

# Maths Workout - Statistics & Probability

<b>Topic 13 - Data Handling Theory</b>				
<b>Target 1</b>	<b>Target 2</b>	<b>Target 3</b>	<b>Target 4</b>	<b>Target 5</b>
<i>Understand types of data, the use of a frequency table and grouped frequency table</i>	<i>Understand the data handling cycle</i>	<i>Understand how to create a questionnaire and avoid bias</i>	<i>Understand key points of 4 sampling methods</i>	<i>Key points: 3 averages; bar chart, frequency chart, and histogram; frequency polygon and frequency chart</i>
1. Presentation: Know the difference between categorical and numerical data	1. Presentation: Introduction to the 4 stages of the data handling cycle	1. Presentation: Some basic principles of writing a questionnaire	1. Presentation: Understand the terms sample, population, survey and census	1. Presentation: The 3 averages: Interactive diagram
2. Speed response: Distinguish between categorical and numerical data	2. Presentation: Stage 1: Identify the problem	2. Presentation: Some basic principles of writing a questionnaire	2. Presentation: Introduction to 4 of the main types of sampling	2. Presentation: Know the difference between a bar chart, a frequency chart and a histogram: Interactive diagram
3. Presentation: Know the difference between discrete and continuous data	3. Presentation: Stage 1: Plan the Process	3. Presentation: Some basic principles of writing a questionnaire	3. Presentation: Random sampling: uses, advantages & disadvantages	3. Presentation: Understand how a frequency chart and frequency polygon are related
4. Speed response: Distinguish between discrete and continuous data	4. Presentation: Stage 2: Collect the data	4. Presentation: Biased questions	4. Presentation: Stratified sampling, : uses, advantages & disadvantages	
5. Speed response: Distinguish between categorical, numerical discrete and numerical continuous data	5. Presentation: Stage 3: Process & present the data	5. Presentation: Biased questions	5. Calculate the correct values for a stratified sample	
6. Speed response: Distinguish between categorical, numerical discrete and numerical continuous data	6. Presentation: Stage 4: Interpret and summarise the results	6. Speed Response: Distinguish between a biased question and a fair question	6. Calculate the correct values for a stratified sample: extension	
7. Presentation: Know the terms raw data and frequency table	7. Presentation: Stage 4: Evaluate the results and the whole process	7. Speed Response: Distinguish between a biased question and a fair question	7. Calculate the correct values for a stratified sample: extension	
8. Presentation: Understand a grouped frequency table	8. Presentation: All 4 Stages of DHC: interactive diagram		8. Presentation: Quota sampling: uses, advantages & disadvantages	
			9. Presentation: Systematic sampling: uses, advantages & disadvantages	
			10. Presentation: All 4 sampling methods: Interactive diagram	