



<p>Survey</p>	<p>A method for collecting quantitative information about items in a population</p>	<table border="1"> <thead> <tr> <th>Favorite Food Choices</th> <th>Frequency</th> </tr> </thead> <tbody> <tr> <td>Tacos</td> <td> </td> </tr> <tr> <td>Chicken Nuggets</td> <td> </td> </tr> <tr> <td>Hamburgers</td> <td> </td> </tr> <tr> <td>Hot Dogs</td> <td> </td> </tr> <tr> <td>Pizza</td> <td> </td> </tr> </tbody> </table>	Favorite Food Choices	Frequency	Tacos		Chicken Nuggets		Hamburgers		Hot Dogs		Pizza					
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<p>Tally Marks</p>	<p>Tally marks are a quick way of keeping track of numbers in groups of five. These are written as four vertical lines crossed by a diagonal line.</p>																	
<p>Bar Graph</p>	<p>A graph that is used to compare quantities. The height or length of each bar represents a given number.</p> <table border="1"> <thead> <tr> <th>flavor</th> <th>preferences</th> </tr> </thead> <tbody> <tr> <td>chocolate</td> <td>8</td> </tr> <tr> <td>vanilla</td> <td>14</td> </tr> <tr> <td>strawberry</td> <td>10</td> </tr> </tbody> </table>	flavor	preferences	chocolate	8	vanilla	14	strawberry	10	<p>preferences</p> <table border="1"> <caption>Data for Bar Graph: preferences</caption> <thead> <tr> <th>Flavor</th> <th>Frequency</th> </tr> </thead> <tbody> <tr> <td>chocolate</td> <td>8</td> </tr> <tr> <td>vanilla</td> <td>14</td> </tr> <tr> <td>strawberry</td> <td>10</td> </tr> </tbody> </table>	Flavor	Frequency	chocolate	8	vanilla	14	strawberry	10
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<p>Histogram</p>	<p>A special kind of bar graph that displays the frequency of data that has been organized into equal number groupings. The number groupings cover all possible values of data, therefore there are no spaces between the bars.</p>	<table border="1"> <caption>Data for Histogram: Number of students</caption> <thead> <tr> <th>Ages of students</th> <th>Number of students</th> </tr> </thead> <tbody> <tr> <td>10</td> <td>2</td> </tr> <tr> <td>11</td> <td>6</td> </tr> <tr> <td>12</td> <td>9</td> </tr> <tr> <td>13</td> <td>7</td> </tr> <tr> <td>14</td> <td>3</td> </tr> </tbody> </table>	Ages of students	Number of students	10	2	11	6	12	9	13	7	14	3				
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<p>Line Graph</p>	<p>A graph used to show change and direction of change over a period of time.</p>	<p>Temperature in Laredo, Tx</p> <table border="1"> <caption>Data for Line Graph: Temperature in Laredo, Tx</caption> <thead> <tr> <th>Day</th> <th>Temperature °F</th> </tr> </thead> <tbody> <tr> <td>Mon</td> <td>32</td> </tr> <tr> <td>Tue</td> <td>40</td> </tr> <tr> <td>Wed</td> <td>36</td> </tr> <tr> <td>Thu</td> <td>34</td> </tr> <tr> <td>Fri</td> <td>46</td> </tr> <tr> <td>Sat</td> <td>50</td> </tr> <tr> <td>Sun</td> <td>62</td> </tr> </tbody> </table>	Day	Temperature °F	Mon	32	Tue	40	Wed	36	Thu	34	Fri	46	Sat	50	Sun	62
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<p>Circle Graph</p>	<p>A graph used to compare parts of a whole. The circle represents the whole and is separated into parts of the whole.</p>																
<p>Pictographs</p>	<p>A kind of graph that uses pictures or symbols where each symbol or picture represents a certain number of some thing.</p>	<p>Pets owned by students</p> <p>cat </p> <p>dog </p> <p>fish </p> <p>bird </p>															
<p>Frequency</p>	<p>The frequency of a particular data value is the number of times the data value occurs.</p>	<p>Number of people in your classmate's families 2, 3, 6, 5, 3, 4, 5, 3, 3, 2, 3, 4, 3, 4, 3, 4</p>															
<p>Frequency table</p>	<p>A frequency table is constructed by arranging collected data values in ascending order of magnitude with their corresponding frequencies.</p>	<table border="1"> <tr> <td>2</td> <td> </td> <td>2</td> </tr> <tr> <td>3</td> <td> </td> <td>6</td> </tr> <tr> <td>4</td> <td> </td> <td>4</td> </tr> <tr> <td>5</td> <td> </td> <td>2</td> </tr> <tr> <td>6</td> <td> </td> <td>1</td> </tr> </table>	2		2	3		6	4		4	5		2	6		1
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<p>Frequency graph</p>	<p>A Frequency Graph is a graph plotted from a frequency table.</p>	<p>Number of people in your classmate's families</p> <p><i>Can you tell from your frequency graph what is the most frequent number of members in a family?</i></p>															



<p>Outlier</p>	<p>An outlier is a data item that is much higher or much lower than items in a data set.</p>	<p>Scores on math 7th test: 100, 95, 85, 100, 90, 95, 100, 95, 25, 90</p>
<p>Stem and Leaf Plot</p>	<p>A data plot which uses part of the data value as the stem and the rest of the data value (the leaf) to form groups or classes. This is very useful for sorting data quickly. The data is arranged by place value. The digits in the largest place is referred to as the stem and the digits in the smallest place are referred to as the leaf (leaves).</p>	<p>Scores on math test: 80,55,85,58,75,60,70,75,65,95, 80,95,70,80,85,90,100,85,65,70</p> <pre> 5 5 8 6 0 5 5 7 0 0 0 5 5 8 0 0 0 5 5 5 9 0 5 5 10 0 </pre>
<p>Box plot (box-and-whisker plot)</p>	<p>Its a chart that shows median, miniumun and maximun data values, upper and lower quartiles.</p> <p>A boxplot may also indicate which observations, if any, might be considered outliers.</p>	<p>The box plot shows a vertical axis from 0 to 2.0. The minimum is at 0.1, the first quartile is at 0.4, the median is at 0.7, the third quartile is at 1.1, and the maximum is at 2.1. The Interquartile Range (IQR) is the red-shaded area between 0.4 and 1.1.</p>
<p>Interpreting a boxplot</p>	<p>Using the boxplot, you can tell:</p> <ul style="list-style-type: none"> • The maximum temperature is 110°F (aprox) • The minimum temperature is 30°F (aprox) • The average temperature is 70°F (aprox) • The first quartile temperature is 45°F (aprox) • The third quartile temperature is 80°F (aprox) 	<p>The horizontal box plot shows a scale from 20 to 110. The minimum is at 30, Q1 is at 45, Median is at 70, Q3 is at 80, and Maximum is at 110.</p>

