

# Year 10-11ab Statistics

## Collection of Data

Describing data, primary and secondary data, capture-recapture formula, random sampling, non-random sampling, stratified sampling, collection of data, questionnaires, interviews, hypothesis, and designing investigations,

## Processing & Representing Data

Tables, two-way tables, pictograms, bar charts, stem and leaf diagrams, pie charts, comparative pie charts, population pyramids, choropleth maps, histograms and frequency polygons. Cumulative frequency diagrams, shape of distribution, unequal width histograms, misleading diagrams and selecting the right diagram

## Summarising Data

Averages, frequency tables, grouped data, transforming data, geometric and weighted mean, measures of dispersion, standard deviation, box plots, outliers, skewness, choices, comparing data and making estimates.

## Time Series

Time series graphs, trend lines, variation, moving point averages, seasonal variation,

### DID YOU KNOW?

A career as an Actuary offers a wide range of opportunities and gives you the chance to apply your mathematical and statistical skills to real life challenges

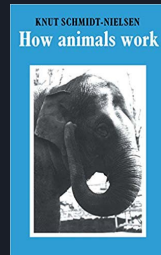
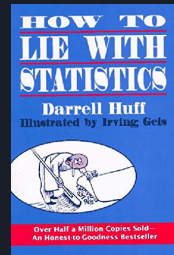
## Probability

Using probability to assess risk, experimental probability, mutually exclusive and exhaustive events, addition law, independent events, Venn diagrams, sample space diagrams, tree diagrams, conditional probability and formula for conditional probability

### DID YOU KNOW?

Statistician is listed among the Bureau of Labor Statistics' fastest growing careers in 2018 and it's predicted to grow 33 percent by 2026. During that same period, jobs are only expected to grow by 7.4 percent. In 2016, the median statistician made over \$80,000, much higher than average \$50,620.

It's a great time to be a statistician!



## Reading Books

## Introduction to GCSE Statistics

Capture-recapture formula, stratified sampling, Spearman's rank coefficient of correlation calculations



## Autumn Test

1 x Calculator Paper



## Mid-Year Test

1 x assessment paper

## Scatter Diagrams & Correlation

Scatter diagrams, correlation, causal relationships, lines of best fit, finding the equation of the line of best fit, interpolation and extrapolation, Spearman's rank interpretation and calculation PMCC

## Index Numbers

Simple index numbers, RPI, CPI, GDP, chain base, index numbers and rates of change

## End of Year Test

Assessment paper

## Probability Distributions

Binomial distribution, Normal distribution, standardised scores, quality assurance, control charts.

# 2024-25

