

Unit 12 – collecting data

No.	Question	Answer	Example																
12.1	What does qualitative mean?	Data that describes something	Hair colour																
12.2	What does quantitative mean?	Data that can be measured or counted	Number of dogs in the park																
12.3	What is discrete data?	Data that can only take set values	Shoe size Number of pets you have																
12.4	What is continuous data?	Data that can take any value (can be decimal)	Height Weight																
12.5	What is primary data?	Data that is collected first hand	Taking a survey																
12.6	What is secondary data?	Data that is collected by someone else	The internet																
12.7	What is a sample?	A smaller group taken from the total population you are testing	In year 8 there are 200 students, I took a sample of 40 to give my survey.																
12.8	What are four things that questionnaires should NOT be?	<ul style="list-style-type: none"> Too personal Too complicated Leading Specific to only certain people 	On average how many books do you read per month? <input type="checkbox"/> none <input type="checkbox"/> 1 – 2 <input type="checkbox"/> 3 – 4 <input type="checkbox"/> 5 – 6 <input type="checkbox"/> 7 or more																
12.9	What are four things that response boxes should be?	<ul style="list-style-type: none"> Be exhaustive Not overlap Have specific units and time frame Have specific quantitative answers 	<input type="checkbox"/> none <input type="checkbox"/> 1 – 2 <input type="checkbox"/> 3 – 4 <input type="checkbox"/> 5 – 6 <input type="checkbox"/> 7 or more																
12.10	What are three things that tally charts should include?	<ul style="list-style-type: none"> The specific category Tally Frequency 	<table border="1"> <thead> <tr> <th>Colour</th> <th>Tally</th> <th>Frequency</th> </tr> </thead> <tbody> <tr> <td>Red</td> <td>III</td> <td>3</td> </tr> <tr> <td>Blue</td> <td>II</td> <td>2</td> </tr> <tr> <td>Green</td> <td>IIII</td> <td>4</td> </tr> </tbody> </table>	Colour	Tally	Frequency	Red	III	3	Blue	II	2	Green	IIII	4				
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Red	III	3																	
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12.11	What are three things that two way tables must include?	<ul style="list-style-type: none"> One data set along the top row One data set along the left column 2 total headings 	<table border="1"> <thead> <tr> <th></th> <th>Girls</th> <th>Boys</th> <th>Total</th> </tr> </thead> <tbody> <tr> <th>Yr 7</th> <td>4</td> <td>3</td> <td>7</td> </tr> <tr> <th>Yr 8</th> <td>6</td> <td>2</td> <td>8</td> </tr> <tr> <th>Total</th> <td>10</td> <td>5</td> <td>15</td> </tr> </tbody> </table>		Girls	Boys	Total	Yr 7	4	3	7	Yr 8	6	2	8	Total	10	5	15
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Unit 13 – presenting data

No.	Question	Answer	Example												
13.1	What three things must a pictogram include?	<ul style="list-style-type: none"> A heading column A sensible picture A key 													
13.2	What four things must a bar chart have?	<ul style="list-style-type: none"> An x-axis representing frequency A y-axis representing the groups The bars must be the same width The axis must go up in equal increments 													
13.3	What are grouped frequency tables?	A way of recording large data sets The categories are a set of data values represented using inequalities	<table border="1"> <thead> <tr> <th>Weight of box (w kg)</th> <th>Frequency</th> </tr> </thead> <tbody> <tr> <td>0 < w ≤ 4</td> <td>11</td> </tr> <tr> <td>4 < w ≤ 8</td> <td>16</td> </tr> <tr> <td>8 < w ≤ 12</td> <td>29</td> </tr> <tr> <td>12 < w ≤ 16</td> <td>26</td> </tr> <tr> <td>16 < w ≤ 20</td> <td>20</td> </tr> </tbody> </table>	Weight of box (w kg)	Frequency	0 < w ≤ 4	11	4 < w ≤ 8	16	8 < w ≤ 12	29	12 < w ≤ 16	26	16 < w ≤ 20	20
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13.3	What must grouped frequency tables include?	<ul style="list-style-type: none"> A heading column A frequency column Sometimes a tally column 													
13.4	How many degrees in a pie chart?	360°													
13.5	How do you calculate each angle in a pie chart?	Divide by the total frequency and multiply by 360													

Unit 14 – interpreting data

No.	Question	Answer	Example
14.1	How do you calculate the mean?	Add up all the data sets Divide by how many pieces of data there are	6, 3, 4, 7 $\frac{6 + 3 + 4 + 7}{4} = 5$
14.2	How do you calculate the median?	Put all the data in ascending order and find the middle value.	7, 2, 4, 8, 3, 9, 1 1, 2, 3, <u>4</u> , 7, 8, 9 4 is the median as it is in the middle
14.3	How do you calculate the mode?	Find the value that occurs the most	7, 2, 4, 8, 3, 9, 1, 9, 9 9 is the mode as it appears the most
14.4	How do you calculate the range?	Subtract the smallest value from the largest	7, 2, 4, 8, 3, 9, 1, 9, 9 9 – 1 = 8 therefore 8 is the range