

Guide to making judgments — Year 6 Mathematics

Name

Focus: Apply knowledge of chance events, variation and bias to develop arguments and improve game fairness.

Knowledge and understanding	Thinking and reasoning Reflecting	Communicating	
<p>Uses possible outcomes and frequency to estimate likelihood as a common fraction.</p> <p>Compares and orders estimates of likelihood.</p> <p>Identifies differences between graphs.</p> <p>Questions 1–5</p>	<p>Reflects on learning and applies new understandings to:</p> <ul style="list-style-type: none"> • develop mathematical arguments • plan, evaluate and explain changes to game rules. <p>Questions 6–9</p>	<p>Communicates using mathematical language and representations to justify thinking and reasoning.</p> <p>Questions 1–3, 6, 8, 9</p>	
<p>◀ Explains differences between graphs using a comprehensive understanding of the factors influencing chance events and variation.</p>	<p>◀ Justifies arguments using a comprehensive mathematical interpretation of the quantitative data and factors influencing chance events and bias.</p>	<p>◀ Communicates and justifies thinking and reasoning using clear mathematical language.</p>	A
<p>◀ Correctly compares and orders estimates of likelihood, and identifies outcomes with equal likelihoods. Considers chance events when explaining differences between graphs.</p> <p>◀ Correctly expresses likelihoods as common fractions.</p>	<p>◀ Makes changes to rules which make the game fair. Accurately judges Player B's chances of winning, and justifies using an understanding of chance events.</p>		B
<p>◀ Translates information from graphs into tables. Identifies obvious mathematical differences between graphs. Identifies a most and least likely outcome.</p>	<p>◀ Makes changes to rules which improve the fairness of the game. Considers chance events in arguments.</p>	<p>◀ Communicates using appropriate mathematical language.</p>	C
<p>◀ Identifies numbers of outcomes from grid.</p>	<p>◀ Makes a relevant statement about why the game is unfair or why the rule changes are fair. Identifies likelihood of Player B winning.</p>		D
	<p>◀ Makes a change to the rules.</p>	<p>◀ Records possible outcomes and frequency in graphs.</p>	E

Feedback

.....