

Phase 4 Ideas of Chance and Uncertainty Diagnostic Assessment

Phase 4 Progression Overview	Assessment Note	Marks
I can use data to consider events describing them as being likely	Question 1	/5
I can predict the likelihood of an outcome justifying reasonableness (probable, certain/uncertain)	Question 2	/5
I can identify possible results of an action or event by collect data	Question 3	/3
TOTAL MARKS		/19

	Question	Mark
1	<p>I can use data to consider events describing them as being likely</p> <p>a.) A class voted for their favourite fruit. They were to choose from these 3 fruits. Here are the results:</p> <ul style="list-style-type: none">• Apple — 8 votes• Banana — 2 votes• Grapes — 4 votes <p>a.) Which fruit is most likely to be chosen by the next child?</p> <ul style="list-style-type: none">• <input type="checkbox"/> Apple• <input type="checkbox"/> Banana• <input type="checkbox"/> Grapes <p>(1 mark)</p> <p>b.) Which fruit is least likely to be chosen?</p> <ul style="list-style-type: none">• <input type="checkbox"/> Apple• <input type="checkbox"/> Banana• <input type="checkbox"/> Grapes <p>(1 mark)</p> <p>c.) Use the data to finish the sentence: (more likely / less likely) “Apple is _____ to be chosen than banana.”</p> <p>(1 mark)</p> <p>d.) Is it <i>possible</i> for someone to choose strawberry next?</p> <ul style="list-style-type: none">• <input type="checkbox"/> Yes• <input type="checkbox"/> No <p>(1 mark)</p> <p>e.) Explain why apples might be chosen again. (Example answer: “More people liked apples so it’s likely someone else will choose it.”)</p> <p>(1 mark)</p>	

2

I can predict the likelihood of an outcome justifying reasonableness (probable, certain/uncertain

a.) If you roll a dice once, what is the likelihood of getting a 6?

- Certain
- Probable
- Uncertain

(1 mark)

b.) If you flip a coin, what are the two possible outcomes?

- Heads and tails
- Heads and banana

(1 mark)

c.) A teacher says, "It is certain that the sun will rise tomorrow."

Do you agree?

- Yes
- No

(1 mark)

d.) It is uncertain that I will win the class raffle.

Is this a reasonable prediction? Why?

(Open response — expected: "Yes, because it depends on luck.")

(1 mark)

e.) Circle the best word for the event:

"It might snow in summer."

- Unlikely / Likely / Certain

(1 mark)

3

I can identify possible results of an action or event by collect data

A group of children spin a spinner with 3 colours:

- Red
- Blue
- Yellow

They spin it 10 times.

Their results are:

- Red = 5
- Blue = 3
- Yellow = 2

a.) According to the data, which colour came up most often?

(1 mark)

b.) Which colour is *less likely* on the next spin?

(1 mark)

c.) Is it still *possible* for yellow to be spun next?

- Yes
- No

(1 mark)

d.) Tick the sentence that is true:

- The next spin is certain to be red.
- The next spin might be any colour.

(1 mark)

e.) What does the data tell you about what could happen if you spun the spinner again?

(Example: "Red is most likely, but any colour could happen.")

(1 mark)