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| Year: **6/7** KLA: **Mathematics** Assessment name: **What Are the Chances?** | | | Student | | |
| 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 *ie impossible/certain, percentages, common fractions or decimal fractions between 0 and 1, ‘1 in 4’ chance etc* | Compares theoretical probability with experimental probability. | Plans activities and investigations to explore probability concepts through the game show ‘Deal or No Deal’. | |  |
|  |  | v   * Insightfully explores probability concepts using independently planned and clearly presented investigations to support well-reasoned predictions of probability. * Presents relevant information to describe experimental results given significant scaffolding. * Effectively explores probability concepts using planned and clearly presented investigations, with limited support, to support predictions of probability. * With regular guidance, plans and clearly presents probability investigations to support predictions of probability. * Can gather some data in response to questions in probability. | | A |
| * Confidently and accurately uses and compares a range of expressions to describe probability e.g. ‘**relative frequency’**, decimals between 0 and 1, fractions and percentages. | * 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. |
|  |  | B |
| * Accurately uses mathematical methods to describe and order probability. | * Makes reasonable comparisons between experimental results and theoretical predictions of probability using mathematical language. |
|  |  | C |
| * Uses mathematical methods to describe and order probability e.g. fractions, percentages. | * Can compare experimental probably and theoretical probability and describe reasons for differences using informal language. |
|  | * Describes the difference between experimental probability and theoretical probability and can state an educated prediction based on previous results. | D |
| * Uses predominately informal expressions of probability ie ‘good chance’,’ unlikely’ to describe and order events. |  |
| * Recognises that one event is more or less likely than another event. | * Makes a prediction based on previous results. | E |
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