

### **HOW MANY BUTTONS**

**Organization:** A letter explaining the activity was sent to parents. Parents were asked to have children wear clothing with buttons on the day the activity was scheduled. Children worked in small groups.

**Materials:** Paper, pencils, crayons, counters.

**Task:** Children were asked to determine how many buttons people in the classroom were wearing.

**Question:** “How many buttons are the people in this classroom wearing today?” Talk to the people in your group, use counters, draw, or use another strategy to **ESTIMATE** how many buttons we are wearing.

Work for about ten minutes to figure an estimate. Ask students to tell their estimates and record them on the board. Ask what strategy each used to determine his/her estimate. Have students indicate highest and lowest estimates. Determine range. (What is the least number of buttons that could be in the school today? ...greatest number...? What makes you think so?)

**Count:** Each student took one cube for each button that he or she was wearing. Students who were not wearing any buttons took cubes for the buttons one of the adults was wearing. The group’s cubes were snapped together in ten trains. Each child gave his/her extras to one student in each group to try to make ten trains. Then any leftovers were snapped together into ten trains. Ten trains were brought to the board and lined up along the edge. The extra cubes were also brought to the board. Students counted by tens to determine the number of buttons we were wearing.

How might the numbers change if it were field day or picture day?

**A.64a**