



About the Mathematics in This Unit (page 1 of 2)

Dear Families,

Our class is starting a new mathematics unit about data and probability called *Describing the Shape of the Data*. During this unit, students collect, represent, describe, and interpret data. Students also look at the probability of various events.

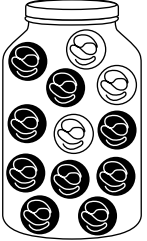
Throughout the unit, students work toward these goals:

BENCHMARKS/GOALS	EXAMPLES																																										
Design an effective survey question to compare two groups.	<p>Data Topic: Who reads more books, fourth graders or seventh graders?</p> <p>Survey Question: How many books did you read last month?</p>																																										
Organize and represent data about two groups in order to compare the groups.	<p>Fourth Graders</p> <table border="1"> <caption>Dot Plot Data</caption> <thead> <tr> <th>Number of Books</th> <th>Fourth Graders</th> <th>Seventh Graders</th> </tr> </thead> <tbody> <tr><td>3</td><td>1</td><td>0</td></tr> <tr><td>4</td><td>2</td><td>0</td></tr> <tr><td>5</td><td>3</td><td>0</td></tr> <tr><td>6</td><td>4</td><td>0</td></tr> <tr><td>7</td><td>2</td><td>0</td></tr> <tr><td>8</td><td>0</td><td>4</td></tr> <tr><td>9</td><td>0</td><td>2</td></tr> <tr><td>10</td><td>0</td><td>3</td></tr> <tr><td>11</td><td>0</td><td>1</td></tr> <tr><td>12</td><td>0</td><td>0</td></tr> <tr><td>13</td><td>0</td><td>0</td></tr> <tr><td>14</td><td>0</td><td>0</td></tr> <tr><td>15</td><td>0</td><td>1</td></tr> </tbody> </table> <p>Seventh Graders</p> <p>Number of Books</p>	Number of Books	Fourth Graders	Seventh Graders	3	1	0	4	2	0	5	3	0	6	4	0	7	2	0	8	0	4	9	0	2	10	0	3	11	0	1	12	0	0	13	0	0	14	0	0	15	0	1
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BENCHMARKS/GOALS	EXAMPLES
Describe the shape of the data from a numerical data set, including where the data are concentrated and the highest, lowest, and median values.	<p>Most fourth graders read between 8 and 10 books last month.</p> <p>The median number of books read by fourth graders is 9 books.</p>
Use data to compare two groups.	<p>The fewest books a fourth grader read is 6. Almost half of the seventh-grade students read fewer than 6 books.</p> <p>The median in the seventh-grade data set (6 books) is lower than the median in the fourth-grade data set (9 books).</p>
Use evidence from a set of data to support an argument.	<p>Fourth-grade students in our study read more books than did seventh-grade students. Even though a few seventh graders read 10 books or more, most seventh graders were at or below the median for fourth graders.</p>
Describe the likelihood of an event in terms of a scale from impossible (probability of 0) to certain (probability of 1).	<p>It is less likely that you will pull a white marble out of this jar than a black marble. The probability of getting a white marble is between 0 and $\frac{1}{2}$.</p> 

Please look for more information and activities about *Describing the Shape of the Data* that will be sent home in the coming week.