Year 11 Statistics Learning Journey

Unit 5 - Time Series

Core knowledge	Reference number	
Line Graphs and Time Series – 'Why do we plot time series graphs using dashed lines?'		
Trend Lines - 'Unlike a scatter diagram's line of best fit, why do we not need to draw a trend line through the mean point?'		
Variations in Time Series – 'What does the variation allow us to know?'		_
Moving Averages - 'Why should you always comment on the trend in relation to the question?'		
Estimating Seasonal Variance and Making Predictions – 'Why may you have to extend the trend line beyond your known values?'		
LC Title	Completed	Dirt
Unit 5 LC – Time Series		
Marchan and an and an	L	

Key Vocabulary

Time Series – A line graph with time plotted on the x-axis.

Dashed Lines – We use dashed lines on a graph when we do not know the value between a given time frame.

Quarters – the first, second, third and fourth group of 3 months of the year.

General Trend – The way that the data changes over time.

Trend Line – Shows the general trend on a graph.

Seasonal Variations – A pattern that repeats due to variation following a regular time frame.

Seasonal Variation (size) – The difference between its actual value and the trend value.

Moving Averages – An average worked out for a given number of successive observations.

Mean Seasonal Variation – Calculate the mean value of all the seasonal variations for that season.

Predicted Values – You can use a trend line and the estimated seasonal variations to predict the figures at some future time. Predicted Value = Trend line value + Estimated Mean Seasonal Value.