A Fair Bear Share

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Do you like blueberry pie? Mama Bear's four cubs sure do! They want Mama Bear to make one, but first they have to collect the ingredients from the forest. One of the four cubs gets distracted and does not collect her fair share. Will they have enough ingredients to make the pie?

Ages: 5 to 8 years

ATOS Reading Level: 3.0

Lexile: 510L

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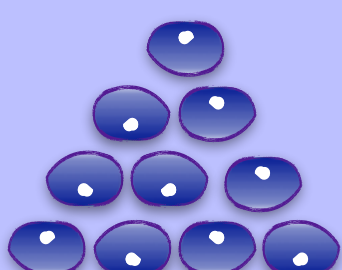


Why did Mama Bear group the nuts, seeds, and blueberries by tens?

Topics: counting, place value, tens and ones, regrouping

Activities To Do Together:

Use the book *A Fair Bear Share* to explore place value.

Before reading *A Fair Bear Share,* ask your child:

- What do you think a fair bear share means?

While reading the book with your child:

- Count with Mama Bear.
- Point out the groups of ten. Point out the ones. What do you notice about the piles of food?
- Estimate how many blueberries you think the cubs will pick.
- Ask your child if they think the three cubs will pick enough to make the pie. Why or why not?

When you have finished reading the story with your child, try the following:

- Explore counting by arranging items into groups of ten.
- Talk about the piles of food you see in the book. Ask "Why do you think Mama Bear is separating the nuts into piles of ten?" "Do you think this is a good idea? Why or why not?"
- Count thirty-five pennies. Find out how many groups of ten you can make with thirty-five pennies. How many pennies were left over?
- Explore the value of coins. Find out how many pennies are equal to one dime. Take a handful of pennies, sort them into groups of ten. Swap out each group of ten pennies for one dime.
- Explore counting by tens by using number lines, 100 charts, and 10 frames. 100 charts are 10-by-10 grids with the numbers 1 through 100. 10 frames are rectangles divided into ten spaces, five on top and five on bottom. Follow this link for printable 10 frames and 100 charts.
- Count large groups of objects. Ask your child, "How do you like to count them? Are there other strategies you can use?"

Questions for Mathematical Thinking:

1. Why do you think Mama Bear grouped the nuts, seeds, and blueberries by tens when she counted them?
2. When would you count objects by making groups of ten? When would it not make sense to use this strategy?
3. Do you notice a pattern in the way Mama Bear arranges the groups of ten?
4. Mama Bear arranges objects in patterns: 4 on the bottom row, 3 on the next row, 2 on the next row, and 1 at the top. If you added another row of objects to this triangular pattern, how many would be in the next row? What would the total number of objects be in this larger pattern?
5. What did you learn about what a fair bear share means?
6. Grouping is a strategy that the bears used to count. Why is it a useful strategy?

Early Math Project Resources:

Berries, Nuts, and Seeds Game (English)

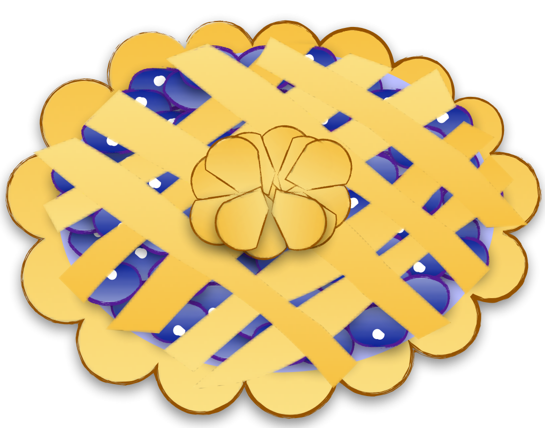
Juego de bayas, nueces y semillas (Español)

Game Board (English)

Berries, Nuts and Seed Cards (English)

Card Backs

Follow this link for additional online resources.



Vocabulary

Math words found in the story: altogether, fair share, first, fourth, second, third

Related math words: patterns, place value, regrouping, renaming

Words to build Reading Comprehension: cartwheels, proudly, raced, skipped

Spanish Title: Not available

Also available in: Braille

Related Books: *Shark Swimathon* by Stuart J. Murphy; *Earth Day Hooray!* By Stuart J. Murphy

This link to the World Catalog will help you find *A Fair Bear Share* in the public library.

Math Connections:

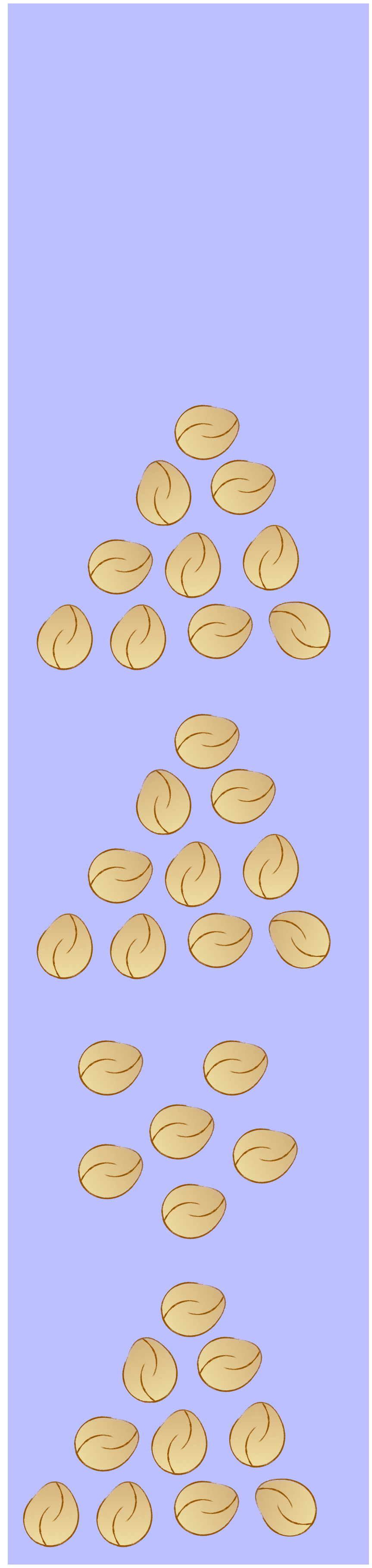
Place value is foundational to children's early and ongoing success with mathematics. There are fun and simple ways to support understanding of place value. You can start with counting.

If your child is learning to count, provide them with lots of opportunities to become familiar with the counting sequence. Start by helping your child learn the sequence of the numbers 0 to 5 and their corresponding values. As children learn their numbers, repeating and/or mixing up the number sequence is very common. Expect this to occur, it's part of the learning process!

Help your child become comfortable with the idea that numbers can be represented in many different ways. For example, the number five can be written as a word, as a numeral, as a group of five ones, or as five dots. It's important for children to understand that numbers can be identified and represented in different ways. Make a game of showing your child a very small collection of objects and having them tell you what number is represented. For example, hold up four fingers to represent the number four or make a group of three acorns to represent the number three. Have fun looking for the numbers that appear all around us. Go on a scavenger hunt to find the number five. Look for different ways that the number two is represented. Find it as a written word and a numeral. Play a version of the game "Eye Spy" that goes like this: "I spy with my little eye, something that represents the number five." Take turns looking for the ways you see the number five represented around you - five fingers, five friends, or five trees at the park.

Talk about zero. It's an important number that represents the absence of something. You can reinforce this idea like this, "The park has four swings, but it has zero roller coasters" or "We have two cats, but we have zero giraffes."

Help your child associate the name of a number with its actual value and compare the value of numbers. With practice, your child will understand that five is more than two and six is less than nine. Becoming comfortable with the number sequence and the values of numbers from 0-9 is an important first step for understanding two-digit numbers.

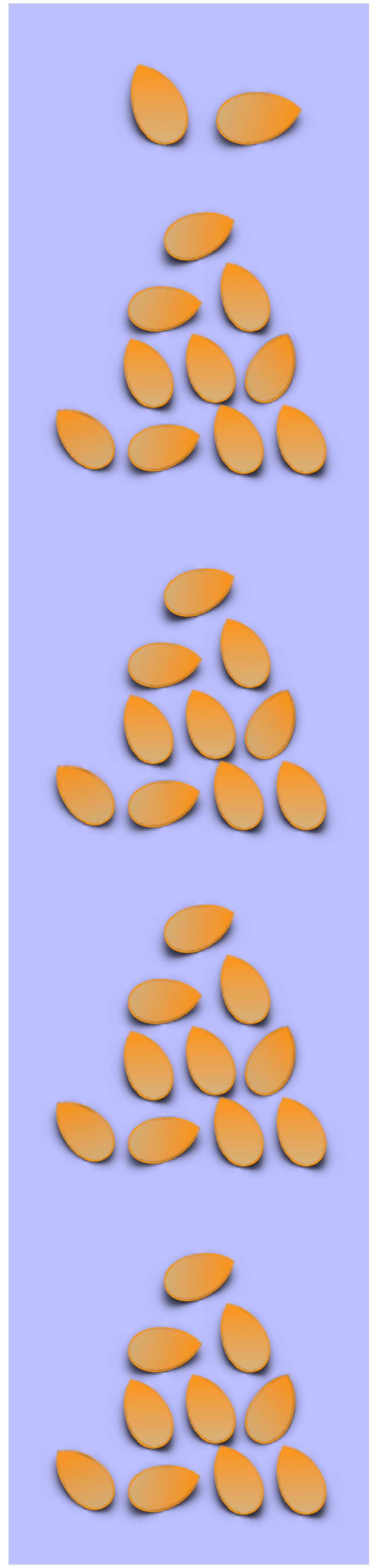


The number system we use most commonly is based on the number 10. The numbers, 0, 1, 2, 3, 4, 5, 6, 7, 8, and 9 are used to represent all other numbers. Learning the order of these numbers, understanding how the values of these numbers compare to each other, and recognizing patterns that exist with numbers, demystifies the counting sequence. It also supports children's understanding of the value of numbers with more than one digit.

When children enter Kindergarten, they learn about the numbers 11-19, which are commonly known as the teen numbers. Talk with your child about the meaning of the word "teen." It means ten. It even looks and sounds like the word ten. The first three teen numbers, 11, 12, and 13 will likely take some special practice as they don't follow the same predictable pattern as is seen with the teen numbers starting with number 14. Talk with your child about how 11 means you have a group of ten and a single one. With the number 12, you have a group of ten and two ones. Ask your child how may groups of ones and tens are in 13. If they aren't sure, ask them if they hear any similarity between the first part of the word "thirteen" and the number 3. Explore how the numbers from 11 to 19 are made up of one group of ten and some more ones. For example, the number 16 is made up of one group of ten and six additional ones. Remind your child that when we talk about a group of ten it means that we are talking about ten things. Write the teen numbers as mathematical equations using the number 10. Ask your child to make a group of 15 objects and figure out how many groups of ten are in 15 and how many ones. Have your child explain what they found out. Encourage them to create a drawing that shows the value of the number 15 and write an equation for the drawing together: 15 = 10 + 5.

Learn to count by 10. Pay special attention to the numbers 10, 20, 30, and 50 because they don't follow the predictable pattern of the numbers 40, 60, 70, 80, and 90. Practice counting by 10 with a collection of dimes. If your child does not have experience counting money or recognizing coins, show them the coins and explain that 10 pennies have the same value as 1 dime.

With practice, children begin to understand that the first digit in a two-digit number represents the amount of tens in the number. For example, in the number 36, three represents 3 groups of ten or thirty. Make a game of figuring out what number is largest or smallest in a group of four two-digit numbers. Ask your child to teach you a strategy that can be used to figure out which of the following numbers has the



the largest value: 57, 38, 81, 19. Ask your child to teach you a strategy for figuring out which of the following numbers has the smallest value: 36, 31, 38, 33.

When looking at two-digit numbers, help your child to understand that the number in the tens place is generally more important when comparing the values of two numbers. If comparing 39 and 61, the value of the three tens that are part of 39 is less than the value of the six tens that is part of 63. Therefore, sixty-three is the larger number. Compare other two-digit numbers and identify which is largest!

Have fun figuring out the largest number that you can make from two or three other numbers and figure out what each of the numbers stands for. For example, the combinations of numbers possible with the numbers 1 and 7 are 17 and 71. How many tens are in 17? In 71?

These types of explorations with base-ten and place value, are essential for success with all of the mathematical operations (+, -, x, /), decimals, proportional reasoning, and algebra.

Age Level	Related Infant Toddler Foundations, Preschool Foundations and CA State Standards
Kindergarten	**Counting and Cardinality K.CC.1, K.CC.2** Know number names and the count sequence. **K.CC.4, K.CC.5** Count to tell the number of objects. **Number and Operations in Base Ten K.NBT.1** Work with numbers 11–19 to gain foundations for place value.
Grade 1	**Number and Operations in Base Ten 1.NBT.2** Understand place value. **1.NBT.4, 1.NBT.5** Use place value understanding and properties of operations to add and subtract.
Grade 2	**Number and Operations in Base Ten 2.NBT.3** Understand place value. **2.NBT.5, 2.NBT.6, 2.NBT.7** Use place value understanding and properties of operations to add and subtract.
Grade 3	**Number and Operations in Base Ten 3.NBT.2** Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.