

Phase 6 Ideas of Chance and Uncertainty Assessment

Phase 6 Progression Overview	Assessment Note	Marks
I can list all possible outcomes for straightforward situations. (e.g. If I can choose two scoops of ice cream for my cone what are my options)	Question 1	6
I can use a simple probability scale to record likelihood.	Question 2	3
I can understand that certainty relates to events that must happen and events that cannot happen)	Question 3	5
I can use available data to order things from most likely to least likely. (e.g. using rainfall data to order Scottish cities from least likely to have rain in July to most likely.)	Question 4	4
I can order outcomes for a single random action from least to most likely by thinking about (i.e. analysing) the situation, e.g. for a die with the faces 1, 1, 2, 2, 2, 3, state that a 2 is most likely, 1 is next and 3 is least likely)	Question 5	3
I can use data to predict the likelihood of the outcome of a simple experiment, justifying reasonableness	Question 6	2
I can order probability devices from the one most likely to the one least likely to produce an outcome (e.g. order three spinners with different proportions shaded yellow from the one most likely to the one least likely to produce a yellow result)	Question 7	3
TOTAL MARKS		/26

	Question	Mark
1	<p>I can list all possible outcomes for straightforward situations. (e.g. If I can choose two scoops of ice cream for my cone what are my options)</p> <p>a.) A café lets you choose one scoop of ice cream and one topping. The flavours are vanilla, chocolate and strawberry. The toppings are sprinkles or chocolate sauce. List all the possible combinations you could get.</p>	6
2	<p>I can use a simple probability scale to record likelihood</p> <p>A music teacher puts three songs into a playlist. Song A plays most often, Song B plays sometimes, and Song C hardly ever plays. Place each song on the probability scale below to show how likely it is to play next.</p> <p>Impossible — Unlikely — Even Chance — Likely — Certain</p>	3
3	<p>I can understand that certainty relates to events that must happen and events that cannot happen</p> <p>Here are some statements about the Olympics. Decide which ones are <i>certain</i> to happen and which ones are <i>impossible</i>. Explain your choices.</p> <ol style="list-style-type: none"> 1. The Olympic torch will be lit at the Opening Ceremony. 2. Every athlete will win a gold medal. 3. Some events will take place outdoors. 4. A swimmer will win the 100m sprint on the athletics track. 5. The Closing Ceremony will happen at the end of the Games. 	5
4	<p>I can use available data to order things from most likely to least likely. (e.g. using rainfall data to order Scottish cities from least likely to have rain in July to most likely.)</p> <p>Here is the number of rainy days in July for four Scottish cities last year:</p> <ul style="list-style-type: none"> • Aberdeen: 10 days • Edinburgh: 7 days • Glasgow: 13 days • Dundee: 5 days <p>Use this data to order the cities from <i>least likely</i> to <i>most likely</i> to have rain in July</p>	4

5	<p>I can order outcomes for a single random action from least to most likely by thinking about (i.e. analysing) the situation, e.g. for a die with the faces 1, 1, 2, 2, 2, 3, state that a 2 is most likely, 1 is next and 3 is least likely)</p> <p>Here is a special dice. The numbers on its faces are: 1, 1, 2, 3, 3, 3 Order the numbers from <i>least likely</i> to <i>most likely</i> to be rolled. Explain how you know.</p>	3
6	<p>I can use data to predict the likelihood of the outcome of a simple experiment, justifying reasonableness</p> <p>A class practises throwing a beanbag into a hoop. Here are their results from 20 throws:</p> <ul style="list-style-type: none"> • Hits the hoop: 14 times • Misses the hoop: 6 times <p>Use this data to predict what is most likely to happen on the next throw. Explain why your prediction is reasonable.</p>	2
7	<p>I can order probability devices from the one most likely to the one least likely to produce an outcome (e.g. order three spinners with different proportions shaded yellow from the one most likely to the one least likely to produce a yellow result)</p> <p>Here are three bags of beads. Each bag contains a different number of yellow beads. Put the bags in order from <i>most likely</i> to <i>least likely</i> to give a yellow bead when you pick one without looking.</p> <p>Bag A: 2 yellow beads, 4 red beads Bag B: 5 yellow beads, 5 blue beads Bag C: 1 yellow bead, 9 green beads</p>	3