

Name: Key
 Period: _____

Main Ideas/Questions	Notes/Examples
Measures of Central Tendency	Mean (\bar{x}): average; add up all the values and divide by the number of values
	Median: middle number when the values are in order from least to greatest *Note: take the average of the two middle values if the set has an even number of values
	Mode(s): value that occurs the most, <u>can have no mode (none)</u>
Range	Biggest value – smallest value <u>OR</u> max - min
Examples	Directions: Find the mean, median, mode(s), and range of each data set. Round to the nearest tenth when necessary.
	<p>1. The daily high temperature for the past two weeks in Orlando: {89, 90, 88, 91, 82, 90, 88, 88, 86, 90, 92, 87, 89, 86}</p> <p>82, 86, 86, 87, 88, 88, 88, 89, 89, 90, 90, 90, 91, 92</p> <p>mean = $\frac{1236}{14}$ range = $92 - 82 = 10$</p> <p>median = $\frac{88+89}{2}$</p> <p>Mean: <u>88.3</u> Median: <u>88.5</u> Mode(s): <u>88, 90</u> Range: <u>10</u></p>
	<p>2. The number of points scored by a football team during their 16-game season: {7, 31, 33, 16, 30, 45, 25, 25, 25, 16, 28, 24, 20, 33, 31, 10}</p> <p>7, 10, 16, 16, 20, 24, 25, 25, 25, 28, 30, 31, 31, 33, 33, 45</p> <p>mean = $\frac{399}{16}$ range = $45 - 7 = 38$</p> <p>median = $\frac{25+25}{2}$</p> <p>Mean: <u>24.9</u> Median: <u>25</u> Mode(s): <u>25</u> Range: <u>38</u></p>
	<p>3. Jenna's math quiz grades in the second quarter: {78, 90, 95, 84, 80, 82, 87, 98, 72}</p> <p>72, 78, 80, 82, 84, 87, 90, 95, 98</p> <p>mean = $\frac{766}{9}$</p> <p>range = $98 - 72 = 26$</p> <p>Mean: <u>85.1</u> Median: <u>84</u> Mode(s): <u>none</u> Range: <u>26</u></p>
<p>4. Trevon has four grades in science class so far: 97, 78, 89, and 94. If he has a test coming up, what grade would he need so his overall average is at least 90? x = test grade</p> <p>78, 89, 94, 97</p> <p>$\frac{78+89+94+97+x}{5} \geq 90$ 5. $\frac{358+x}{5} \geq 90.5$</p> <p>$358+x \geq 450$ -358 -358</p> <p style="text-align: center;">$x \geq 92$</p>	