Queen's Park High School Key Stage 3 Assessment Mathematics – HANDLING DATA

Year 9	Working Towards	Evidence	Meeting	Evidence	Exceeding	Evidence
Collecting data	Apply statistics to describe a population		Introduce idea of a sample. Consider bias		Understand appropriate sampling and its restrictions	
Processing data	Construct graphs using discrete, continuous and grouped data Use scatter graphs for bivariate data		Construct tables, charts and diagrams including those for Time series data. Know their appropriate use Draw line of best fit and make predictions		Construct Cumulative frequency graphs and box plots	
Analysing Data	Interpret, analyse and compare the distributions of data sets through Graphs and MMMR Interpret scatter diagrams. Recognise correlation		Interpret data for Time series. Know that correlation doesn't indicate causation		Interpret data using quartiles and IQR	
Probability	Apply idea of exhaustive outcomes sum to 1. Enumerate sets and combinations using tables, grids and Venn diagrams Construct theoretical possibility spaces and use them to calculate probabilities.		Using tree diagrams Understand effect of increased sample size Calculate probability for combined events.		Calculate and interpret conditional probabilities Use two way tables, tree diagrams and Venn diagrams	
Communication	Use of appropriate Vocabulary - Correlation		Vocabulary – interpolation, extrapolation Explain and discuss what data/graphs are saying Link explanations and predictions to graphical information such as lines of best fit		Explain the appropriateness of each technique	
Year 8						
Collecting data	Apply statistics to describe a population		Apply statistics to describe a population		Introduce idea of a sample. Consider bias	
Processing data	Construct charts, tables and graphs including frequency tables, bar charts, pie charts and pictograms for categorical data. Use vertical line graphs for discrete numerical data. Calculate Mean, Mode, Median and Range (MMMR)		Construct graphs using discrete, continuous and grouped data Use scatter graphs for bivariate data		Construct tables, charts and diagrams including those for Time series data. Know their appropriate use Draw line of best fit and make predictions	
Analysing Data	Interpret, analyse and compare the distributions of data sets through MMMR		Interpret, analyse and compare the distributions of data sets through Graphs and MMMR Interpret scatter diagrams. Recognise correlation		Interpret data for Time series. Know that correlation doesn't indicate causation	
Probability	Record, describe and analyse the frequency of the outcomes of probability experiments using tables and trees Apply ideas of randomness, fairness and equally likely events to calculate the expected outcomes Use relative expected frequencies Construct theoretical possibility spaces		Apply idea of exhaustive outcomes sum to 1. Enumerate sets and combinations using tables, grids and Venn diagrams Construct theoretical possibility spaces and use them to calculate probabilities.		Using tree diagrams Understand effect of increased sample size Calculate probability for combined events.	
Communication	Use of Vocabulary – Discrete, continuous, and Probability vocabulary Likely/unlikely/certain/impossible		Use of appropriate Vocabulary – Correlation Explain use of probability terminology		Vocabulary – interpolation, extrapolation Explain and discuss what data/graphs are saying Link explanations and predictions to graphical information such as lines of best fit	
Year 7						
Collecting data	Complete a tally chart		Plan and conduct a survey (data collection) with		Apply statistics to describe a population	

			appropriate data (discrete/continuous)			
Processing data	Construct pie charts and line graphs Calculating the mean as an average		Construct charts, tables and graphs including frequency tables, bar charts, pie charts and pictograms for categorical data. Use vertical line graphs for discrete numerical data. Calculate Mean, Mode, Median and Range (MMMR)		Construct graphs using discrete, continuous and grouped data Use scatter graphs for bivariate data	
Analysing Data	Interpreting the charts/graphs Interpreting the mean		Interpret, analyse and compare the distributions of data sets through MMMR		Interpret, analyse and compare the distributions of data sets through Graphs and MMMR Interpret scatter diagrams. Recognise correlation	
Probability	Have an awareness of chance and probability		Record, describe and analyse the frequency of the outcomes of probability experiments using tables and trees Apply ideas of randomness, fairness and equally likely events to calculate the expected outcomes Use relative expected frequencies Construct theoretical possibility spaces		Apply idea of exhaustive outcomes sum to 1. Enumerate sets and combinations using tables, grids and Venn diagrams Construct theoretical possibility spaces and use them to calculate probabilities.	
Communication	Explain findings using correct, appropriate terminology.		Use of Vocabulary – Discrete, continuous Understand terminology Likely/unlikely/certain/impossible		Use of appropriate Vocabulary – Correlation Explain use of probability terminology	