

Purpose: *To gather evidence of the students ability to plan and conduct investigations that compare theoretical and experimental probabilities.*

Knowledge & Understanding	Knowledge and Understanding	Thinking and Reasoning	
Expresses estimates of probability in different ways <i>ie impossible/certain, percentages, common fractions or decimal fractions between 0 and 1, '1 in 4' chance etc</i>	Compares theoretical probability with experimental probability.	Plans activities and investigations to explore probability concepts through the game show 'Deal or No Deal'.	
<ul style="list-style-type: none"> <li>⇐ Confidently and accurately uses and compares a range of expressions to describe probability e.g. '<b>relative frequency</b>', decimals between 0 and 1, fractions and percentages.</li> <li>⇐ Accurately uses mathematical methods to describe and order probability.</li> <li>⇐ Uses mathematical methods to describe and order probability e.g. fractions, percentages.</li> <li>⇐ Uses predominately informal expressions of probability ie 'good chance', 'unlikely' to describe and order events.</li> <li>⇐ Recognises that one event is more or less likely than another event.</li> </ul>	<ul style="list-style-type: none"> <li>⇐ Insightfully compares experimental data with theoretical predictions of probability with reference to the size of the sample set and using mathematical calculations to describe the comparisons.</li> <li>⇐ Makes reasonable comparisons between experimental results and theoretical predictions of probability using mathematical language.</li> <li>⇐ Can compare experimental probably and theoretical probability and describe reasons for differences using informal language.</li> <li>⇐ Describes the difference between experimental probability and theoretical probability and can state an educated prediction based on previous results.</li> <li>⇐ Makes a prediction based on previous results.</li> </ul>	<ul style="list-style-type: none"> <li>⇐ Insightfully explores probability concepts using independently planned and clearly presented investigations to support well-reasoned predictions of probability.</li> <li>⇐ Effectively explores probability concepts using planned and clearly presented investigations, with limited support, to support predictions of probability.</li> <li>⇐ With regular guidance, plans and clearly presents probability investigations to support predictions of probability.</li> <li>⇐ Presents relevant information to describe experimental results given significant scaffolding.</li> <li>⇐ Can gather some data in response to questions in probability.</li> </ul>	<p><b>A</b></p> <hr/> <p><b>B</b></p> <hr/> <p><b>C</b></p> <hr/> <p><b>D</b></p> <hr/> <p><b>E</b></p>