

Year 9 Statistics Curriculum Map

Topic		Learning Objectives
1	Planning	1a.1 Hypotheses
		1a.2 Designing Investigations
		1a.3 Strategies to deal with potential problems
2	Types of Data	1b.1 Describing Data
		1b.2 Advantages and implications of merging/grouping data
		<u>1b.3 Know and apply the terms explanatory (independent) variables and response (independent) variables</u>
		1b.4 Primary/secondary data
3	Population and Sampling	Population, sample frame and sample
		Judgement, opportunity (convenience), quota sampling
		Random, systematic and quota sampling
		Stratified
4	Collecting Data	Experimental (laboratory, field and natural), simulation, questionnaires, observation, reference, census, population and sampling
		Reliability and validity
		Collecting sensitive content matter
		Random Response
		Questionnaires and interviews
		Problems with collected data
		Controlling extraneous variables

5	Estimation	Know that sample size has an impact on reliability and replication
		Use summary statistics to make estimates of population characteristics
		Use sample data to predict population proportions
		Apply Petersen Capture-Recapture to calculate an estimate of the size of a population
6	Tabulation	Tally, tabulation, two-way tables
		Frequency tables
7	Diagrams	Pictogram
		Pie charts
		Venn diagrams
		Stem and Leaf diagrams
		<u>Population pyramids</u>
		<u>Choropleth map</u>
		Comparative pie chart
		Comparative 2D representations/ comparative 3D representations
		Bar charts
		Line graphs
		Time series
		Scatter diagrams
		<u>Bar line (vertical line) charts</u>
		<u>Frequency polygons</u>
		<u>Cumulative frequency (discrete and grouped) charts</u>
		<u>Histograms (equal class widths)</u>
<u>Box plots</u>		
Histograms (unequal class widths)		