

## Overview of Chance

	Foundation	Lower Primary	Middle Primary	Upper Primary	Lower Secondary	Middle Secondary	
Recognising Uncertainty	<ul style="list-style-type: none"> <li>recognise and respond to unpredictability and variability in events</li> </ul>	<ul style="list-style-type: none"> <li>identify outcomes of simple chance events, such as the rolling of a die</li> </ul>	<ul style="list-style-type: none"> <li>appreciate concept of fairness of chance games</li> </ul>	<ul style="list-style-type: none"> <li>appreciate both long-term predictability and short-term variation</li> </ul>		<ul style="list-style-type: none"> <li>classify events as dependent or independent</li> <li>find and interpret expected value e.g. of gain or loss</li> </ul>	
Describing and Quantifying Chance	<ul style="list-style-type: none"> <li>use terms such as sometimes, always and never to describe events</li> </ul>	<ul style="list-style-type: none"> <li>use terms such as certain, likely, unlikely and impossible to describe the likelihood of events</li> </ul>	<ul style="list-style-type: none"> <li>qualitative comparison of likelihood (eg recognise chance of red from spinner depends on amount of red &amp; equal amounts of red and blue give equal chance)</li> </ul>	<ul style="list-style-type: none"> <li>quantify simple probabilities as fractions and decimals between 0 and 1</li> </ul>	<ul style="list-style-type: none"> <li>calculate theoretical probabilities using symmetry etc</li> </ul>	<ul style="list-style-type: none"> <li>use tree diagrams to list outcomes and calculate probabilities</li> </ul>	<ul style="list-style-type: none"> <li>calculate probabilities for complementary, mutually exclusive, compound, dependent and independent events, using lists, tree diagrams, venn diagrams, two-way tables</li> </ul>
Chance experiments	<ul style="list-style-type: none"> <li>play games with random elements (e.g. dice)</li> </ul>	<ul style="list-style-type: none"> <li>use spinners and dice in simple chance experiments</li> </ul>	<ul style="list-style-type: none"> <li>plan and conduct chance experiments</li> </ul>	<ul style="list-style-type: none"> <li>design simulations for simple chance events</li> </ul>	<ul style="list-style-type: none"> <li>generate random numbers e.g. for simulations</li> </ul>	<ul style="list-style-type: none"> <li>estimate probabilities from surveys, experiments, samples and simulations</li> </ul>	
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