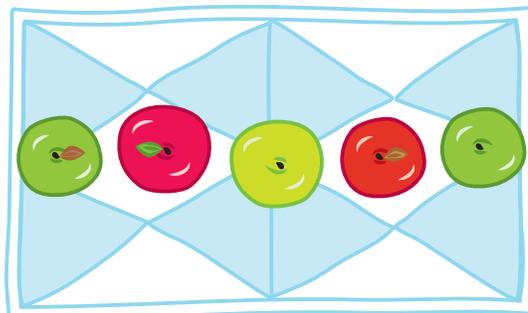


# Bridges in Mathematics Pre-K Unit 1

## September

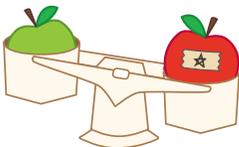
This month, apples offer plenty of tasty opportunities to count, sort, pattern, and much more. In this unit your child will:

- Count to 6 or more
- Read numbers to 5
- Match sets and numbers to 5
- Work with ABAB repeating patterns
- Compare objects by size and by weight



Your child will learn and practice these skills by doing activities and playing games like those shown below.

ACTIVITY OR GAME	COMMENTS
<p>Listen to a counting book that shows how apples develop from seeds to fully ripened fruit.</p>	<p>The teacher points to each item on the page as she counts the seeds, leaves, blossoms, or apples with the children. In so doing, she models the idea of counting each item exactly once and pointing to keep track. When all the items have been counted, she repeats the last number to show that it stands for the total number on the page.</p> <p><b>Teacher</b> How many little green apples do you see on this branch? Let's count!</p> <p><b>All</b> 1, 2, 3, 4, 5, 6!</p> <p><b>Teacher</b> Six little green apples—that's right!</p>
<p>Participate in making and patterning paper apples on the classroom calendar, a new one for each day that passes.</p>	<p>Before posting the apple for the day, the teacher invites children to predict its color. As the days pass, children begin to offer reasons for their predictions.</p> <p><b>Teacher</b> What color will our apple be today?</p> <p><b>Children</b> Red, because last time it was green. Red because it goes red, green, red, green...red! It's red because I know the pattern!</p>
<p>Learn how to show 1, 2, 3, 4, and 5 on the fingers of one hand. Then use those finger patterns to show how many they see when the teacher reads stories and plays counting games with the class.</p>	<p>The teacher follows the steps below to teach children how to pop up just 1 finger. Then he repeats the process for 2, 3, 4, and 5 fingers. With practice, these patterns become a quick and easy way for children to show their thinking.</p> <p>Hold up a hand like this.      Now fold your fingers...      ...and use your thumb like a gate to keep them there.      Now pop up just your pointer.</p>
<p>Help Chirpy the Counting Cricket put the apple cards back in the right order along the number path.</p>	<p>When Chirpy discovers that the sets of apples on the lower path don't match the numbers above them, he's puzzled and confused. He asks the children to help put the cards back in the right order. As they do so, they get practice reading numbers, counting objects, and connecting the written symbols with actual quantities.</p>

ACTIVITY OR GAME	COMMENTS
<p>Compare pairs of apples by weight.</p> 	<p>During this activity, children hear and say words and phrases related to weight: <i>heavy, light, heavier than, lighter than, the same weight</i>, and so on. First they point to the apple that looks heavier. Then they hold one in each hand to try to tell by feel. Finally, they learn to use the balance scale so they can find out for sure which apple is heavier.</p>

## FREQUENTLY ASKED QUESTIONS ABOUT UNIT 1

### Q: Do students really need to start learning math before they go to kindergarten?

**A:** Evidence shows that children start learning about basic mathematics when they are babies. That means that by the time they go to preschool, children have already learned a lot about math just from playing and being active in family life. They have noticed that their friend is taller than they are. They may have learned to count small groups, for example, to make sure that they have the right number of strawberries for dessert. Many children enjoy making designs with symmetry.

The work we do with math in preschool builds on these experiences. Math instruction in preschool is informal and playful, because we want students to enjoy math and we also know that young children learn best through play. There is also a strong connection between early math skills and later success in school in all subjects, including reading.

### Q: How can we help at home?

**A:** One of the quickest and easiest ways is to count, count, and count some more. Don't just say the numbers in order: "One, two, three." That's a good start, but it's also important for students to count groups of objects. When you're done counting, repeat the total. It's obvious to adults, but children need time to learn that the last number they say when counting tells them how many objects they just counted.

- When setting the table to eat, count each plate as you put it down: "One, two, three. Three plates!"
- When you set out some toys to play with, count them: "How many cars do you have? Let's count. One, two, three, four, five, six. Six cars!"
- When you walk up the stairs, count each step as you step on it.
- Play a game we call Plink, Plonk, Plunk. Take turns dropping four to six small hard objects (pennies, Legos) into a cup, telling how many there are in the cup, dumping them out, and counting them together. Children enjoy the sound of each object hitting the cup, and the sound reinforces the counting.
- When you read a picture book, count the items on each page. Point to each item while counting it. These counting books go nicely with this month's work with apples.
  - *Ten Red Apples* by Pat Hutchins
  - *Ten Apples Up on Top* by Theo LeSieg
  - *The Apple Pie Tree* by Zoe Hall
  - *The Line Up Book* by Marisabina Russo

For more ideas and resources, go to [www.mathlearningcenter.org/families](http://www.mathlearningcenter.org/families).