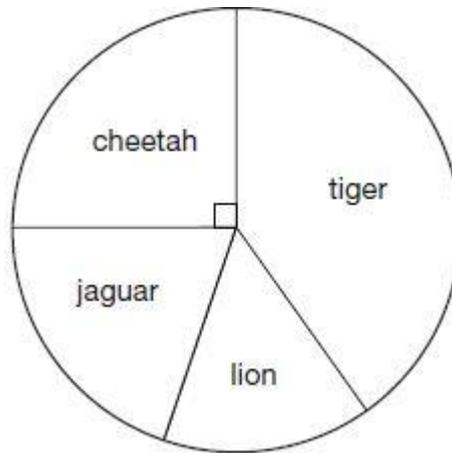


Q1.

This chart shows the number of different types of big cat in a zoo.

There are **20** big cats in the zoo altogether.



Here are some statements about the chart.

Tick the statements that are **true**.

There are more cheetahs than jaguars.

The total number of lions and tigers is 10

One-quarter of the big cats are cheetahs.

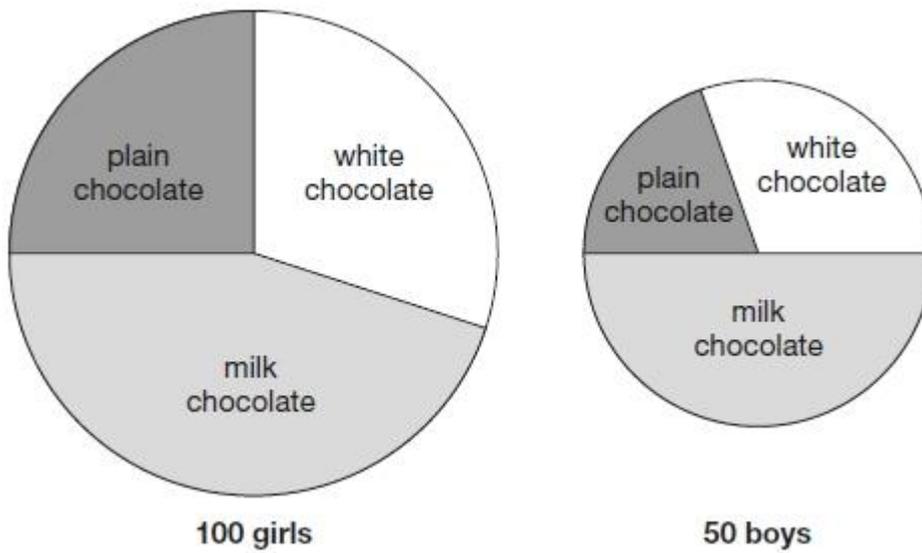
There are more than 5 jaguars.

2 marks

Q2.

100 girls and 50 boys were asked which kind of chocolate they like best.

These two pie charts show the results.



Dev says:

"The pie charts show that more girls than boys liked milk chocolate best."

Dev is correct.

Explain how you know.

A large, empty, cloud-shaped outline with a scalloped border, intended for the student to write their explanation.

1 mark

Mark schemes

Q1.

Award **TWO** marks for only two correct boxes ticked, as shown:

- | | |
|--|-------------------------------------|
| There are more cheetahs than jaguars. | <input checked="" type="checkbox"/> |
| The total number of lions and tigers is 10 | <input type="checkbox"/> |
| One-quarter of the big cats are cheetahs. | <input checked="" type="checkbox"/> |
| There are more than 5 jaguars. | <input type="checkbox"/> |

Award **ONE** mark for:

- only one correct box ticked and no incorrect boxes ticked

OR

- two correct boxes ticked and one incorrect box ticked.

Accept alternative unambiguous positive indications, e.g. Y.

Up to 2 marks

[2]

Q2.

Award **ONE** mark for an explanation which recognises that the two pie charts represent different numbers of children, e.g:

- '25 boys like milk chocolate best and more than 25 girls do'
- 'It's almost half of 100 girls and that's more than half of 50 boys'
- 'The pie chart shows that half of the boys chose milk chocolate and that's 25. About 45 girls chose milk chocolate because it's nearly half of the girls' pie chart'
- '25 boys chose milk chocolate, but (whole number in the range 40-49) girls chose milk chocolate'
- 'There are twice as many girls as boys so a quarter of the girls' pie chart is the same number as half of the boys' pie chart, and it's more than a quarter of the girls'
- $\frac{1}{2}$ of 50 boys chose milk = 25
- $\frac{1}{4}$ of 100 girls chose plain = 25

and from the girls' pie chart it is obvious that more chose milk than plain'

- 'There are twice as many girls as boys and the sizes of the pie charts show this and the area for boys who like milk chocolate is smaller than the area for girls who like it'.

Do not accept vague or incomplete explanations, e.g:

- '100 is more than 50'
- 'More girls took part than boys so more girls like milk chocolate'
- 'The section for boys who like milk chocolate is smaller than the section for girls who like it'.

Commentary: The pie charts are presented using the mathematical convention that their areas are proportional to the numbers they represent, i.e. in this example the chart for girls has twice the area of the chart for boys.

[1]