

KS3 Assessment Rubric – MATHS – STATISTICS

Year 7

Working Towards Age Expectations	Working At Age Expectations	Working Above Age Expectations
<ul style="list-style-type: none"> • Pupils extract and interpret information presented in simple tables and lists. • They construct charts and diagrams to communicate information they have gathered for a purpose, and they interpret information presented to them in this form. 	<ul style="list-style-type: none"> • Pupils generate and answer questions that require the collection of discrete data which they record using a frequency table. • They understand and use an average and range to describe sets of data. • Using technology where appropriate: they group data in equal class intervals if necessary, represent collected data in frequency diagrams and interpret such diagrams. • They construct and interpret simple line graphs. 	<ul style="list-style-type: none"> • Pupils understand and use the mean of discrete data. • They compare two simple distributions using the range and one of the mode, median or mean. • They interpret graphs and diagrams, including pie charts, and draw conclusions. • They understand and use the probability scale from 0 to 1. • They find and justify probabilities and approximations to these by selecting and using methods based on equally likely outcomes and experimental evidence, as appropriate. • They understand that different outcomes may result from repeating an experiment.

Year 8

Working Towards Age Expectations	Working At Age Expectations	Working Above Age Expectations
<ul style="list-style-type: none"> • Pupils generate and answer questions that require the collection of discrete data which they record using a frequency table. • They understand and use an average and range to describe sets of data. • Using technology where appropriate: they group data in equal class intervals if necessary, represent collected data in frequency diagrams and interpret such diagrams. • They construct and interpret simple line graphs. 	<ul style="list-style-type: none"> • Pupils understand and use the mean of discrete data. • They compare two simple distributions using the range and one of the mode, median or mean. • They interpret graphs and diagrams, including pie charts, and draw conclusions. • They understand and use the probability scale from 0 to 1. • They find and justify probabilities and approximations to these by selecting and using methods based on equally likely outcomes and experimental evidence, as appropriate. • They understand that different outcomes may result from repeating an experiment. 	<ul style="list-style-type: none"> • Pupils collect and record continuous data, choosing appropriate equal class intervals over a sensible range to create frequency tables. • They construct and interpret frequency diagrams. • They construct pie charts. They draw conclusions from scatter diagrams, and have a basic understanding of correlation. • When dealing with a combination of two experiments, they identify all the outcomes. • When solving problems, they use their knowledge that the total probability of all the mutually exclusive outcomes of an experiment is 1.

Year 9

Working Towards Age Expectations	Working At Age Expectations	Working Above Age Expectations
<ul style="list-style-type: none"> • Pupils understand and use the mean of discrete data. • They compare two simple distributions using the range and one of the mode, median or mean. • They interpret graphs and diagrams, including pie charts, and draw conclusions. • They understand and use the probability scale from 0 to 1. • They find and justify probabilities and approximations to these by selecting and using methods based on equally likely outcomes and experimental evidence, as appropriate. • They understand that different outcomes may result from repeating an experiment. 	<ul style="list-style-type: none"> • Pupils collect and record continuous data, choosing appropriate equal class intervals over a sensible range to create frequency tables. • They construct and interpret frequency diagrams. • They construct pie charts. They draw conclusions from scatter diagrams, and have a basic understanding of correlation. • When dealing with a combination of two experiments, they identify all the outcomes. • When solving problems, they use their knowledge that the total probability of all the mutually exclusive outcomes of an experiment is 1. 	<ul style="list-style-type: none"> • Pupils specify hypotheses and test them by designing and using appropriate methods that take account of variability or bias. • They determine the modal class and estimate the mean, median and range of sets of grouped data, selecting the statistic most appropriate to their line of enquiry. • They use measures of average and range, with associated frequency polygons, as appropriate, to compare distributions and make inferences. • They understand relative frequency as an estimate of probability and use this to compare outcomes of experiments.