

by UPAT Parent Educator Barbara Rouse

“...5, 4, 3, 2, 1, blastoff “ shouts the 4 year old boy as he takes his toy rocket and runs around the playroom pretending to go to outer space. Young children learn about numbers and math through their everyday activities. They learn math when they play with objects and people, solve problems, and make observations about their surroundings. Wise parents support their child’s learning by providing play materials for their child to experiment with. Children learn about shapes when they construct them from playdough, pipe cleaners, string, or crayons. They learn by playing with blocks or nesting containers. Children learn that parts make up the whole by playing with puzzles or toys that come apart. They learn about how numbers are used when their parents point out numbers to them as they go throughout their day. Children learn spatial sense or a feel for their surroundings and the objects in them when they run, climb, swing, slide, or play with blocks or puzzles.

Children need to experience numbers in many different ways to build their understanding of it. They need to connect the spoken number names to a variety of objects, pictures, and written number symbols. They need to understand the language of math-- the meaning of words such as same/different, more/less, many/few, etc. Children usually progress in their understanding of math from concrete (the actual objects), to pictorial (pictures of objects), to symbolic (numerals), and finally to abstract. It is helpful for them to see two toy trucks next to a picture of two trucks next to the symbol “2”.

What math concepts do young children need to understand before entering Kindergarten?

- Count by rote from 1 to 10 or more
- Counts out at least 5 objects
- Tells if someone has “more” or “less” of something than they do
- Draws some numbers
- Describes objects as being under or over something; or on or off
- Names and draws some shapes
- Matches and sorts objects by color, size, shape, or use
- Arranges stuffed animals or toys from smallest to largest
- Repeats a pattern by color or size when stringing beads or arranging blocks
- Points out when a story or routine is changed or out of order

The most important thing for parents to do is make it fun!