



## Math with Kids is Fun!

Have you ever sung a counting song with your baby? Asked your toddler, “Which tower of blocks is higher?” Said, “One for you, one for your sister and one for me, as you passed out apple slices?” If so, you’ve been preparing your child for future success in studying mathematics at school.

Literacy means being able to read and understand words. Numeracy is an understanding of numbers and an ability to reason with them. Like literacy, numeracy starts in the very early years. Infants as young as six months can tell the difference between a pile of 12 toys and a pile of 24 toys. As a parent, you build on this understanding when you introduce words like “more” and “less.” In an informal way, you are laying the groundwork for the concepts of addition and subtraction.

### Basic principles

Here are some principles to keep in mind when introducing children to numbers.

- Children learn through play. Keep an **attitude of play**, and follow what the child is interested in.
- Children learn **through their senses**. Use **real objects** they can see and touch.
- **Repetition** is the key to understanding. Take advantage of events that happen in **everyday routines** to make children aware of numbers and shapes that are all around them.
- Children’s abilities develop **slowly over time**, and each child develops at a **unique pace**. **Wait till a child is ready** before introducing more complex concepts.

### A good foundation

You can use the following activities and opportunities to build a foundation that will prepare children for school. You don’t need any complicated equipment. You can count anything, starting with your child’s two hands!

**Vocabulary** - Children need to know the words for mathematical ideas, and not just the numbers (one, two, three...). Talk to them about size (a big truck, a small ball), about quantity (a full cup, an empty bowl) and order (your turn first, my turn second). Songs and finger plays are fun ways to repeat these words over and over.

**Counting** - A four year old might be able to say the numbers up to 30, but chances are he can only think *logically* about five objects. It takes practice for children to learn that counting means assigning one number to each object and that



the last number named is the number of objects in the group. Start early to develop this awareness with a game of “Simon Says”: “Simon says, take two steps forward. One. Two.”? When you read a picture book, point to similar items on the page: “I see three trees. One. Two. Three. How many birds do you see?” For older children, cooperative board games give practice in moving a marker as many squares as the dots on a die.



**Shape recognition** - Craft activities are a chance to talk about geometric shapes: “Here’s a circle for the face. Can you choose two circles for the eyes?” Help children get familiar with the shape of number symbols by using play dough to make the numbers from one to five for them to trace with their finger. When you take a walk together, point out the numbers on the houses you pass.



**Comparison** - Get children interested in comparisons by talking about *them*: “Your fingers are longer than the baby’s.” “Your pants are longer than your shorts.” “You and I have the same number of toes. Let’s count them.”



**Sequence** - Putting things in order is an important mathematical skill. Your children can practise this by doing simple clapping games. For instance, take turns setting a short pattern of slow and quick claps. The other person must repeat the same pattern. You can also practise putting things in order of size. For example, making a row of cans from the tallest to the shortest.



**Matching and grouping** - You can combine matching and grouping with household chores. Get your children to help sort socks into pairs. When it’s time to put away toys, suggest they put all the blocks into one box and the toy cars into another.

**Measuring** - At first, children can measure things with their bodies. “How many times can you put your hands across the book?” Show them how to place the second hand next to the first hand, not on overlapping. Cooking together provides lots of opportunities for measuring, though you might want to have your preschooler put that spoonful of salt into a small bowl before adding it to your sauce, just in case his measurement skills aren’t yet accurate!

Get inspired and make up your own activities to enrich playtime and your family routine. With the attitudes that math is fun, your children will be on the road to future success with handling the mathematics of daily life.