



Learning Journey for Statistics

Index Numbers

How does this unit link to prior learning?	What will you be learning about?
<p>Percentages and Percentage Change</p> <ul style="list-style-type: none"> Calculate percentage increases and decreases. Interpret values relative to a base value of 100. Understand that indices above/below 100 represent percentage change. <p>Ratio and Proportion</p> <ul style="list-style-type: none"> Use scaling and multiplicative reasoning. Compare values proportionally. Understand how index numbers standardise data. <p>Interpreting Data and Graphs</p> <ul style="list-style-type: none"> Read tables and graphs. Identify trends over time. Compare changes between datasets. <p>Comparing Data</p> <ul style="list-style-type: none"> Make fair comparisons between different quantities. 	<ul style="list-style-type: none"> Know the different types of index numbers. Use different index numbers in context Calculate and interpret data involving rates of change.
	<p>British Values</p>
	<ul style="list-style-type: none"> Rule of Law - use of formula for index numbers and crude rates to analyse. Mutual Respect - listening and learning from both the teacher and peers to ensure a positive and productive learning environment.
	<p style="text-align: center;">Key vocabulary</p> <p>Index numbers, weighted numbers, consumer price index, retail price index, gross domestic product, rate of change, increasing, decreasing.</p>

Prior Knowledge

- Convert the following decimals and fractions into percentages
 - 0.64
 - 0.12
 - 0.125
 -
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- Write the percentage multiplier needed to
 - Find 30%
 - Find 64%
 - Increase by 72%
 - Decrease by 24%
- Write 21 as a percentage of 42
- Write 2 as a percentage of 15
- A height of a tree increases from 90cm to 110cm. Find the percentage height increase.

We will develop our learning each week by focusing on:

<p>Lesson 1: Index numbers Calculate and interpret simple index numbers</p>	<p>RAG</p>
<p>Lesson 2: Specific Index Numbers Interpret retail price index (RPI), and consumer price index (CPI), and gross domestic product (GDP).</p>	

<p>Lesson 3: Weighted Index Numbers (HIGHER ONLY) Calculate and interpret weighted index numbers.</p>	
<p>Lesson 4: Chain Based Index Numbers (HIGHER ONLY) Calculate and interpret chain based index numbers.</p>	
<p>Lesson 5: Rates of Change Interpret data related to rates of change over time (including, but not limited to percentage change, births, deaths, house prices, and unemployment).</p>	
<p>Lesson 6: Standardised Rates (HIGHER ONLY) Calculate standardised birth and death rates.</p>	
<p>Lesson 7: Revision Lesson Select resources to use to revise for the end of topic assessment.</p>	
<p>Lesson 8: Assessment Lesson Do 10-minute top up and go through answers together, students to self assess Open book assessment done in silence</p>	
<p>Lesson 9: Feedback Lesson Students to highlight their traffic light sheet. Teacher to go through assessment and students to self-assess in green pen. Students to complete the NOW section of the WOW-HOW-NOW sheet.</p>	

How will this help you in the future?	
KS4	Beyond LHS
<ul style="list-style-type: none"> • Mathematics Uses percentage change, ratio and proportional reasoning. Develops interpretation of graphs and numerical data. • Geography Analyses changes in population, migration and economic indicators over time. Compares trends between countries and regions. • Business Uses index numbers to monitor sales, prices and market performance. Supports understanding of inflation and economic trends. • Science Develops skills in analysing data and identifying trends. 	<ul style="list-style-type: none"> • Develops the ability to interpret information about inflation, wages and the cost of living. • Supports financial decision-making, such as budgeting and understanding changes in prices. • Helps students critically evaluate statistics reported in the media. • Provides data-handling skills valued in further education, apprenticeships and employment. • Relevant to careers involving business, finance, economics, data analysis, marketing and public services.