

**Title:** Plentiful Pocket Graphing!

**Grade:** Kindergarten – First Grade

**Objective:**

- 1) Students will create a pictorial graph representing the number of students wearing certain numbers of pockets.
- 2) Students will work in pairs to answer questions based on a pictorial graph.

**Duration:** About 40 minutes.

**Related SOL's:**

Number and Number Sense: K.1 The student, given two sets containing 10 or fewer concrete items, will identify and describe one set as having more, fewer, or the same number of members as the other set, using the concept of one-to-one correspondence,

Probability and Statistics: K.15 The student will display objects and information, using objects graphs, pictorial graphs and tables.

**Materials:** One large sheet of paper at least 30" by 48", black marker, crayons, pocket cut-out, tape.

**Procedures:**

- 1) In a whole group, have the students sit at their tables to begin the activity.
- 2) Tell the students that they are going to learn a way to display information that lets them see answers about numbers without even needing to count. Ask them if they can think of any ideas.
- 3) Ask the students to count every pocket they are wearing that day. This includes pants, shirts, skirts, sweaters, and even jackets, if they are wearing them. Assist any children having difficulties.
- 4) After the students have counted their pockets, hand out a pocket cut-out to each student and tell them to decorate their pockets with crayons.
- 5) As the students color, go to each child and ask how many pockets he/she is wearing. Record his/her number on his/her pocket cut-out with a black marker.
- 6) Once all students have their pockets numbered, bring the group to sit in a circle on the floor around the large sheet of white paper. This paper should be labeled across the bottom from left to right as so: "1, 2, 3, 4, 5, 6+." Make

sure that the numbers are far enough apart that the pocket pictures have space to be placed without over-lapping.

- 7) Tell the students that as you call their names, you will give them a piece of tape and they can attach their pocket to the large sheet by matching the number on their pocket with the number of the paper. Make sure the students understand that they line the pockets up neatly.
- 8) Once all the students have taped their pockets to the graph, ask them guiding question: Which number has the most pockets? How can you tell? Which number has the least pockets? Which numbers have fewer pockets than (name specific number)? Do we need to count to tell which has the most and which has the least pockets? How could a graph like this be useful? What other information could we graph? Why is it important that our pocket pictures are the same size and line up?
- 9) Have students return to tables and hand out Pockets Exercise Sheet. Have students answer questions as you read them aloud.

**Evaluation:**

*Formative:*

- 1) Observe students to see if they are able to make a one-to-one correspondence of numbers to pockets while counting.
- 2) Question students for understanding of graph and the information it displays.

*Summative:*

- 1) Students' performance on answering Pocket Exercise Sheet questions with a partner.

**Adaptations:**

- 1) Provide assistance to students who are still developing their counting skills during the pocket counting part of the activity. Either give assistance yourself or ask a more-abled student to be a counting buddy.
- 2) For students with physical disabilities, place the graph on a large table top and allow the student(s) to be one of the first to place their pocket so they do not need to reach as far.

- 3) Students struggling with understanding can be paired with a stronger student during Pocket Exercise Sheet.



