

All About Numbers

What Is a Number?

What's in a number? Plenty! Numbers describe amounts and sequences of all kinds, like:

- *Exactly* how many (“I have 4 books”) or how much (“That’s 2 teaspoonfuls of sugar”).
- *Approximately* how many (about 20 people) or how much (almost one cup of water).
- Parts of things (6 pieces of the puzzle) or proportions (“We ate half of the pears”).
- The order of things (grocery store aisles) or the sequence of events (“First, put on your socks. Second, put on your shoes”).

Why Is Learning About Numbers Important?

Numbers help us compare, measure, order, add, subtract, and solve problems of all kinds. When children begin kindergarten, their knowledge about numbers helps prepare them for learning math. Children and adults use number skills daily in their work and play.

What Do Children Need to Know About Numbers?

Adults need to know that:

- Number words can be confusing to children because they are used in many different ways. A child may hear the word “five” when adults say, “1, 2, 3, 4, 5...,” “I’ll be home at 5 o’clock,” “José is 5 years old,” “Our address is 5 Maple Drive,” and more!

Over time, children develop different number skills when they learn:

- The correct order of number words.
- The names for symbols for those words (like 4, 5, 6).
- That a number tells us “how many,” and later, that each number word means a *specific* amount; only then do children learn how numbers are related to each other.
- What numbers mean, which occurs gradually—it’s harder for children to understand numbers when talking about abstract ideas like time and money.

How Can We Help Children Learn About Numbers?

Notice that everyone uses numbers. Adults are experts at using numbers all day long, such as when they plan schedules, prepare meals, or decide what they can afford to buy.

Be a number detective. Find numbers and ways to use them, and help your child find them, too. Look for clues to what your child thinks number words mean!

Talk about numbers. Children learn what number words mean from hearing adults use and talk about numbers in a meaningful way.

Babies and Toddlers

- **Notice amounts.** Point out amounts of things in storybook pictures. Are there more or less?

- **Count aloud when your child is near.** Count fingers and toes, how many times you roll the ball, or how many toy cars you have.

Preschoolers and Older Children

- **Be a number detective.** Find numbers in:

- Nature: “How many spots does the ladybug have?”
- Your neighborhood: “The stop sign has eight sides.” “How far is the bus stop?”
- Your home, such as while cooking, cleaning, or playing.

- **Count and compare amounts with your child.** Count the number of stairs you climb, bus stops you pass, and forks needed to set the table.

