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Curriculum Planning Template

Subject: Statistics Year 10 Ability All

Half Term 1 / weeks	**Week 1-2**	**Week 3**	**Week 4-6**
Topic	Block 1 – The Sec Block 2 – Hypotheses	Block 3 – Data Types	Block 4 – Data Collection & Sampling
Topic overview **Pupils will learn…**	To investigate the Statistical Enquiry Cycle. To be able to write suitable hypotheses and critique unsuitable hypotheses.	To understand the different types of data and their advantages and disadvantages.	To be able to plan and collect data, choosing an appropriate method to do so.
Components	• To investigate the Statistical Enquiry Cycle and its impact throughout the course. • Know that a hypothesis can only be tested through appropriate collection and analysis of data • Know the constraints that may be faced in designing an investigation to test a hypothesis • Determine proactive strategies to mitigate issues that might arise during the statistical enquiry process	• To know and apply terms used to describe data (including types, grouping and variables) • To know the difference between primary and secondary data.	• To have an understanding of the differences between population, census and sample • To be able to use a variety of sampling techniques and understand the advantages and disadvantages of each • To know key features to be considered when planning data collection • To understand why it is important that data be cleansed before further processing
What pupils should already know (prior learning components)	Students will have an idea of the Data Handling Cycle from Year 9 Unit 6 and Year 9 Unit 10 about data handling.	Students will have already met types of data in Year 8 and briefly considered some advantages and disadvantages	Students should already be familiar with tables, tally charts, questionnaires and bias.
Transferrable knowledge (skills)	Statistical Enquiry Cycle will be referred to in every lesson as it should run through the course and each section should feature in the Cycle (probability as a notable exception). Hypotheses is a key part of the set up of an investigation and will lead into the next blocks about collecting data. Also has cross curricular links with Science, Geography and Design.	Identifying relevant types of data is important not just in planning statistical enquires but also in collecting data, and planning and executing data analysis. Students will also use this in Maths and in other GCSE subjects.	Students need to know the appropriate method for collecting data in further blocks throughout the course. This skill will be used in any GCSE or A Level course which requires data to be collected.
Key vocabulary pupil will know and learn	Statistical Enquiry Cycle, hypothesis	Continuous, discrete, primary, secondary, quantitative, qualitative, categorical, grouped, ungrouped, variable, explanatory, response, independent.	Population, sample, census, grouped, ungrouped, primary, secondary, random, stratified, systematic, quota, convenience, judgement, observation, simulation, questionnaire, bias,
Assessment activities	Block 1-4 covered in Test 1 Homework available for after each block	Block 1-4 covered in Test 1 Homework available for after each block	Block 1-4 covered in Test 1 Homework available for after each block
Resources available	Template lessons available for each block. Latest edition of textbook available. Certain Hegarty quizzes are suitable but not every topic features online	Template lessons available for each block. Latest edition of textbook available. Certain Hegarty quizzes are suitable but not every topic features online	Template lessons available for each block. Latest edition of textbook available. Certain Hegarty quizzes are suitable but not every topic features online

Notes **Why this topic is important…**	The whole premise of statistics is built around the SEC, not just the course but any use of statistics. As such this topic is crucial to put the subject into context. Once the cycle is established the first element, the hypothesis, is investigated in detail. Any statistical enquiry is built to investigate a hypothesis, so this is a necessary first step.	This topic considers the data types suitable for different sorts of hypothesis and the most relevant to use in different situations. This is a necessary step as a precursor to collecting data.	Prior to any manipulation of data to answer a hypothesis, it is essential that good quality data is obtained. Students need to understand what constitutes good quality data and how to go about collecting it to avoid pitfalls such as bias. This topic looks at the different ways to collect various types of data with their advantages and disadvantages before considering how to initially process collected data ready for analysis by cleansing it.