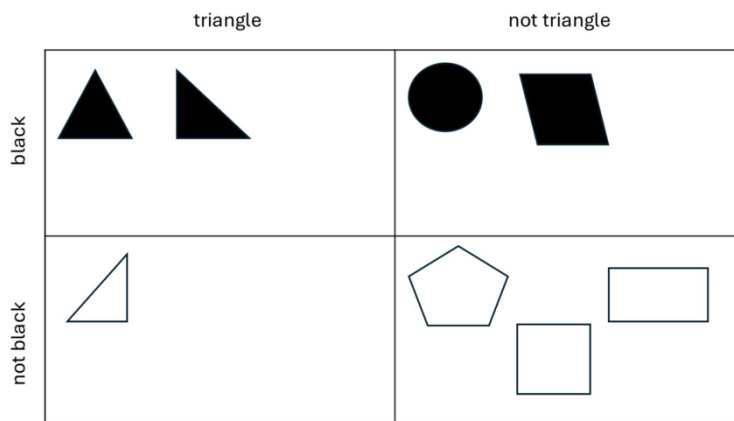


Phase 4 Ideas of Chance and Uncertainty Diagnostic Assessment

| Phase 4 Progression Overview | Assessment Note | Marks |
|---|------------------------|--------------|
| I can label bar graphs with titles, axes | Question 1 | /3 |
| I can use a variety of different methods to explore, display and interpret relationships between data (including Venn and Carroll diagrams) | Question 2 | /5 |
| I can understand why organising data is necessary | Question 3 | /2 |
| I can describe information from diagrams that use arrows (flow chart). | Question 4 | /3 |
| I can make and interpret bar graphs where the scale is appropriate, one unit may represent more than one value | Question 5 | /3 |
| TOTAL MARKS | | /16 |

| | Question | Mark | | | | | | | | | | |
|----------|---|----------|--------------------|-----|---|-----|---|------|---|------|---|---|
| 1 | <p>I can label bar graphs with titles, axes</p> <p>This is a graph of pets that belong to the students in Primary 4.</p> <p>a). Label the bar graph by adding:</p> <ul style="list-style-type: none"> - an appropriate title - x-axis title - y-axis title <div data-bbox="368 510 1102 1077" data-label="Figure"> <table border="1"> <caption>Pets owned by students in Primary 4</caption> <thead> <tr> <th>Pet Type</th> <th>Number of Students</th> </tr> </thead> <tbody> <tr> <td>Dog</td> <td>6</td> </tr> <tr> <td>Cat</td> <td>4</td> </tr> <tr> <td>Fish</td> <td>7</td> </tr> <tr> <td>Bird</td> <td>2</td> </tr> </tbody> </table> </div> | Pet Type | Number of Students | Dog | 6 | Cat | 4 | Fish | 7 | Bird | 2 | 3 |
| Pet Type | Number of Students | | | | | | | | | | | |
| Dog | 6 | | | | | | | | | | | |
| Cat | 4 | | | | | | | | | | | |
| Fish | 7 | | | | | | | | | | | |
| Bird | 2 | | | | | | | | | | | |

| | | |
|---|---|---|
| 2 | <p>I can use a variety of different methods to explore, display and interpret relationships between data (including Venn and Carroll diagrams)</p> <p>This is a Venn diagram comparing animals and things that can fly.</p> <div data-bbox="233 1330 884 1765" data-label="Diagram"> </div> <p>a.) How many animals are there altogether?</p> <p>b.) How many things can fly?</p> <p>c.) How many animals can fly?</p> | 3 |
|---|---|---|



This is a Carroll diagram comparing shapes and colours.

d.) How many shapes are not triangles?

e.) How many more triangles are black than not black?

2

3 I understand why organising data is necessary.

A teacher asks the class about their favourite fruit. This is what she collected:

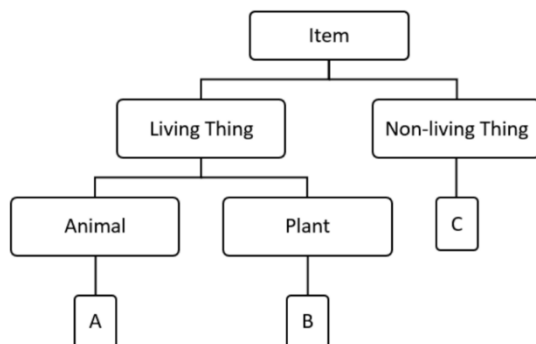
Apple, Banana, Apple, Orange, Apple, Pear, Banana, Orange, Apple, Banana, Pear, Apple, Orange, Banana, Apple

a.) Is this data easy to understand?

b.) How could this be displayed to be able to understand it quickly?

2

4 Describe information from diagrams that use arrows (flow chart).



Using this flow chart:

a.) Can you name something for Box A?

b.) Can you name something for Box B?

c.) Can you name something for Box C?

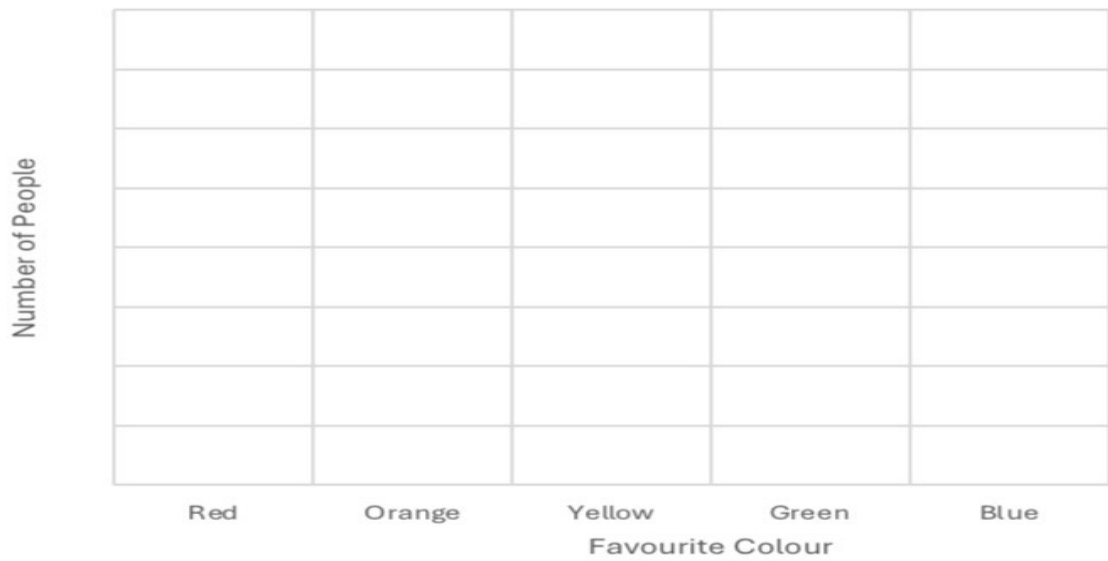
3

5

I can make and interpret bar graphs where the scale is appropriate, one unit may represent more than one value

| Favourite colour | Total |
|------------------|-------|
| Red | 12 |
| Orange | 7 |
| Yellow | 8 |
| Blue | 6 |
| Green | 10 |

Pupil's Favourite Colours



- a.) Use the information in the table to create a bar graph, using an appropriate scale.
- b) How many more people liked red than green?
- c) How many people were asked about their favourite colour altogether?