



HELPING YOUR
CHILDREN
LEARN AND ENJOY
MATHEMATICS

MATH GAMES TO PLAY WITH YOUNG CHILDREN

Here are a few math games you can play with your children. Each is a two-person game—designed to be played by a parent or older child with a younger child. Some are very simple and meant to be played with very young children; others are a bit more difficult. No age is indicated because children, as well as their abilities, mature at different rates. You will know very quickly after you start a game if your child is ready for that game. If you have to do a lot of “teaching” and your child still doesn’t understand, move on to something else; don’t push too hard!

■ WHAT COMES NEXT?

This game is about building simple patterns. You can play the game with any sorts of objects, but you will need a lot of them so you and your child can continue building the pattern. You start, for example, by placing an apple, then an orange, then another apple and orange in a straight line. Then ask your child, “What comes next?” If your child hesitates, hand him or her an apple, and let him or her put it next in the line. Then add another orange and ask, “Now what’s next?” If you want to make it a bit harder, on your turn place both an apple and an orange at the end of the line, before you ask

the question. You can play this game with colored blocks, stickers, buttons, and many other things. Eventually graduate to more advanced patterns, such as red block, red block, blue block, red block, red block, blue block. Together you can invent new, more complicated patterns.

■ WHAT ANIMAL AM I?

Young children all love animals and, from an early age, they learn amazing facts about different animals. You start this game by saying something like, “I’m thinking of an animal that has four legs; what is it?” If your child guesses your animal right off, great! But if he or she guesses wrong, say something like, “No. My animal barks; what is my animal?” Continue to give clues—as easy or as hard as your child can use—and have your child continue to guess until he or she names your animal! Although this may not seem like math, we call different characteristics *attributes* and use them to sort and classify in mathematics. After your child guesses a few of your animals, ask if he or she would like to think of an animal and have you guess. Just think of how many animals there are that you and your child can guess!



Photo by Paul Giganti, Jr.

■ ADD A BLOCK

Both boys and girls should play with building blocks often—and from a very young age. This game is about building skills that help young children develop spatial and small motor skills. The blocks you use to play the game do not all have to be the same; in fact, different shaped blocks make for a more interesting game. Start by placing a block on the tabletop or floor. Now ask your child to add one block of his or her choice on top of yours. Keep taking turns until you can't make the building any taller without blocks falling. Remember: this is NOT a contest. If your child's block falls off, let him or her try again. Play this game with different kinds of blocks. You will find the more you play this game, the better your child will become at building, balancing, and planning ahead.

■ FOLLOW ME

This is a game that, in its simplest form, even babies and toddlers can play. Start with a physical motion, such as putting your hand on your head. Then ask your child to do what you are doing: "Follow me!" After he or she puts a hand on his or her head, take your hand off your head and pinch your nose, again saying, "Follow me!" The motions you want your children to "follow" can be simple or complex, depending on their age. For example, standing on one leg may be OK for a four year-old but too difficult for a toddler. After your child understands the game, play it by making one motion after another while your child follows along—without any need for words. Another version of this game is called "Clap Like Me." To play it, you clap a pattern, such as clap, clap, pause; clap, clap, pause. Then you say, "Clap like me." Don't forget to let your children make up clapping patterns too.

■ DRAW THIS

To play this game you need to sit side-by-side at a table, with you and your child each having a sheet of paper and a selection of crayons, colored pens, paints—whatever you choose. Start by picking up a crayon (use only ONE color to start) and drawing something simple on your paper, such as a circle in the middle of the page. Then ask your child to do the same on his or her paper. Don't expect your child's shape to be as good as yours; drawing ability comes with age and practice. After he or she has copied your first shape, draw a new shape somewhere on your paper, such as a triangle or Tic-Tac-Toe grid. Be creative, but keep your child's age and drawing ability in mind. Keep taking turns as long as you would like and, if you plan ahead, you might end up with something you both recognize, such as a stick figure or smiley face. When your child understands the game, trade roles and have him or her start the drawing, with you following along.

There are many more games you can play with your children. Just make sure that, when you choose games to play together, they are a good fit for your child's age and ability and, most of all, they are FUN!

WHAT ABOUT FLASH-CARDS AND WORKBOOKS?

You may be tempted to give your children a headstart in mathematics by using flash cards and workbooks to help them master basic skills. Don't worry; there will be plenty of time to learn basic math facts and operations in school.

Instead, think of your role in your children's early learning as providing a vast and varied math playground of hands-on activities for your children to experience, enjoy, and explore. Early childhood is the time when children should enjoy learning. Anything that might make learning math seem like work to children may make them anxious or, even worse, make them dislike doing math. Concentrate on finding ways to make math learning fun and interesting, and always be aware when they get tired or bored with an activity. Make math fun and you will be giving your children more than a set of basic skills, you will be giving them a love of learning that will last.

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