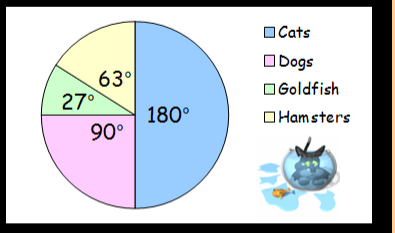
Outcome 2 – Calculations from Pie Charts

Bronze examples

Examples... 420 pupils were asked to name their favourite pet.

The results were shown in the pie chart below.



(a) How many preferred cats?

420 ÷ 2 = 210 pupils

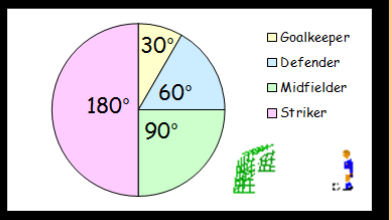
(b) How many preferred dogs?

420 ÷ 4 = 105 pupils

Silver examples

Examples... 48 boys were asked to name their best position in football.

The results were shown in the pie chart below.



(a) How many preferred to play in defence?

48 ÷ 6 = 8 pupils

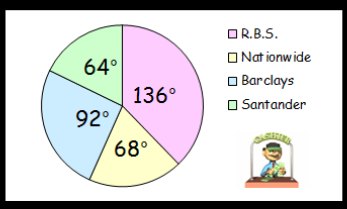
(b) How many preferred to play in goal?

48 ÷ 12 = 4 pupils

Gold examples

Examples... 1080 people were asked who they banked with.

The results were shown in the pie chart below.



(a) How many preferred to bank with Barclays?

92 ÷ 360 × 1080 = 276 people

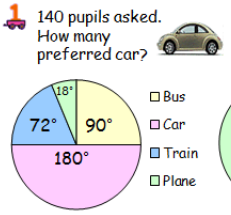
(b) How many preferred to bank with R.B.S?

136 ÷ 360 × 1080 = 408 people

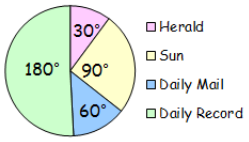
Bronze Questions

For each pie chart, calculate the following...

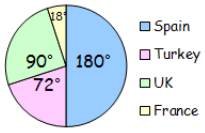
1. 140 pupils asked. How many preferred car?



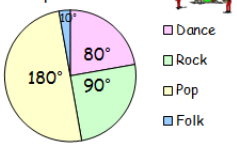
2. 20 adults asked. How many preferred Daily Record?



3. 240 tourists asked. How many preferred UK?



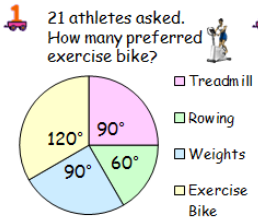
4. 56 young people asked. How many preferred rock?



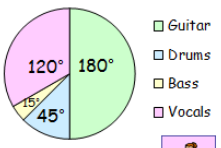
Silver Questions

For each pie chart, calculate the following...

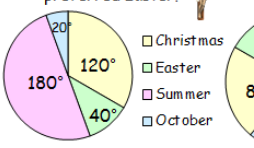
1. 21 athletes asked. How many preferred exercise bike?



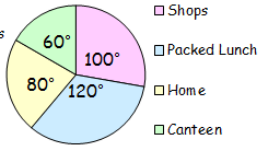
2. 72 musicians asked. How many preferred drums?



3. 540 pupils asked. How many preferred Easter?



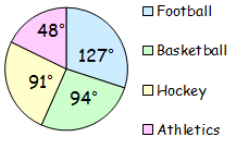
4. 300 pupils asked. How many preferred canteen?



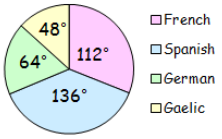
Gold Questions

For each pie chart, calculate the following...

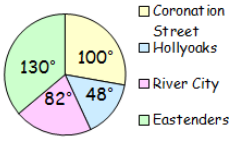
1. 30 students asked. How many preferred athletics?



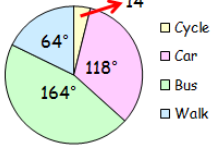
2. 90 language students asked. How many chose Spanish?



3. 180 adults asked. How many preferred Eastenders?



4. 720 students asked. How many cycled to school?



Common Fractions in Pie Charts:

$\frac{180°}{360°} = \frac{1}{2}$ $\frac{90°}{360°} = \frac{1}{4}$

More Fractions in Pie Charts:

$\frac{60°}{360°} = \frac{1}{6}$ $\frac{30°}{360°} = \frac{1}{12}$

$\frac{120°}{360°} = \frac{1}{3}$ $\frac{40°}{360°} = \frac{1}{9}$ $\frac{45°}{360°} = \frac{1}{8}$

How to calculate fractions in Pie Charts using a calculator:

angle ÷ 360 × amount

Bronze Answers

1. 70 pupils
2. 10 adults
3. 60 tourists
4. 14 young people

Silver Answers

1. 7 athletes
2. 9 musicians
3. 60 pupils
4. 50 pupils

Gold Answers

1. 4 students
2. 34 language students
3. 65 adults
4. 28 students