

Varied Fluency

Step 5: Read and Interpret Pie Charts

National Curriculum Objectives:

Mathematics Year 6: (6S1) [Interpret and construct pie charts and line graphs and use these to solve problems](#)

Differentiation:

Developing Questions to support reading and interpreting pie charts. Using halves, thirds, quarters and fifths, with numbers up to 100. Including up to 5 segments and up to 2 different denominators per chart.

Expected Questions to support reading and interpreting pie charts. Using halves, quarters, eighths, fifths, thirds and sixths, with numbers up to 1000. Including up to 6 segments and up to 3 different denominators per chart, where all denominators are direct multiples.

Greater Depth Questions to support reading and interpreting pie charts. Using any fraction, with numbers up to 1000. Including up to 6 segments and up to 4 different denominators per chart, where all denominators are not always direct multiples.

More [Year 6 Statistics](#) resources.

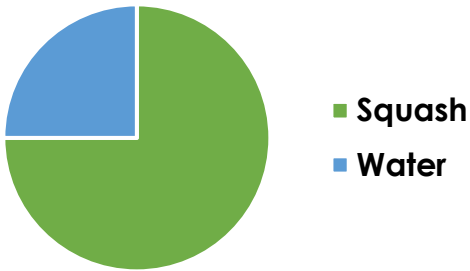
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Read and Interpret Pie Charts

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1a. What fraction of the pie chart represents people who chose squash?

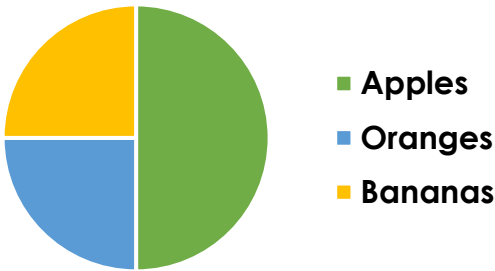
Favourite Drink



VF

1b. What fraction of the pie chart represents people who chose oranges?

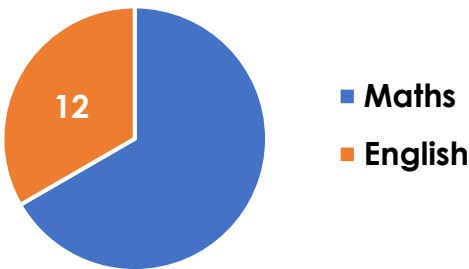
Favourite Fruit



VF

2a. The pie chart shows the votes of 36 people. Find the missing value.

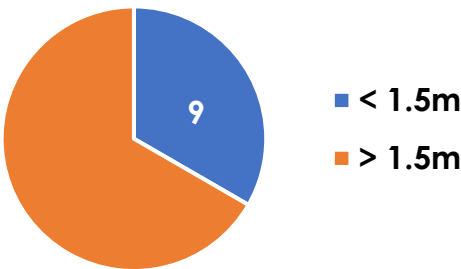
Favourite School Subject



VF

2b. The pie chart shows the results of 27 people. Find the missing value.

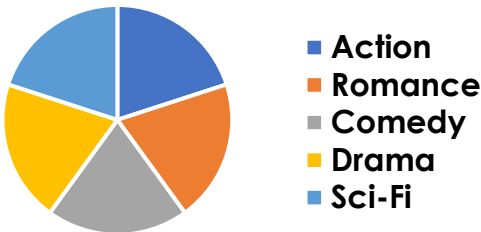
Height



VF

3a. 100 people took part in a survey about films. How many people does each segment represent?

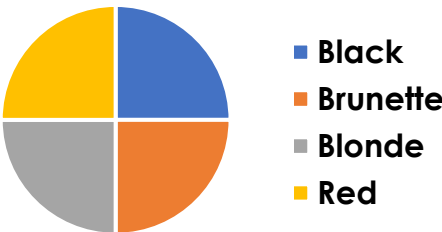
Favourite Film Type



VF

3b. 80 people took part in a survey about their hair colour. How many people does each segment represent?

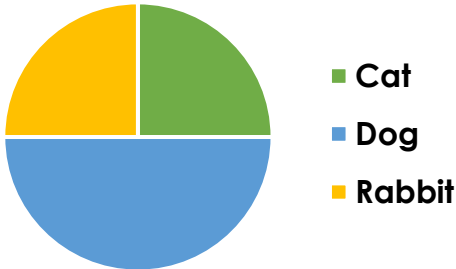
Hair Colour



VF

4a. How many people from the 40 surveyed chose each pet type?

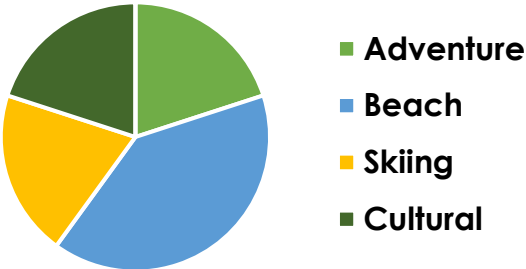
Favourite Pet



VF

4b. How many people from the 50 surveyed chose each option?

Favourite Holiday



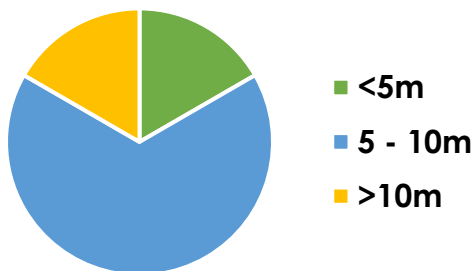
VF

Read and Interpret Pie Charts

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5a. What fraction of the pie chart represents people who threw <5m?

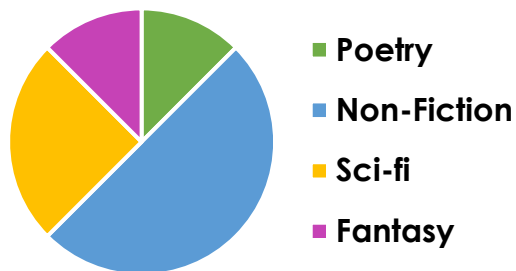
Throwing Distance



VF

5b. What fraction of the pie chart represents people who chose fantasy?

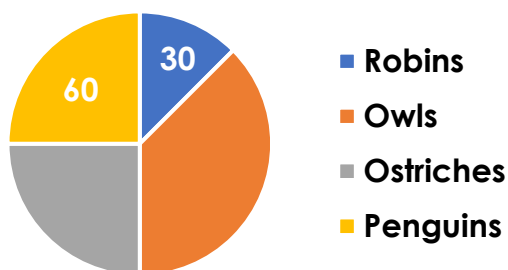
Favourite Type of Book



VF

6a. The pie chart shows the votes of 240 people. Find the missing values.

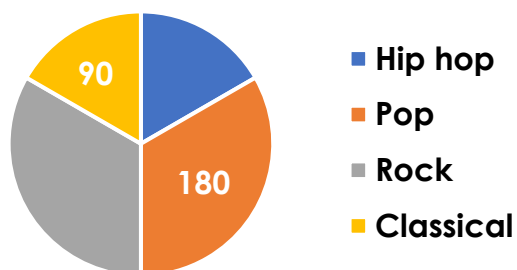
Favourite Bird



VF

6b. The pie chart shows the results of 540 people. Find the missing values.

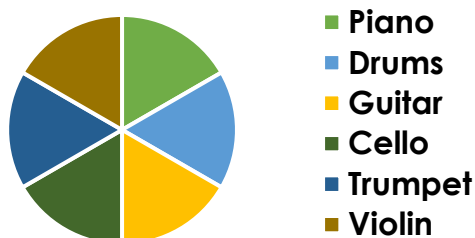
Favourite Music



VF

7a. 720 people took part in a survey about playing instruments. How many people does each segment represent?

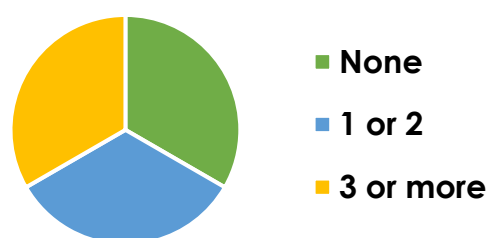
Musical Instruments



VF

7b. 990 people took part in a survey about siblings. How many people does each segment represent?

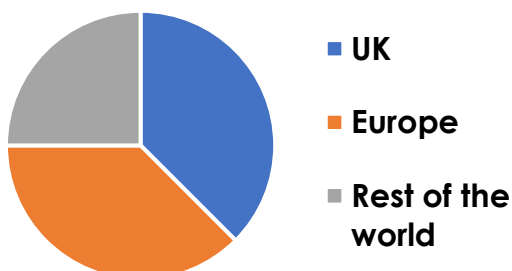
Number of Siblings



VF

8a. How many people from the 480 surveyed chose each option?

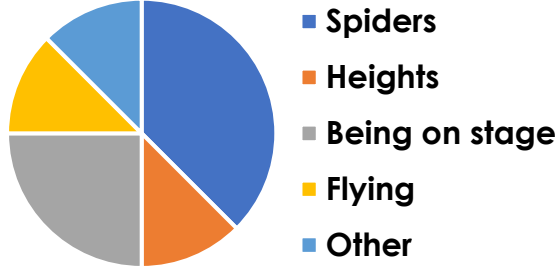
Holiday Destination



VF

8b. How many people from the 320 surveyed chose each option?

Biggest Fear

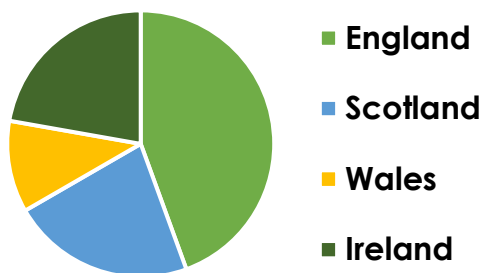


VF

Read and Interpret Pie Charts

9a. What fraction of the pie chart represents people who live in Scotland?

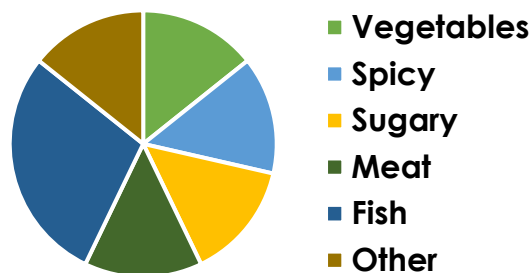
Location of Home in UK



VF

9b. What sized fraction of this pie chart represents people who chose fish?

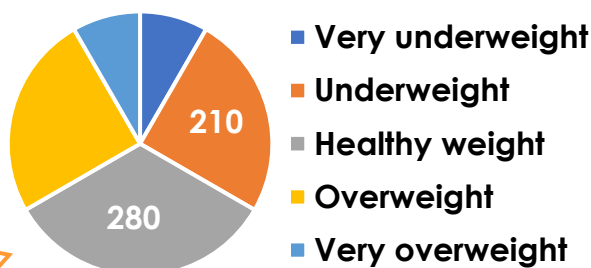
Worst Type of Food



VF

10a. This pie chart shows the weight of 840 people. Find the missing values.

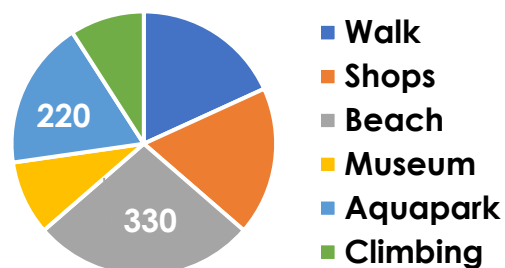
Weight



VF

10b. This pie chart shows the votes of 1,210 people. Find the missing values.

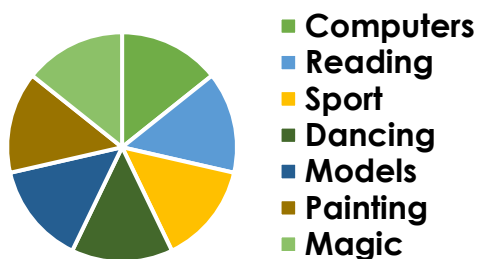
Favourite Day Out



VF

11a. 630 people took part in a survey about their hobbies. How many people does each segment represent?

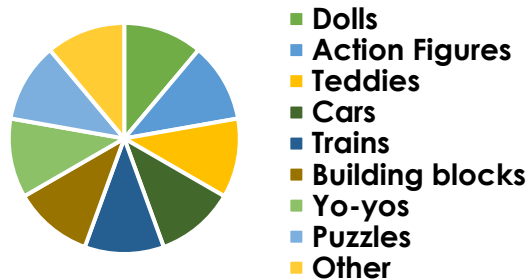
Favourite Hobby



VF

11b. 720 people took part in a survey about toys. How many people does each segment represent?

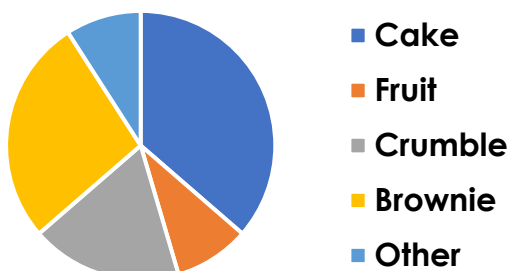
Favourite Toy



VF

12a. How many people from the 880 surveyed chose each option?

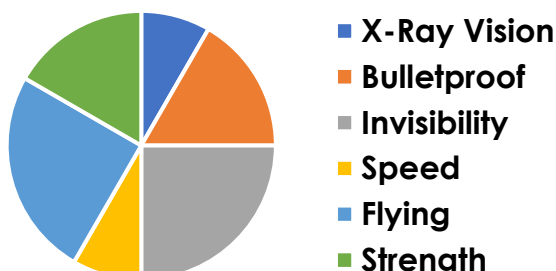
Favourite Pudding



VF

12b. How many people from the 960 surveyed chose each option?

Best Superhero Power



VF

Varied Fluency
Read and Interpret Pie Charts

Developing

1a. $\frac{3}{4}$

2a. 24

3a. 20

4a. Cat – 10, Dog – 20, Rabbit – 10

Expected

5a. $\frac{1}{6}$

6a. Owls – 90, Ostriches – 60

7a. 120

8a. UK – 180, Europe – 180, Rest of the world – 120

Greater Depth

9a. $\frac{2}{9}$

10a. Very underweight – 70, Overweight – 210, Very overweight – 70

11a. 90

12a. Cake – 320, Fruit – 80, Crumble – 160, Brownie – 240, Other – 80

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Developing

1b. $\frac{1}{4}$

2b. 18

3b. 20

4b. Adventure – 10, Beach – 20, Skiing – 10, Cultural – 10

Expected

5b. $\frac{1}{8}$

6b. Hip Hop – 90, Rock – 180

7b. 330

8b. Spiders – 120, Heights – 40, Being on stage – 80, Flying – 40, Other – 40

Greater Depth

9b. $\frac{2}{7}$

10b. Walk – 220, Shops – 220, Museum – 110, Climbing – 110

11b. 80

12b. X-Ray Vision – 80, Bulletproof – 160, Invisibility – 240, Speed – 80, Flying – 240, Strength – 160