

# Data Organization

Grades 1-2

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| <b>Objectives</b>   | Students will:<br><br><ol style="list-style-type: none"><li>1. Demonstrate how to organize data by writing down their estimations and actual findings</li><li>2. Demonstrate how to make estimations by writing estimations about how many beans can be held</li><li>3. Compare their estimates to their actual data in a math journal entry</li></ol>  |
| <b>Length of Lesson</b>   | Approximately 1.5 hours   |
| <b>Materials</b>  | <ol style="list-style-type: none"><li>1. Paper</li><li>2. Scissors</li><li>3. Pencil</li><li>4. Beans</li><li>5. Chart Paper (or chalkboard)</li></ol>  |
| <b>Activity</b><br><br> | <ol style="list-style-type: none"><li>1. The teacher will read the book <i>Jack and the Beanstalk</i>. The teacher will remind students that Jack received only five beans for the cow. The teacher then asks, "How many beans do you think Jack would have had if he'd received a whole handful instead of just a few?"</li><li>2. The teacher asks the students, "Think about how many jellybeans do you think you can hold in one hand?" The students share their estimates with the class.</li><li>3. Students are to trace one hand onto paper, cut it out, and write their estimation on the thumb. It is helpful for the teacher to model the procedure.</li><li>4. Students are to place jellybeans into their hands, to see how many they can hold. The students get into pairs and check the number of jellybeans the other child held.</li><li>5. The students are to cut out a small paper bean and write the actual number held onto the paper bean, then glue it to the paper.</li><li>6. The teacher will create a large chart which displays children's estimations and actual findings. The children are to arrange their hands in on a class graph.</li><li>7. Students are to identify the smallest number of beans held, and place the hand in the first column of the chart.</li><li>8. Students discuss possible ways to arrange the hands into columns.</li><li>9. Once students agree on how many numbers are assigned to a column, they tape the hands onto the chart.</li></ol> |
| <b>Practice</b>   | A class discussion will focus on the various sizes of hands and how many beans were held. Most likely, a few hands will not fit into the larger hands - more beans, smaller hands - less beans theory. Have students discuss possible reasons why this may have occurred. To find more accurate data, have students trace their hands again, this time keeping their fingers  |

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|  | together. Talk about the outcomes of the second activity.   |
| <b>Post-Lesson Activity</b>  | Students will write a journal entry about the hands and beans activity. They are to talk about the relationships between the size of the hands and the amount of beans.   |
| <b>Assessment</b><br> | The teacher will monitor the students' participation during the activity. In addition, the teacher will read the findings recorded in each student's journal. The teacher will have made a PowerPoint assessment covering the information of estimation with a few simple math questions on estimation, somewhere around 8 to 10 questions. Once the PowerPoint is posted onto SlideServe, the students will be asked to line up at the door of the classroom with a piece of paper and pencil. They will be taken to a computer lab and asked to complete the assessment of estimation questions on SlideServe by writing down the answers they accumulate and handing it in to the teacher when finished. |
| <b>Sources</b>   | <ol style="list-style-type: none"><li>1. Burns, Marylin. (1996). <u>50 Problem Solving Lessons</u>. New York: Math Solutions Publications.</li><li>2. Regniers, Beatrice Schenk. ( 1985). <u>Jack and the Beanstalk</u>. New York: Collier Macmillian.</li></ol> <p>This lesson plan was developed based on a lesson plan by Angie Lund and Sheila Brune.</p>   |