

Core Knowledge												
1	Data		A set of information									
2	Range	range = largest - smallest	The difference between the largest and smallest values									
3	Mode	<p><b>3, 4, 5, 5, 5, 6, 6, 7, 8, 8, 9</b></p> <p>mode = 5</p>	The most common value (also called the modal value)									
4	Median	<p>1, 3, 3, <b>6</b>, 7, 8, 9</p> <p>Median = <b>6</b></p> <p>1, 2, 3, <b>4, 5</b>, 6, 8, 9</p> <p>Median = <math>(4 + 5) \div 2</math></p> <p>= <b>4.5</b></p>	The middle value when the data is written in <b>order</b> . If there are an even number of values, the median is the middle of the two middle values.									
5	Pictogram	<p><b>Colour of cars</b></p> <p>Red: ● ● ● ●</p> <p>Blue: ● ●</p> <p>Green: ●</p> <p>White: ● ●</p> <p>Key: ● represents 2 cars</p>	A chart which uses pictures to represent quantity. A pictogram always has a <b>key</b> .									
6	Key		Labels that identify how to read a chart. In a pictogram the key shows what each picture represents.									
7	Bar chart	<p><b>Laptop case sales</b></p>	Bars of equal width show the data. Bars are equally spaced and there are labels on each axis.									
8	Bar-line chart	<p><b>Mass of bowling ball</b></p>	Like a bar chart but uses lines instead of bars									
9	Tally chart	<table border="1"> <thead> <tr> <th>vehicle</th> <th>frequency</th> </tr> </thead> <tbody> <tr> <td>cars</td> <td>     </td> </tr> <tr> <td>trucks</td> <td>    </td> </tr> <tr> <td>vans</td> <td>  </td> </tr> </tbody> </table>	vehicle	frequency	cars		trucks		vans		Tallies record counting, use groups of 5.	
vehicle	frequency											
cars												
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10	Frequency	<table border="1"> <thead> <tr> <th>vehicle</th> <th>frequency</th> <th>frequency</th> </tr> </thead> <tbody> <tr> <td>cars</td> <td>     </td> <td>8</td> </tr> <tr> <td>trucks</td> <td>    </td> <td>5</td> </tr> </tbody> </table>	vehicle	frequency	frequency	cars		8	trucks		5	The number of times a particular item appears in a data set.
vehicle	frequency	frequency										
cars		8										
trucks		5										
11	Grouped data	<table border="1"> <thead> <tr> <th>Number of emails</th> <th>Tally</th> <th>Frequency</th> </tr> </thead> <tbody> <tr> <td>1-4</td> <td>    </td> <td>5</td> </tr> <tr> <td>5-8</td> <td>     </td> <td>10</td> </tr> </tbody> </table>	Number of emails	Tally	Frequency	1-4		5	5-8		10	Data can be grouped into classes
Number of emails	Tally	Frequency										
1-4		5										
5-8		10										
12	Modal class		The modal class is the class with the highest frequency.									
13	Continuous data	<p><b>Height of plants in garden</b></p>	Data that is measured, it can have any value (infinite). On a bar chart this data is shown with no gaps between the bars.									
14	Discrete data	eg shoe size, days of the week	Data that has distinct values									

15	Mean	$\frac{\text{sum of amounts}}{\text{number of amounts}}$	The total of a set of values, divided by the number of values.
16	Average		A typical value or a measure of central tendency. Mode, median and mean are types of average.
17	Comparing data sets	<i>"Paul's jumps are less consistent than Daniel's because his jumps have a greater range. Daniel jumps further on average than Paul because his jumps have a greater mean."</i>	Find an average and the range, then write 2 sentences comparing the data.
18	Line graph		Shows how quantities change. Plot points with a cross and join with a straight line.
19	Minimum		The lowest or least amount or value
20	Maximum		The highest or greatest amount or value
21	Dual bar chart		Shows 2 sets of data on the same graph, must include a key.
22	Compound bar chart		Combines different sets of data in each bar, must include a key.
<b>Depth Knowledge</b>			
23	Anomaly	18, 24, 16, 20, 21, 18, 21, 100 100 is an anomaly, it's much larger than the rest of the data	A value that doesn't fit with the rest of the data. Also called an outlier.
24	Comparative bar chart		A bar chart that shows more than one dataset e.g. dual bar charts and compound bar charts
25	Axis break		This shows that some values have been left off the axis. It can save space where there is no relevant data and enhance readability.
26	Bimodal	<b>3, 4, 5, 5, 5, 6, 6, 6, 8, 8, 9</b> modes = 5 and 6 two modes are called bimodal	2 modes
27	Multi modal		More than 2 modes