

Math Matters in Preschool!

Building Early Math Skills Through Play

Young children build a foundation for mathematical thinking long before they start formal schooling. A well-prepared classroom invites them to explore numbers, patterns, measurement, and shapes in hands-on, meaningful ways.

Counting and Number Sense

Children learn that numbers represent quantity when they count, compare, and match objects.

Include:

- Counting bears, cubes, or buttons WITH indications of what to do with it. (Cups with a number on the side, etc.)
- Number puzzles and peg boards with quantity indicated.
- Dice, spinners, and number cards
- Ten-frames and small trays for sorting with written numbers
- Collections to count (shells, rocks, pom-poms, lids) with indications of what to do with them.
- Magnetic or wooden numbers with items
- Beads and string for sequencing with cards that

Everyday Opportunities: Count how many friends are here, how many blocks tall a tower is, or how many steps to the door.

Measuring and Comparing

Measurement concepts grow from exploring size, weight, length, and volume through direct experience.

Include:

- Rulers, tape measures, and yardsticks (for exploration with teacher support)
- Scales and balances with items for weighing and comparing
- Measuring cups, spoons, and pitchers
- Clear containers of various sizes with water to transfer from one to another.
- Sand and water table tools
- Timers and hourglasses with reasons for using them/intention.

Everyday Opportunities: Compare who built the tallest tower, which bucket holds more sand, or whose line of cubes is longer.

Shapes and Spatial Thinking

Geometry begins with recognizing, naming, and manipulating shapes in the environment.

Include:

- Pattern blocks and attribute blocks
- Shape sorters and puzzles

- Tangrams
- Geoboards and rubber bands
- 2D and 3D shape models (spheres, cubes, cones, cylinders)
- Foam or wooden blocks in assorted shapes
- Shape stamps, cookie cutters, and tracing templates

Everyday Opportunities: Find shapes in the classroom ('The clock is a circle!'), build structures, and draw shapes in play dough or sand.

A Teacher's Tip

Math doesn't live on a shelf: it lives in children's play! Join them in wondering:

- "How many more do we need?"
- "Which one is heavier?"
- "What shapes can you see in your building?"

When teachers name and notice math in play, children begin to see math everywhere.