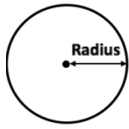

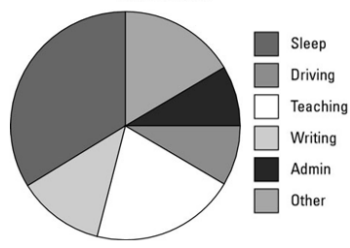
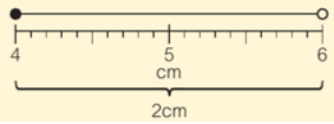
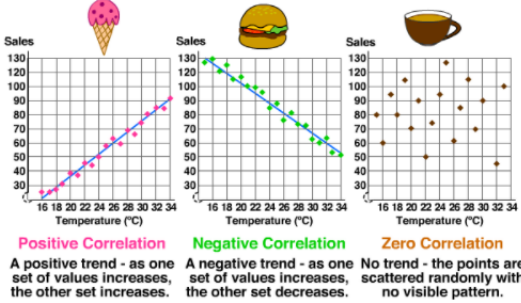
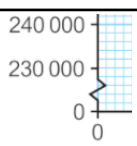
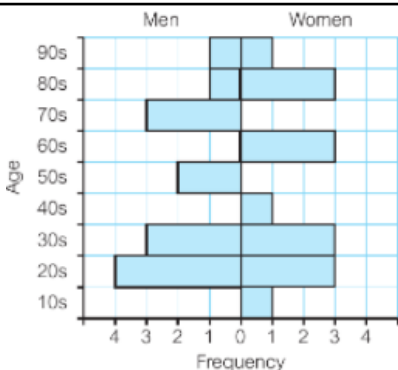


Prior Knowledge																			
1	Radius	 <p>The distance from the centre of a circle to the circumference</p>																	
2	Angles in a full turn	 <p><math>360^\circ = \text{full turn} = \text{one revolution}</math></p>																	
3	Frequency	The number of times something occurs.																	
4	Mode	<p><b>3, 4, 5, 5, 5, 6, 6, 7, 8, 8, 9</b></p> <p>mode = 5</p>	The value that occurs <b>most</b> often, or has the highest frequency.																
5	Median	<p>1, 3, 3, <b>6</b>, 7, 8, 9</p> <p>Median = <b>6</b></p> <p>1, 2, 3, <b>4</b>, <b>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 in <b>order</b> . If there are an even number of values the median lies halfway between the two middle values.																
6	Mean	<p><u>sum of amounts</u></p> <p><u>number of amounts</u></p>	The total of the values divided by the number of values.																
7	Range	range = biggest value - smallest value	The spread of the data. Calculate by subtracting the smallest value from the biggest.																
8	Modal class		The class with the highest frequency in a grouped frequency table.																
9	Comparing data sets	<p><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></p>	Find an average and the range, then write 2 sentences comparing the data.																
Core Knowledge																			
10	Pie chart	<p>Breakdown of Colin's average day Total: 24 hours</p> 	A pie chart is a circle divided into slices called sectors. Each sector represents a set of data.																
11	Frequency table	<table border="1" data-bbox="534 1433 869 1568"> <thead> <tr> <th>Age (years)</th> <th>Frequency</th> </tr> </thead> <tbody> <tr> <td>12</td> <td>1</td> </tr> <tr> <td>13</td> <td>17</td> </tr> <tr> <td>14</td> <td>12</td> </tr> </tbody> </table>	Age (years)	Frequency	12	1	13	17	14	12	A table used to organise data as an ordered list with their frequencies.								
Age (years)	Frequency																		
12	1																		
13	17																		
14	12																		
12	Two-way table	<p>Dominant Hand</p> <table border="1" data-bbox="550 1601 853 1747"> <thead> <tr> <th></th> <th>Left</th> <th>Right</th> <th>Totals</th> </tr> </thead> <tbody> <tr> <th>2 years</th> <td>9</td> <td>11</td> <td>20</td> </tr> <tr> <th>18 years</th> <td>15</td> <td>5</td> <td>20</td> </tr> <tr> <th>Totals</th> <td>20</td> <td>20</td> <td>40</td> </tr> </tbody> </table>		Left	Right	Totals	2 years	9	11	20	18 years	15	5	20	Totals	20	20	40	A two-way table divides data into groups in rows and columns.
	Left	Right	Totals																
2 years	9	11	20																
18 years	15	5	20																
Totals	20	20	40																
13	Grouped data	<p>The class <math>4 \leq l &lt; 6</math> includes all values of length <math>l</math> from <math>l = 4</math> cm up to, but not including, 6 cm.</p> 	Data can be grouped into classes.																
14	Class width	<table border="1" data-bbox="534 1960 869 2094"> <thead> <tr> <th>Height</th> <th>Frequency</th> <th>Class width</th> </tr> </thead> <tbody> <tr> <td><math>140 \leq h &lt; 150</math></td> <td>8</td> <td>10</td> </tr> <tr> <td><math>150 \leq h &lt; 155</math></td> <td>9</td> <td>5</td> </tr> <tr> <td><math>155 \leq h &lt; 160</math></td> <td>4</td> <td>5</td> </tr> </tbody> </table>	Height	Frequency	Class width	$140 \leq h < 150$	8	10	$150 \leq h < 155$	9	5	$155 \leq h < 160$	4	5	The width of a class in a frequency table.				
Height	Frequency	Class width																	
$140 \leq h < 150$	8	10																	
$150 \leq h < 155$	9	5																	
$155 \leq h < 160$	4	5																	

15	Median (position)	In a set of $n$ data values, the median is the $\frac{n+1}{2}$ th one.	When data is grouped you can identify the position of the median value by adding 1 to the number of values ( $n$ ) and dividing by 2.
16	Stem and leaf diagram	<pre> 1   9 2   2 2 4 8 8 8 8 3   5 6 9 </pre> <p>Key: 1   9 means 19 cm</p>	This shows numerical data split into a 'stem' and 'leaves'. The key shows how to read the data.
17	Outlier		An extreme value, or anomaly, that doesn't fit the pattern of the other data values.
18	Scatter graph	 <p><b>Positive Correlation</b> A positive trend - as one set of values increases, the other set increases.</p> <p><b>Negative Correlation</b> A negative trend - as one set of values increases, the other set decreases.</p> <p><b>Zero Correlation</b> No trend - the points are scattered randomly with no visible pattern.</p>	This shows two sets of data on the same graph. The shape of the graph shows if there is a correlation between the data sets.
19	Line of best fit		A line of best fit represents the trend of the correlation. When drawing, aim for a balance of points above and below the line.
20	Axis break		An axis break can improve readability for large data values, but it can be misleading as it can exaggerate the differences in data.

**Depth**

21	Back to back stem and leaf diagram	<pre> Before video     After video   8 5 3 2     1   2   9 6 6 4 1 0   2   1 7 9                3   0 6 7 7 8                4   2 2 5 9                5   0 0 </pre> <p>Key                          Key 2   3 means 32              3   6 means 36</p>	This shows 2 sets of data and is useful for comparing the distributions. There is a key to read each side. The left hand side is ordered right to left from the stem.
22	Population pyramid		This is a back to back bar chart and is useful for comparing distributions.