








# Reason Statistically

	PREPARING DATA FOR ANALYSIS PROGRESSION	ANALYSING DATA FOR INTERPRETATION PROGRESSION	INTERPRETING DATA TO PREDICT AND CONCLUDE PROGRESSION	PROBABILITY PROGRESSION
	MOST ADULTS WILL BE ABLE TO:	MOST ADULTS WILL BE ABLE TO:	MOST ADULTS WILL BE ABLE TO:	MOST ADULTS WILL BE ABLE TO:
	<ul style="list-style-type: none"> <li>sort objects according to their attributes, organise data about the objects and represent data, using concrete objects or pictures.</li> </ul>	<ul style="list-style-type: none"> <li>describe parts of the data and the set of data as a whole to determine what the data show.</li> </ul>		<ul style="list-style-type: none"> <li>identify all possible outcomes in situations that involve simple (single-stage) chance</li> <li>use words to describe the likelihood of particular outcomes (events).</li> </ul>
				
	<ul style="list-style-type: none"> <li>sort and organise category data and represent it, using tables, pictographs and bar graphs.</li> </ul>	<ul style="list-style-type: none"> <li>describe the general features of a data set.</li> </ul>	<ul style="list-style-type: none"> <li>make sensible statements based on the general features of a data set.</li> </ul>	<ul style="list-style-type: none"> <li>use fractions to express the probability of events</li> <li>recognise uncertainty in simple (single-stage) chance situations.</li> </ul>
	<ul style="list-style-type: none"> <li>sort, organise and represent data, using tables and graphs such as line plots, bar graphs and line graphs</li> <li>recognise the differences involved in representing category and numeric data.</li> </ul>	<ul style="list-style-type: none"> <li>describe the shape and important features of a sample data set (considering especially median and range)</li> <li>compare two or more samples.</li> </ul>	<ul style="list-style-type: none"> <li>draw conclusions and make predictions, based on evidence from the data.</li> </ul>	<ul style="list-style-type: none"> <li>use relative frequency to provide an estimate of the probability of an event</li> <li>use fractions, ratios and percentages to express probabilities</li> <li>compare the results of trials or observations with expectations based on models.</li> </ul>
				<ul style="list-style-type: none"> <li>determine the probabilities in simple multi-stage probability situations</li> <li>apply the law of large numbers to probability situations.</li> </ul>
				
	<ul style="list-style-type: none"> <li>sort, organise, clean and represent multi-variate data, making appropriate use of histograms, stem-and-leaf plots, box plots (box-and-whisker diagrams) and scatter plots</li> <li>graph time-series data.</li> </ul>	<ul style="list-style-type: none"> <li>find, use and interpret measures of centre and spread, including mean and interquartile range.</li> </ul>	<ul style="list-style-type: none"> <li>use observations based on samples to make conjectures about the populations from which the samples were taken.</li> </ul>	<ul style="list-style-type: none"> <li>determine the probabilities in more complex multi-stage chance situations</li> <li>apply the notion of 'expected value' to probability situations.</li> </ul>