips long").
- ✓ **Telling Time:** Read both digital and analog (clock face) clocks to the hour and half-hour (e.g., 2:00 and 2:30).
- ✓ **Data and Graphs:** Organize items into categories and answer questions like "How many more people liked apples than bananas?" based on a simple chart.

