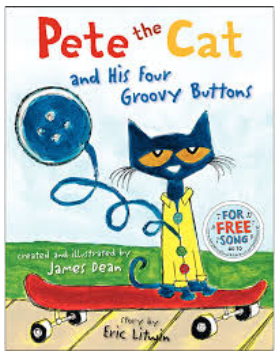
Pete the Cat and His Four Groovy Buttons



Pete the Cat is wearing his favorite shirt—the one with the four totally groovy buttons. But when one falls off, does Pete cry? Goodness, no! He just keeps on singing his song—after all, what could be groovier than three groovy buttons? Let's explore counting and sorting by making Pete a button box!

Materials: **Pete the Cat and His Four Groovy Buttons** by James Dean DUPLO bricks Hula hoops 4 DUPLO Base Plates 1 button bag for each group of 4

Intro: **Review** rules and procedures for LEGO Engineering. Introduce the book "Pete and His Four Groovy Buttons". Set the stage for listening by asking an "I wonder" statement based on the cover illustration – i.e. " I wonder what is popping off Pete's nifty yellow shirt? Why is it popping off? What do you think will do about this button? Have you ever had a button pop off of your clothes? What happened?" **Read aloud and** discuss the story. **Ask questions…**

- How many buttons are on Pete's shirt? What time is it on the clock? What is Pete doing at 8:00 in the morning?
- When Pete loses a button, how many does he have left?
- What does Pete do every time he loses a button?
- What does Pete think when he has lost his last shirt button?

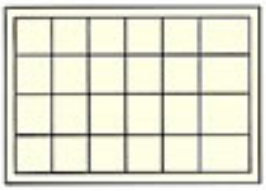
Challenge: Each group will be responsible for ***building a button box for Pete's groovy buttons– one that will have compartments to sort the buttons into!*** How will they do this? Tell students that they will be getting a bag of Pete's buttons – buttons of all different colors and sizes and shapes. They must decide how to sort the buttons – after the buttons are sorted, they must make a box using the large DUPLO plate for a bottom, and using regular DUPLO bricks to make the sides and compartment walls of the box. There must be one compartment for each set of sorted buttons; all pink buttons in one compartment, yellows in another, heart-shaped in another, etc. Show the compartment diagram chart for helpful ideas.

Build: Divide students into four work groups. Have groups work together to sort and build. Monitor each group by observation and asking pertinent questions*: **"How have you decided to sort the buttons?" "How many compartments will you need to store those buttons in?"*** Allow students time to build.

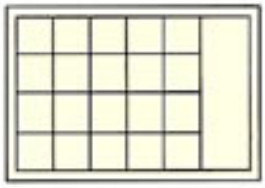
Debrief: Gather the students back together and discuss problems they had and how they solved them. Ask ***"What worked best?" "What didn't work?" "What did you wish you had more of?"***

Presentation: Visit each group's construction. The group presenting are the called the "Sitters" because they sit and describe what they've done. The teacher and the rest of the class are called the "Standers" because they stand around the presenters in a circle to observe and ask questions. The standers and the sitters change depending on the group presenting. Allow each group to explain how they sorted the buttons and how they built their boxes. Pete the Cat will be so pleased!

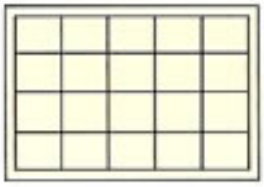
COMPARTMENT DIAGRAM CHART



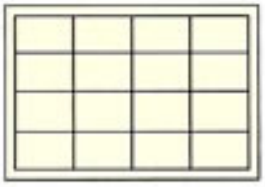
MODEL 202-95
24 compartments



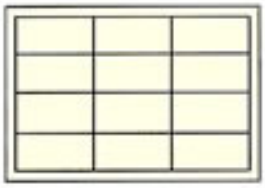
MODEL 204-95
21 compartments



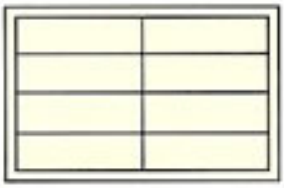
MODEL 206-95
20 compartments



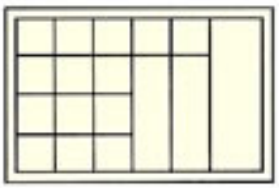
MODEL 209-95
16 compartments



MODEL 211-95
12 compartments



MODEL 213-95
8 compartments



MODEL 227-95
17 compartments

You can sort buttons by:

- **Size**
- **Shape**
- **Color**
- **Patterns**
- **Number of button holes**

What other ways can you think of?