

Maths Workout - Statistics & Probability

Topic 11 - Probability Lab				
Target 1	Target 2	Target 3	Target 4	Target 5
<i>Use probability theory to predict the most likely outcome on a spinner</i>	<i>Use probability theory in games of chance: 'Higher, Lower or Equal' dice game</i>	<i>Use probability theory in games of chance: 'Higher or Lower' card game</i>	<i>Engage with experimental probability</i>	<i>Calculate expectation; work with mutually exclusive events; list possible outcomes</i>
1. Use probability theory to predict the most likely outcome on a spinner	1. Use probability theory to predict if the next outcome will be higher or lower than the previous outcome: 1 die	1. Use probability theory to predict if the next outcome will be higher or lower than the previous outcome: cards	1. Simulation of throwing a drawing pin: record scores in tally chart, calculate relative frequency	1. Demo: = Probability x Number of Trials = Expected Number of Successes
	2. Use probability theory to predict if the next outcome will be higher or lower than the previous outcome: 2 dice		2. Demo: Experimental probability basics	2. Calculate the expected number of successes
			3. Estimate the probability of getting a six on a biased die: simulation of rolling a biased die 50 times	3. Calculate with the expected number of successes with one die
			4. Estimate the probability of getting a six on a biased die: simulation of rolling a biased die 50 times	4. Calculate with the expected number of successes with two dice
			5. Enrichment: Generate π from experimental probability	5. Demo: Mutually exclusive events
				6. Calculate the probability of one event given the probability of a mutually exclusive event
				7. Calculate the probability of one event given the probability of a mutually exclusive event
				8. List possible outcomes using a system
				9. List possible outcomes using a system
				10. List possible outcomes using a system
				11. List possible outcomes using a system
				12. List possible outcomes using a system