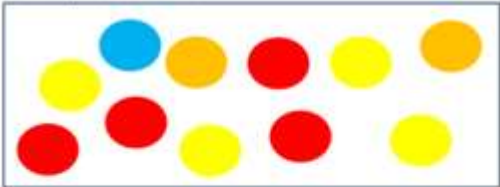


Ideas of chance and uncertainty

Terms	Illustrations	Definitions
Certainty		The probability that an event will definitely happen.
Chance	<p style="text-align: center;">Examples of chance</p>  <p>There are 11 balls in this box.</p> <p>The chances of pulling out a red ball is $4/11$</p> <p>The chances of pulling out a yellow ball is $4/11$</p> <p>The chances of pulling out a blue ball is $1/11$</p> <p>The chances of pulling out an orange ball is $2/11$</p> <p style="text-align: center;">It could be estimated from the calculated chances that:</p> <ul style="list-style-type: none"> • There is an equal chance of pulling out a red or yellow ball • You are most likely to pick out a red or yellow ball • You are least likely to pick out a blue ball 	<p>The number of times an event is likely to happen compared to the number of times it could happen.</p> <p>For example;</p> <p>There is a 1 in 6 chance of throwing a 3 on a dice labelled 1-6. It is likely to happen once as there is only 1 number 3 on the dice but it could happen 6 times.</p>
Consequences		The impact a decision can make on yourself and on others. For example; Reading food labels when shopping for the family – The majority of the food items state it is high in sugar, fat and calories. If this food is eaten each night, consequences for the family may be tooth decay long term, gradual weight gain etc.
Draw conclusions		To make statements about a set of data based on results.

Ideas of chance and uncertainty

Event		A single result of an experiment.																											
Frequency table	<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th colspan="3" style="text-align: center;">Number of cars passing the school</th> </tr> <tr> <th style="width: 30%;">Colour</th> <th style="width: 40%;">Tally Marks</th> <th style="width: 30%;">Frequency</th> </tr> </thead> <tbody> <tr> <td>Red</td> <td> I</td> <td style="text-align: center;">6</td> </tr> <tr> <td>Silver</td> <td> </td> <td style="text-align: center;">12</td> </tr> <tr> <td>White</td> <td> </td> <td style="text-align: center;">17</td> </tr> <tr> <td>Green</td> <td> </td> <td style="text-align: center;">4</td> </tr> <tr> <td>Blue</td> <td> </td> <td style="text-align: center;">9</td> </tr> <tr> <td>Black</td> <td> </td> <td style="text-align: center;">5</td> </tr> <tr> <td>Gold</td> <td>I</td> <td style="text-align: center;">1</td> </tr> </tbody> </table>	Number of cars passing the school			Colour	Tally Marks	Frequency	Red	I	6	Silver		12	White		17	Green		4	Blue		9	Black		5	Gold	I	1	A table used to note tally marks and show frequencies of each item.
Number of cars passing the school																													
Colour	Tally Marks	Frequency																											
Red	I	6																											
Silver		12																											
White		17																											
Green		4																											
Blue		9																											
Black		5																											
Gold	I	1																											
Language of probability		The words used to describe the likelihood or chance of an event happening. Words can include; never, sometimes, always, likely, unlikely, possible, impossible, certain, uncertain, one in ten chance, 50/50 chance etc.																											
Likelihood		The chance that an event will happen.																											
Predictions		An educated guess at future events based on past experiences. E.g. predicting the weather in December.																											
Probability		How likely something is to happen – calculated as the number of times an event actually happened divided by the number of possible events. It can be expressed as a fraction, decimal fraction or percentage .																											
Uncertainty		The probability that an event may not happen.																											