

Our Learning Goals:

- Patterns are all around us.
- Patterns repeat in a predictable way.
- Patterns are divided into units that repeat.
- Number quantities can be compared.
- Lengths can be measured and compared.
- The length of an object can be measured with non-standard units of measurement.
- What is one more or one fewer than a number?

Repeating Patterns

Patterns are found in all areas of mathematics. Learning to search for patterns and how to describe and extend them is part of doing mathematics and learning to think algebraically.

An important concept in working with repeating patterns is for students to identify the core of the pattern. The core of a repeating pattern is the string of elements that repeats. The knowledge of the core or unit is essential to be able to extend the pattern.

If this pattern continues in the same way,
what comes next?



Measuring with Non-Standard Units

In Unit 2, students were asked to compare lengths as longer than, shorter than, or the same length as. In Unit 4, students will use non-standard units such as unit cubes, large paper clips, small paper clips, etc. to focus on the attribute of length.

How Can I Help My Student

In math class, students engage in math problems to discuss underlying math concepts. They are asked to share their thinking and solutions with others. It is important that children solve problems accurately in ways that make sense to them. Be sure to have your student explain his/her thinking to you.

What Activities Can I Do At Home?

Construct Rhythmic Patterns

Take turns making patterns with body motions. Start a pattern such as: clap, clap, stomp; clap, clap, stomp; clap, clap, stomp: and see whether your child can continue the pattern. Reverse roles and let your child create a pattern and you continue the pattern. Students may need to do this several times to get the idea of the repeating unit through the motions.

Interpreting Rhythmic Patterns

You can provide a challenge for your child by having them interpret the body motions pattern with a different collection of items. For example:

Clap – Use a button

Stomp – Use a penny

So, Clap, Clap, Stomp becomes:



Measuring Length

In school, we have been using cubes to measure the length of our shoes. Your child may enjoy investigating the length of shoes at home. Your child can trace shoe outlines on paper, and then use paper clips or Cheerios to measure the length of the outline. *Watch to be sure that your child is laying the measuring tools end to end with no gaps.*

Counting

Counting strategies for counting accurately will continue to be a focus for kindergarten. Find ways to count together with your child; for example, count aloud, count sets of objects, ask your child to count out specific amounts, and pose problem that he or she can solve by counting. *It is normal for students to struggle over the decades and particularly with 11, 12, and 13 as these numbers do not sound at all like they believe they should.*

One More or Fewer

Find opportunities to ask your child about one more and one fewer, a concept we are working on in class. For example, after your child counts a set of objects such as pennies, ask, “What if I gave you one more penny? Then how many would you have?” or “What if I took one penny back? Then how many would you have?” Then, add or remove a penny. That way, your child can recount the set to find out or double-check the answer.