

Explore Family Math Activities

The following two activities have been adapted from the Building Blocks curriculum, usually implemented in pre-K Explore classrooms. These activities have been adapted for three- and four-year-olds and can easily be done at home with families and other caregivers, with few materials needed. They are designed to be playful and fun, while also supporting children's development in an at-home setting.

Activity 1: Dancing Patterns

Materials Needed: Music, for dancing.

How to play:

- Select a song you and your child enjoy for dancing
- Invite your child to follow a pattern while dancing. For example, toe/heel, toe/heel/, toe/heel.
- Consider trying more complex movement sequences. For example, clap/kick/kick, or toe/toe/heel/clap.
- After you dance a pattern, invite your child to describe the pattern they danced. Emphasize the part of the pattern that keeps repeating (toe/heel, for example).

Why this game?

Patterns are essential to mathematics and are all around us. Helping children explore patterns, and see the structure in patterns, will provide a strong math foundation. Recognizing and recreating patterns eventually supports children in arithmetic, and eventually algebra!

Activity 2: Circles and Cans

Materials Needed: Cans of various sizes or other cylinders (such as a can of nuts, a soup can, a pencil holder, etc.)

How to play:

- Trace the bases of several cans on paper using a writing tool.
- Ask your child to match the cans to the traced circles.
- Encourage your child to place the can directly on the traced circle to check.

Why this game?

- Children learn that 3D objects (like cans) have shape "faces". For example, a can, has two sides or "faces" that are circles.
- In this activity, children actively explore shapes. You may help your child to run their finger around the circular edge or "face" of a can. Children will get to feel that *circles are perfectly round*.

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