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This is a story about three little firefighters getting ready to march in a parade. The problem is they don't have any buttons on their coats. The parade is about to start! What will they do?

Ages: 2 to 6 years

# **ATOS Reading Level:**

1.7

Lexile: n/a

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# 3 Little Firefighters

How will the 3 little firefighters find three matching sets of buttons?

Topics: sorting, counting, classification

# **Activities To Do Together:**

Use 3 Little Firefighters to introduce the concepts of classification, sorting, and matching to your child. These skills help children realize the connections between objects and ideas, and what belongs in a group. You can practice these important skills together by noticing similar attributes such as color, shape, and size.

# Before reading the book:

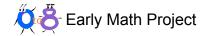
- Ask your child to predict what will happen in the story.
- Talk about the word *match* and what it means. What are some things that match?
- Place a small pile of objects in front of your child. Talk about what it means to sort objects and the different ways things can be sorted: color, pattern, size, shape, or texture.

#### While reading the book:

- Ask your child to tell you what they notice about the buttons. How are they similar? How are they different?
- Count the buttons with your child. Do the children have enough buttons for all of the coats? How do you know?
- Practice naming the colors and shapes on the pages. Ask your child to describe the shapes of the buttons.

When you have finished reading the book:

- Ask your child to tell you about the problem the little firefighters were trying to solve and how they solved it.
- There are many different ways to solve the three little firefighters' problem. What other ways could they have done it? Encourage your child to draw a picture of their solution.
- Make a game out of sorting the same items in different ways. For example, sort a group of leaves by shape, size, texture, or color.





#### DISCOVERING THE MATH: BOOK GUIDE

# **Conversations During Daily Routines with Toddlers:**

- 1. Bath Time Make a game out of sorting bath-safe objects in different ways. Ask: "Which of these things float?" "Let's sort these objects into groups of the same color." "Which of these objects are animals, and which are not?"
- 2. Park Time "Here is a pile of rocks. Let's sort them by color. What is another way we could sort them?"
- 3. Clean Up Time "Let's clean up all the toys on the floor. Which of these toys belong together? How should we organize them? What other ways could these toys be organized?"
- 4. Laundry Time Talk about how you sort the laundry before you wash it. Talk about what you are looking for as you sort the clothes into different piles. When folding the clean laundry, ask "How do you think we should sort the clothes now, so they end up in the right place?"

# **Questions for Mathematical Thinking:**

- 1. What shape buttons do you see most often? Why do you think many buttons are that shape?
- 2. What are some of the ways the children tried sorting the buttons? What sets did they try to create?
- 3. If there were just two little firefighters, how many buttons would they need altogether?

## **Early Math Project Resources:**

Visit <u>3 Little Firefighters</u> (countplayexplore.org/book/three-little-firefighters) to find activities and related Learning Foundations and California Mathematics Standards for this book.

## **Vocabulary**

Math words found in the story: circles, four, large, less than, medium, sets, shape, size, small, sort, three

**Related math words:** attribute, classification, different, identical, more than, same, similar

Words to build reading comprehension: parade

Related Books: A Pair of Socks by Stuart J. Murphy; Sam Sorts by Marthe Jocelyn; Sort it Out! by Barbara Mariconda

Click this link to the World Catalog or enter bit.ly/3ZRNzce to find 3 Little Firefighters in the public library.



#### DISCOVERING THE MATH: BOOK GUIDE

#### **Math Connections:**

Use 3 Little Firefighters to show that the same group of objects can be sorted in different ways. Being able to sort objects by their attributes (such as shape, size, color, or texture) helps to build a foundation for algebra and higher mathematics. For example, data needs to be sorted and grouped when creating a bar graph and like terms are combined when solving an algebraic equation.

Explore sorting with your child when you take a walk in the park or around your neighborhood. Gather natural items with your child and encourage them to sort the same items in several different ways. You might sort a group of leaves by color, then by type, and then by texture. Try this with other items you find at home or the grocery store. Ask your child what they would like to sort.

Learning to look at situations from many angles helps children discover new ways to solve problems and builds their reasoning skills. When children consider the different ways a group of objects can be sorted, they are being flexible in their thinking. Flexible thinking is very important when solving problems of all types, not just in mathematics.

Classification is used to identify objects and ideas, which is the foundation of sorting. This is an important skill which is used in science, mathematics, English, and history. For example, when a new animal is discovered, scientists use classification (the animal's physical attributes, such as whether it is cold-blooded or warm-blooded, has or does not have a backbone) to place it within the animal kingdom. Children use classification to sort objects into sets. To create a set of green buttons, the child must first identify the object as a button and then determine whether it is green. At the same time, the child must reject objects that are not buttons and/or are not green. Provide children many opportunities to classify and sort different objects to develop this important skill.

