Activities

Patterning

• Set up a simple AB (alternating) color pattern on a table or the floor. Help students hear the rhythm by “reading” the pattern aloud as you touch each cube, for example, “brown cube, pink cube, brown cube, pink cube, brown cube.” Then, ask, “What comes next? Why?” (Pink, because each brown cube is followed by a pink cube in this pattern.) Repeat with other AB patterns.

• As students gain confidence, introduce more complex patterns, such as AAB (blue cube, blue cube, green cube), ABC (red cube, pink cube, yellow...
You'll find dozens of ways to use these colorful linking cubes in your classroom! They're perfect for hands-on math practice at your learning center—or for demonstrating math concepts to your entire class. To get started, try some of the engaging activities described in this guide.

⚠️ WARNING:
CHOKING HAZARD—Small parts.
Not for children under 3 yrs.

©2005 Lakeshore
(800) 428-4414
www.lakeshorelearning.com

RA529
Ages 3+

Designed to meet these objectives:

Math
- Students will identify, build and extend patterns.
- Students will use manipulatives to demonstrate an understanding of basic operations.
- Students will create and interpret simple graphs.
- Students will measure using nonstandard units of measurement.
- Students will explore 2- and 3-dimensional shapes.

Activities

Patterning
- Set up a simple AB (alternating) color pattern on a table or the floor. Help students hear the rhythm by “reading” the pattern aloud as you touch each cube, for example, “brown cube, pink cube, brown cube, pink cube, brown cube.” Then, ask, “What comes next? Why?” (Pink, because each brown cube is followed by a pink cube in this pattern.) Repeat with other AB patterns.

- As students gain confidence, introduce more complex patterns, such as AAB (blue cube, blue cube, green cube), ABC (red cube, pink cube, yellow...
cube) or growing patterns (red cube, blue cube, red cube, red cube, blue cube). Prompt children to create patterns for their classmates to extend.

**Operations**
- Direct students to link 3 pink cubes together. Then, have them link 5 gray cubes, and link those together with the first set. How many cubes do they have altogether? (8) Explain how to write a number sentence to show this problem: “3 + 5 = 8.” Model subtraction in a similar way.
- Prompt students to make 5 chains of 2 cubes each. How many links do they have altogether? Model how to write this problem as “5 x 2 = 10.” Work out other multiplication problems in the same way. Then, make a 9-link chain and ask, “How can we make 3 equal chains from this chain?” Once students solve the problem, help them write it as “9 ÷ 3 = 3.”

**Measurement**
- Use the cubes to measure a book. How many cubes are needed to make a chain that is as long as the book? Provide a larger book and ask, “Will we need to add or remove cubes to equal this larger book?” Test children’s answers.
- Explain that each cube is 2 centimeters long. Help children calculate the length of the book in centimeters. Measure other objects in the same way.

**Graphing**
Make a bar graph by listing up to 10 pets across the bottom of a sheet of chart paper. Add a key, such as, “pink = cats, brown = dogs, white = fish, blue = birds, gray = iguanas.” Have students place cubes of the appropriate colors in columns above the types of pets they keep, linking the cubes together. Help children analyze the resulting graph by asking questions such as, “Which type of pet is kept by the most students? Which type of pet is kept by the fewest students? Are there two types of pets that are kept by the same number of students?”

**Exploring Shapes**
- Invite students to use the cubes to make shapes. Guide their explorations with questions such as, “How many different shapes can you make using 4 cubes? Can you make a square using exactly 8 cubes? Can you make a cube?”
- Have students make a 2-cube x 3-cube rectangle. How many cubes long is each side? How many cubes are there altogether? Add another layer to make a rectangular prism. How long is each side? How many cubes are there altogether?
cube) or growing patterns (red cube, blue cube, red cube, red cube, blue cube). Prompt children to create patterns for their classmates to extend.

Operations
- Direct students to link 3 pink cubes together. Then, have them link 5 gray cubes, and link those together with the first set. How many cubes do they have altogether? (8) Explain how to write a number sentence to show this problem: “3 + 5 = 8.” Model subtraction in a similar way.
- Prompt students to make 5 chains of 2 cubes each. How many links do they have altogether? Model how to write this problem as “5 x 2 = 10.” Work out other multiplication problems in the same way. Then, make a 9-link chain and ask, “How can we make 3 equal chains from this chain?” Once students solve the problem, help them write it as “9 ÷ 3 = 3.”

Measurement
- Use the cubes to measure a book. How many cubes are needed to make a chain that is as long as the book? Provide a larger book and ask, “Will we need to add or remove cubes to equal this larger book?” Test children’s answers.
- Explain that each cube is 2 centimeters long. Help children calculate the length of the book in centimeters. Measure other objects in the same way.

Graphing
Make a bar graph by listing up to 10 pets across the bottom of a sheet of chart paper. Add a key, such as, “pink = cats, brown = dogs, white = fish, blue = birds, gray = iguanas.” Have students place cubes of the appropriate colors in columns above the types of pets they keep, linking the cubes together. Help children analyze the resulting graph by asking questions such as, “Which type of pet is kept by the most students? Which type of pet is kept by the fewest students? Are there two types of pets that are kept by the same number of students?”

Exploring Shapes
- Invite students to use the cubes to make shapes. Guide their explorations with questions such as, “How many different shapes can you make using 4 cubes? Can you make a square using exactly 8 cubes? Can you make a cube?”
- Have students make a 2-cube x 3-cube rectangle. How many cubes long is each side? How many cubes are there altogether? Add another layer to make a rectangular prism. How long is each side? How many cubes are there altogether?