

Phase 5 Ideas of Chance and Uncertainty Diagnostic Assessment

Phase 5 Progression Overview	Assessment Note	Marks
I can produce working graphs to explore data I can suggest data to be collected	Question 1	/5
I can suggest ways to improve a classification to better answer a question	Question 2	/2
I can revise a survey question so it can be answered by multiple choice.	Question 3	/2
I can understand that data can be swayed by the questions I have asked.	Question 4	/2
I can organise data into intervals	Question 5	/1
I can collect data using surveys and investigation in collaboration with others	Observed in class work	N/A
I can represent data collected in diagrams including Pie charts, Venn diagrams and Carroll diagrams	Observed in class work	N/A
I can read information on bar and line graphs where not all numbers are shown on scale	Question 6	4
TOTAL MARKS		/15

Question

Mark

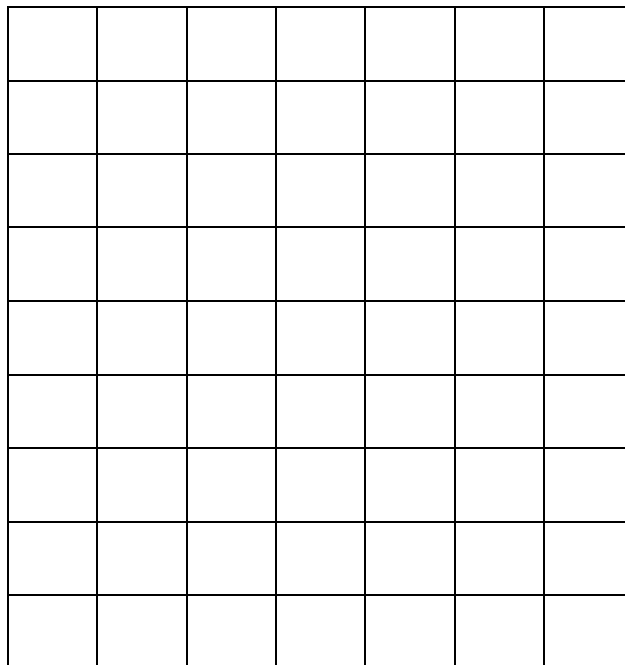
1

I can produce working graphs to explore data. I can suggest data to be collected

This table shows how many children chose each fruit for a breaktime snack.

Fruit	Number of Children
Apple	8
Banana	5
Orange	6
Grapes	3

a.) Create a bar graph to show this data. Your bar graph should have labelled x and y axis and a title. (3 marks)



b.) How many more children chose apples than grapes? (1 mark)

c.) If the class wanted to find out what the most popular snack at break time was how could they change the question? (1 mark)

<p>2</p>	<p>I can suggest ways to improve a classification to better answer a question</p> <p>A teacher wants to find out what children enjoy doing at wet breaktime. She asked the class which games they liked to play at wet break time. Most of the children answered but some did not give an answer.</p> <p>a.) How could the teacher change the question so everyone can answer?</p> <p>b.) Can you think of something the children that didn't answer might do at wet break instead?</p>	<p>2</p>
<p>3</p>	<p>I can revise a survey question so it can be answered by multiple choice.</p> <p>A teacher asked the class this question:</p> <p>How do you get to school?</p> <p>The answers were very different and difficult to organise.</p> <p>a) Rewrite the question so it can be answered so that it is a multiple-choice question with 4 choices to choose from.</p> <p>Question: _____</p> <p>Choice 1: _____</p> <p>Choice 2: _____</p> <p>Choice 3: _____</p> <p>Choice 4: _____</p>	<p>2</p>
<p>4</p>	<p>I can understand that data can be swayed by the questions I have asked.</p> <p>A teacher wants to find out what lunch children prefer at school. They ask the class this question:</p> <p>Most children like hot school dinners, don't they?</p> <p>a) Explain how this question could affect, or sway, the answers the children give.</p>	

b) Suggest a better question the teacher could ask to collect fairer data.

2

5 **I can organise data into intervals**

Here are the ages (in years) of pets owned by a class:

3, 5, 1, 4, 8, 2, 10, 6, 11, 7

a.) Organise the data into the intervals below and show how many pets are in each interval:

- 1–3
- 4–6
- 7–9
- 10–12

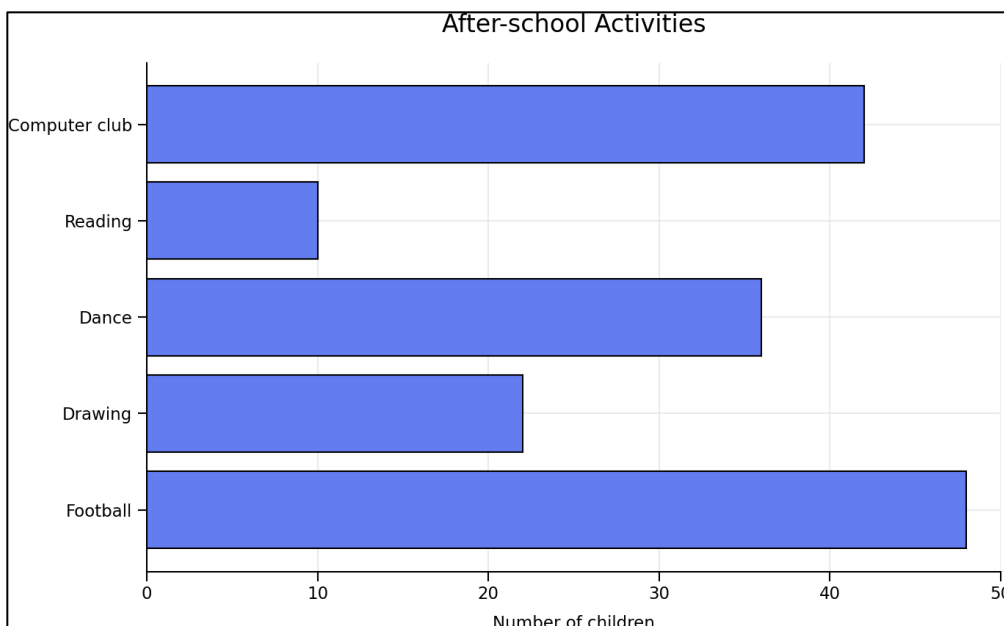
1

6 **I can read information on bar and line graphs, where not all numbers are shown on scale**

Using the graph below:

a.) How many children go to computer club after school? (number within 2 acceptable)

b.) How many children go to Reading after school? (number within 2 acceptable)



The line graph shows the number of minutes spent reading during the week.

c.) How many minutes are spent reading on Monday? (number within 2 minutes acceptable)

d.) How many minutes are spent reading on a Thursday? (number within 2 minutes acceptable)

