6 Ways to Develop Early Math Skills

Some early math concepts that your child should develop:

- Understanding size, shape, and patterns
- Counting verbally
- Recognizing numerals
- Identifying more or less of a quantity
- Understanding one-to-one correspondence (matching sets, which group has 4)



Shape and sort – Toys can be math tools as kids sort them by different categories – such as shape. Go on a shape hunt throughout the house, finding toys and other household objects that are cubes, cylinders, boxes, cones, and prism shapes. Bring the items together and help your child figure out different categories. Your child might want to sort by color as well as shape – go with whatever ideas your child has. Recognizing the shape is one concept and learning to make categories is another. Encourage your child to look at the shape and describe the characteristics, such as "This has four corners on each side and so does this."



Count and sort – Use toys and other familiar objects to sort in different ways: type, color, size, or shape. Count how many objects of each color or shape your child has. You might find those lost blocks under the sofa to add to the pile. Count how many cabinets, how many doors, how many windows in the house as well. Counting objects helps your child to develop a one-to-one correspondence of the object and the number.



Comparing sizes – What's bigger? Smaller? Putting objects in order from smallest to largest and understanding that larger containers hold more than smaller ones may seem simple, but these ideas are developed through experience. Help your child by providing real life examples. When you are shopping, compare sizes and prices of different containers of the same food. Provide empty containers to play with (remember how much fun playing store was when you were a kid?). Many foods come in various sizes – empty and clean out yogurt cartons, oatmeal boxes, and water bottles – all can be compared and sorted. You might find two containers that hold the same volume but one container is taller than the other. Experiment with filling one container and pouring it into the other. Very young children will

invariably think that the taller container holds more, even when they see it is the same. This idea takes time to develop but shows the importance of exploring and playing with different containers in developing mathematical understanding.



Number hunt – Find numbers on your walks, on drives, in the store, and in your home. Numbers may be confused with letters and words so make a point of pointing out the differences. Add a number line with cute graphics to your family room décor as well as an alphabet chart. Make your own out of meaningful things for your family – use pictures of family members, pets, and things in your home (1 dog, 2 cats, 3 fish, 4 people in the family, etc.).



Stack it up – Play with blocks helps to develop spatial awareness and is a great way to get future engineers on the path to success. Understanding about size, shape, and patterns can come from playing with wooden blocks, LEGO blocks, and even those giant cardboard blocks that you remember from Kindergarten class.



Play with patterns – Patterns are everywhere! Point out the patterns in nature and in your home. Patterns help us to predict what comes next. Making patterns with blocks, toys, stickers, trays of cookies – all are ways to find order and beauty in the everyday things we see around us. Ask your child to make patterns with their crayons or blocks – what colors do they use? Make a necklace with pony beads – what makes a nice pattern? Who knows? You might even get a more organized kitchen cabinet or a color-coordinated sock drawer once your child starts playing with patterns!

Help your child develop a love for math by using it every day and seeing the beauty of math in everyday things – like the petals on a flower, the patterns of skip counting (2, 4, 6, 8), or the rhythm of music.

Math is cumulative so concepts build on one another. If your child has problems with math, even in early grades, a tutor can help to fill the gaps so they don't get bigger.

Dr. Judie Harrington, an experienced college professor, elementary teacher, and reading teacher, provides the one-on-one attention that your child needs. Conveniently located, NRICH Tutoring has a comfortable environment as well as the resources for hands-on, minds-on learning

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