

Y6 Statistics

KS2 Y6 Maths · Follows the national curriculum

Name _____ Class _____ Date _____

1. Worked example

A pie chart shows how 40 people travel to work. The 'bus' slice is 90° . How many people take the bus?

Step 1 · What fraction of the circle is 90° ?

$$90/360 = 1/4$$

Step 2 · $1/4$ of 40

10

Answer: 10 people (25%)

Check: A quarter of the circle is a quarter of the people ✓

2. Now try one with the steps

36 children were asked their favourite sport. 12 chose football. What angle is the football slice?

Step 1 · Each child: $360^\circ \div 36$

Step 2 · 12 children $\times 10^\circ$

Answer:

3. Practice

Have a go at each one. There is space underneath to work it out.

1. How many degrees are there in a whole pie chart?

2. A pie chart is split into 4 equal slices. What percentage does each slice show?

3. A slice is 180° . What fraction of the data does it show?

4. A pie chart shows 40 people. A slice is 90° . How many people is that?

5. In a survey of 40 people, 10 prefer tea. What angle should the tea slice be?

6. A pie chart shows 30 people. A slice is 120° . How many people is that?

7. A pie chart shows 60 people. How many degrees represent each person?

8. 60 people were surveyed and 15 chose blue. What angle is the blue slice?

9. A slice is 45° . What fraction of the data does it show?

10. A pie chart shows 80 people. One slice is 25% of the chart. How many people is that?

11. A pie chart shows 24 children. One slice is 150° . How many children is that?

12. A pie chart has three slices. Two are 100° and 140° . How big is the third?

13. 90 people chose their favourite pet: 30 cats, 45 dogs, 15 fish. Work out the angle for each slice.

14. A slice of 72° represents 18 people. How many people does the whole pie chart represent?

15. Class A's pie chart has a bigger 'football' slice than class B's. Does this mean more children in class A like football? Explain.

4. Before you hand it in

Using 100 instead of 360 when working out angles.

A pie chart is a circle: 360° . Find the angle for one item ($360 \div \text{total}$), then multiply.

Thinking a bigger slice always means a bigger number of people.

A pie chart shows proportions. Check what each chart's total is before comparing amounts.

Angles that do not add up to 360° .

Always check: all the angles must add to 360° , and all the amounts must add to the total.