

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 understanding reading and interpreting pie charts. Using halves and quarters, with numbers up to 12.

Expected Questions to support understanding reading and interpreting pie charts. Using halves, quarters, eighths, thirds and sixths, with numbers up to 30.

Greater Depth Questions to support understanding reading and interpreting pie charts. Using any fractions, with numbers up to 100.

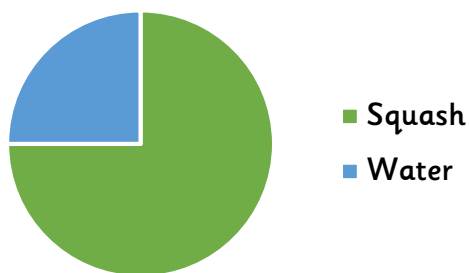
More [Year 6 Statistics](#) resources.

Did you like this resource? Don't forget to [review](#) it on our website.

Varied Fluency – Read and Interpret Pie Charts

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

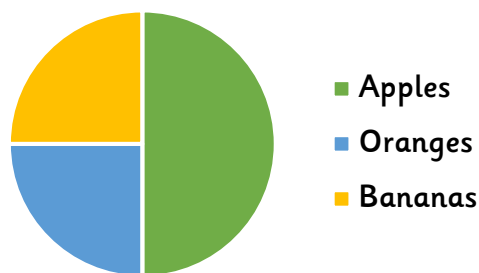
Favourite drink



VF

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

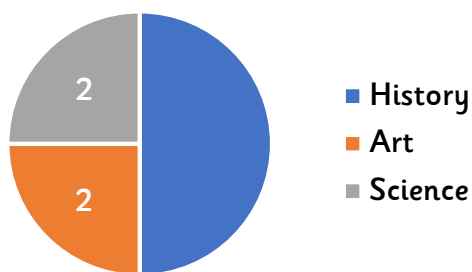
Favourite fruit



VF

2a. This pie chart shows the votes of 8 people. Find the missing value.

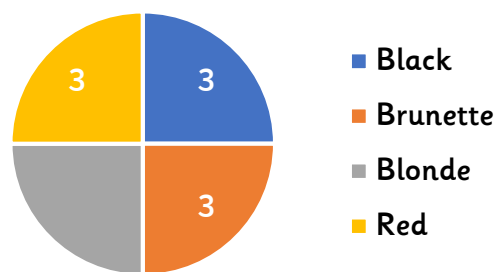
Favourite school subject



VF

2b. This pie chart shows the hair colour of 12 people. Find the missing value.

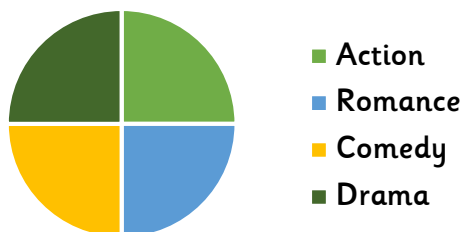
Hair colour



VF

3a. 4 people took part in a survey about films. How many people does each segment represent?

Favourite film type



VF

3b. 10 people measured how far they could jump. How many people does each segment represent?

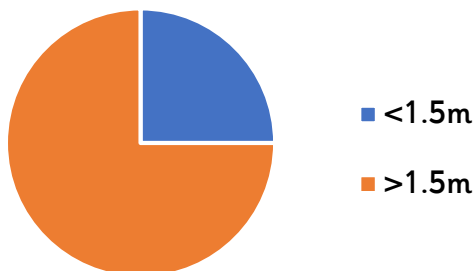
Long jump length



VF

4a. How many people from the 12 measured were in each height group?

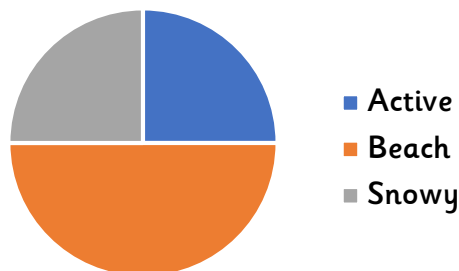
Height



VF

4b. How many people from the 8 surveyed chose each option?

Favourite holiday

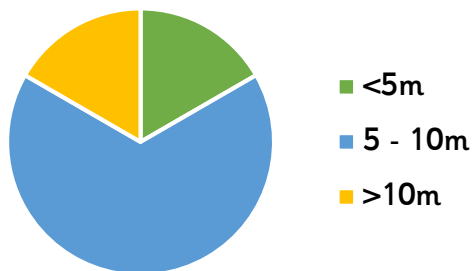


VF

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

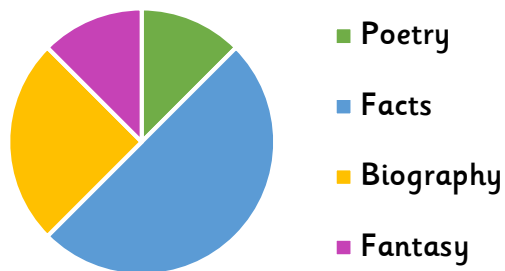
Throw distance



VF

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

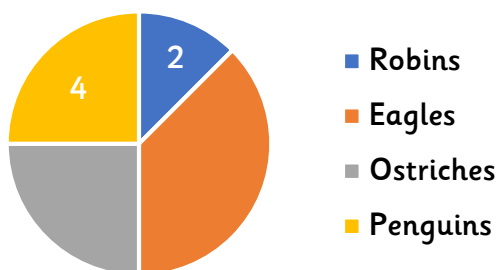
Favourite book type



VF

6a. This pie chart shows the votes of 16 people. Find the missing values.

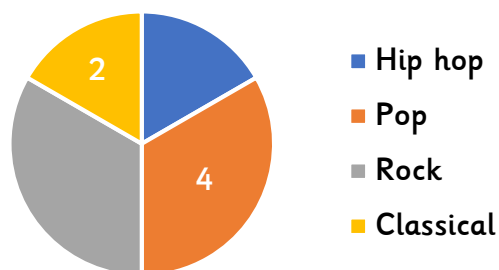
Favourite bird



VF

6b. This pie chart shows the votes of 12 people. Find the missing values.

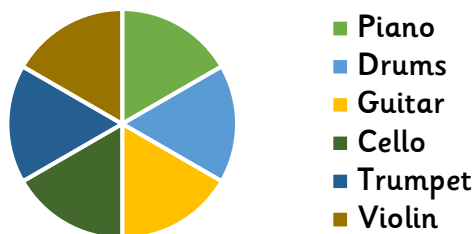
Favourite music



VF

7a. 24 people took part in a survey about playing instruments. How many people does each segment represent?

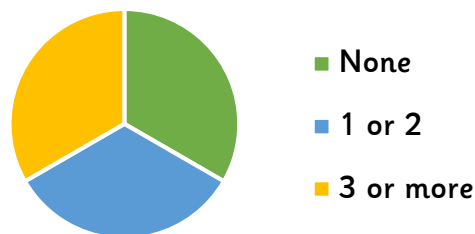
Musical instruments



VF

7b. 24 people took part in a survey about siblings. How many people does each segment represent?

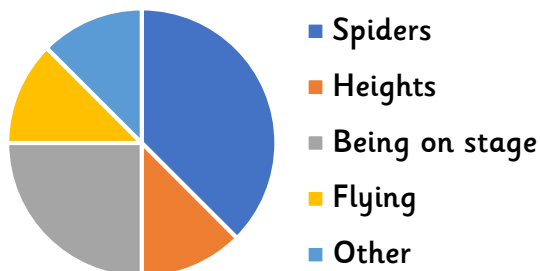
Number of siblings



VF

8a. How many people from the 16 surveyed chose each option?

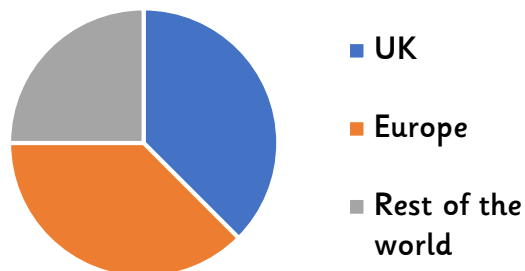
Biggest fear



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8b. How many people from the 24 surveyed chose each option?

Holiday destination

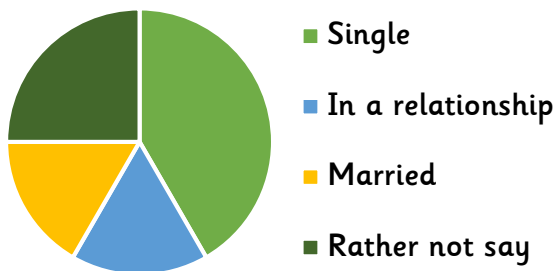


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9a. What sized fraction of this pie chart represents people who are single?

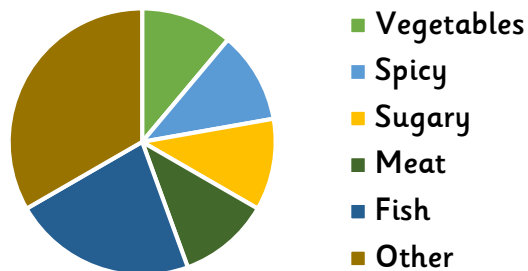
Relationship status



VF

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

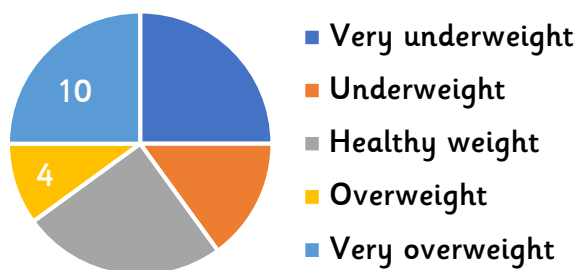
Worst food



VF

10a. This pie chart shows the weight of 40 people. Find the missing values.

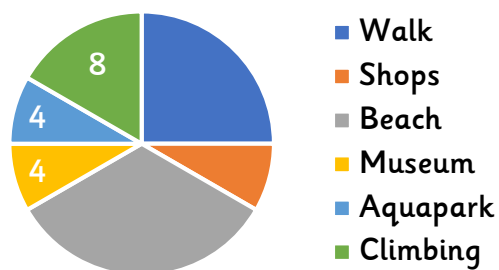
Weight



VF

10b. This pie chart shows the votes of 48 people. Find the missing values.

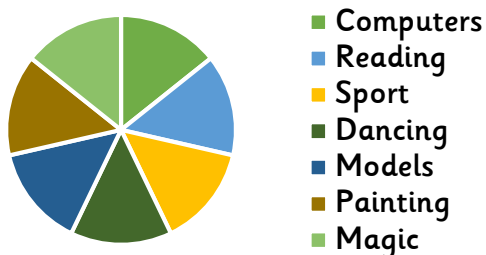
Favourite day out



VF

11a. 49 people took part in a survey about their hobbies. How many people does each segment represent?

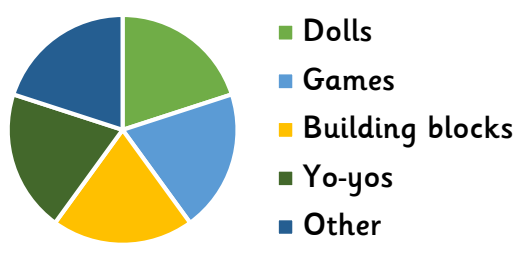
Favourite hobby



VF

11b. 55 people took part in a survey about toys. How many people does each segment represent?

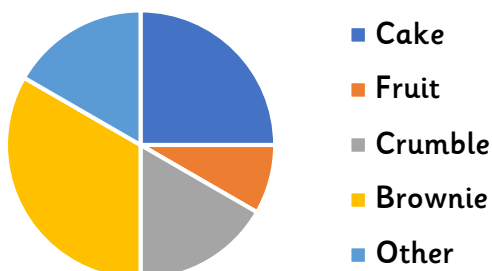
Favourite toy



VF

12a. How many people from the 60 surveyed chose each option?

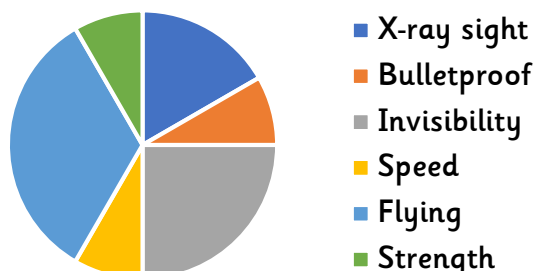
Favourite pudding



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12b. How many people from the 72 surveyed chose each option?

Best superhero power



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Developing

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

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

2a. 4 people.

2b. 3 people.

3a. 1 person.

3b. 5 people.

4a. <1.5m: 3 people; >1.5m: 9 people.

4b. Active: 2 people; Beach: 4 people; Snowy: 2 people.

Expected

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

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

6a. Eagles: 6 people; Ostriches: 4 people.

6b. Hip hop: 2 people; Rock: 4 people.

7a. 4 people.

7b. 8 people.

8a. Spiders: 6 people; Heights: 2 people; Being on stage: 4 people; Flying: 2 people; Other: 2 people.

8b. UK: 9 people; Europe: 9 people; Rest of the world: 6 people.

Greater Depth

9a. $\frac{5}{12}$

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

10a. Very underweight: 10 people; Underweight: 6 people; Healthy weight: 10 people.

10b. Walk: 12 people; Shops: 4 people; Beach: 16 people.

11a. 7 people.

11b. 11 people.

12a. Cake: 15 people; Fruit: 5 people; Crumble: 10 people; Brownie: 20 people; Other: 10 people.

12b. X-ray sight: 12 people; Bulletproof: 6 people; Invisibility: 18 people; Speed: 6 people; Flying: 24 people; Strength: 6 people.