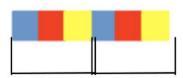
# All About Patterns

#### What Are Patterns?

Patterns are predictable repetitions. You can see, hear, or act out a pattern—it's whenever sights, sounds, or movements repeat in predictable ways.

To be a pattern, the set of objects, events, actions, or sounds must repeat fully at least once so we can see the pattern unit. Two pattern units make a pattern.



The pattern unit is the part of the pattern that repeats over and over again. There are two pattern units shown here.

Common repetitions that make patterns:

- Color: the colors blue, red, purple in the image you see here
- Shape: triangle, square, half-circle, triangle square, half-circle
- Sound: clap, snap, clap, snap
- Objects:
- Motion: jump, squat, jump, squat

# Why Is Learning About Patterns Important?

Patterns help us make predictions, such as, "Whose turn is next on the slide?" The ability to work with and create patterns will also help children learn algebra and more advanced math when they are older.

#### What Do Children Need to Know About Patterns?

- Recognize patterns. "I see a pattern!"
- Describe them in words. "The pattern is spoon, fork, fork, spoon, fork, fork."
- Copy patterns that someone else has made.
- Fill in missing parts of patterns.
- Recognize equivalent patterns. "A blanket with red and blue stripes has the same pattern as one with green and white stripes."
- Extend patterns. "We need a blue block next."
- Create their own patterns with objects, movements, or sounds.

## How Can We Help Children Learn About Patterns?

Singing songs, making rhymes, and dancing with children all help them recognize patterns. There are also many opportunities to create and talk about patterns during play and chores.

### **Babies and Toddlers**

- Sing songs with repeating words and hand motions. Songs like "Wheels on the Bus" or "Saco Una Manito" help children learn to recognize patterns.
- Recognize that difference is important for patterning. Talk to your child about the differences between objects. "This sock is blue and this one is pink." "This box is large and this box is small."
- Talk about patterns you see in clothing, books, or while out and about.
- With older toddlers, you can play a game of "I Spy." If someone is wearing a striped green and blue shirt, say, "I spy a green and blue pattern" and see if your child can point to it.

#### **Preschoolers and Older Children**

- Arrange food on a plate in a pattern: carrot stick, celery stick, celery stick, carrot stick, celery stick, celery stick. Talk to your child about the pattern. See if they can guess what comes next.
- Ask your child to create a movement pattern with clapping, stomping, and jumping.
  See if you can repeat it.
- **Use materials around you to create patterns**. If you see a piece of clothing with a striped pattern, discuss the pattern with your child.