<u>Maths- Pie Charts</u>

Today you will be consolidating the work you did on Monday about pie charts.

Try to complete as much of the work as you can.

EXTENSION

Collect some data about a topic which interests you and represent it in a dual bar chart.
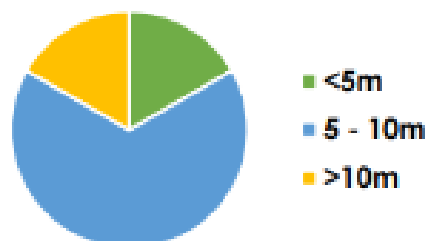For example:

- Football statistics for two different years
- Specific animal populations for two different years

Read and Interpret Pie Charts

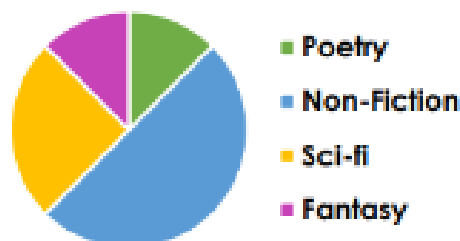**5a. What fraction of the pie chart represents people who threw <5m?**

Throwing Distance

- <5m
- 5 - 10m
- >10m

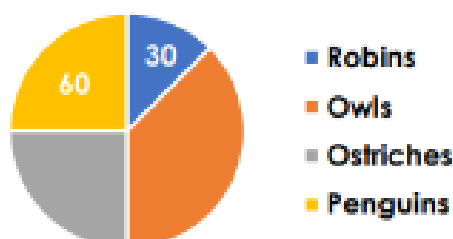**5b. What fraction of the pie chart represents people who chose fantasy?**

Favourite Type of Book

- Poetry
- Non-Fiction
- Sci-fi
- Fantasy

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

Favourite Bird

30
60

- Robins
- Owls
- Ostriches
- Penguins

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

Favourite Music

90
180

- Hip hop
- Pop
- Rock
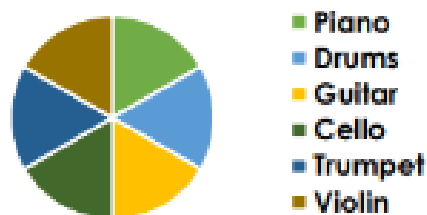- Classical
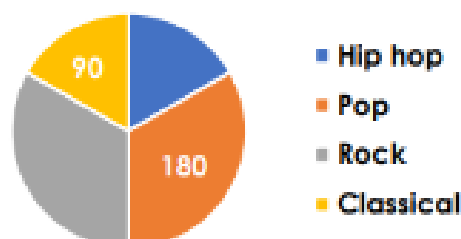
7a. 720 people took part in a survey about playing instruments. How many people does each segment represent?

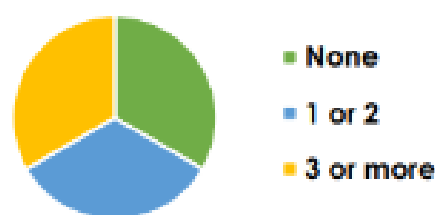### Musical Instruments

- Piano
- Drums
- Guitar
- Cello
- Trumpet
- Violin

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

Number of Siblings

- None
- 1 or 2
- 3 or more

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

Holiday Destination

- UK
- Europe
- Rest of the world
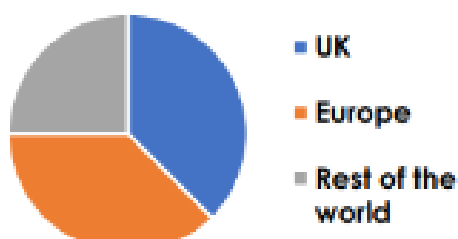
8b. How many people from the 320 surveyed chose each option?

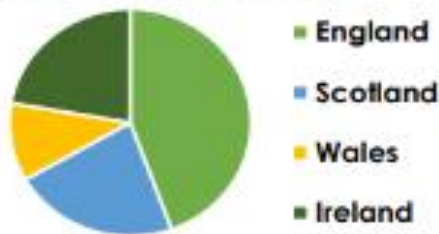### Biggest Fear

- Spiders
- Heights
- Being on stage
- Flying
- Other
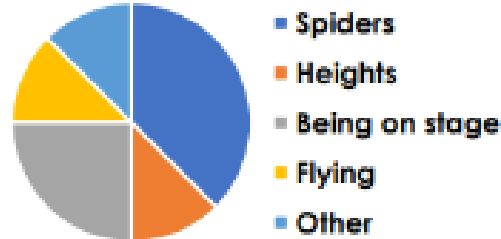
Read and Interpret Pie Charts

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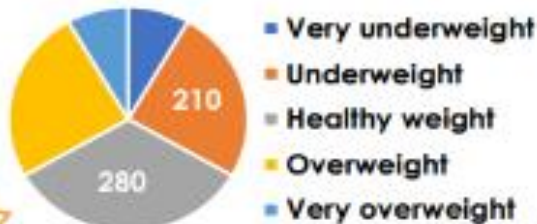
Location of Home in UK

- England
- Scotland
- Wales
- Ireland

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

Worst Type of Food

- Vegetables
- Spicy
- Sugary
- Meat
- Fish
- Other
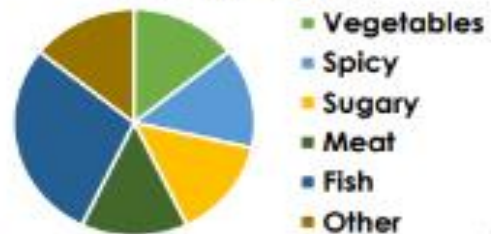
10a. This pie chart shows the weight of 840 people. Find the missing values.

Weight

210

280

- Very underweight
- Underweight
- Healthy weight
- Overweight
- Very overweight

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

Favourite Day Out

220

330

- Walk
- Shops
- Beach
- Museum
- Aquapark
- Climbing
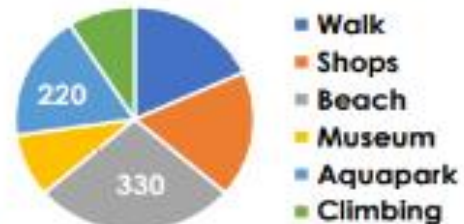
11a. 630 people took part in a survey about their hobbies. How many people does each segment represent?

Favourite Hobby

- Computers
- Reading
- Sport
- Dancing
- Models
- Painting
- Magic
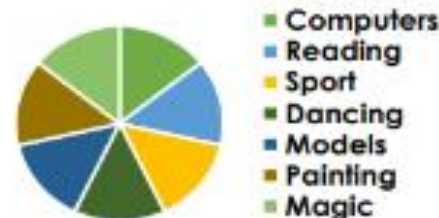
11b. 720 people took part in a survey about toys. How many people does each segment represent?

Favourite Toy

- Dolls
- Action Figures
- Teddies
- Cars
- Trains
- Building blocks
- Yo-yos
- Puzzles
- Other
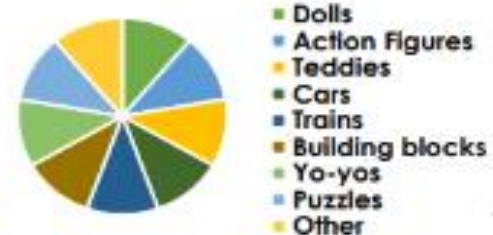
12a. How many people from the 880 surveyed chose each option?

Favourite Pudding

- Cake
- Fruit
- Crumble
- Brownie
- Other
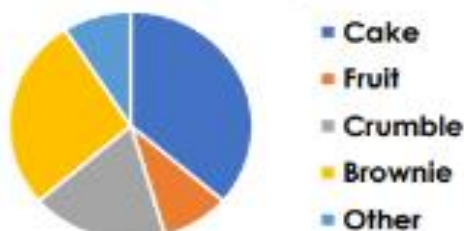
12b. How many people from the 960 surveyed chose each option?

Best Superhero Power

- X-Ray Vision
- Bulletproof
- Invisibility
- Speed
- Flying
- Strength
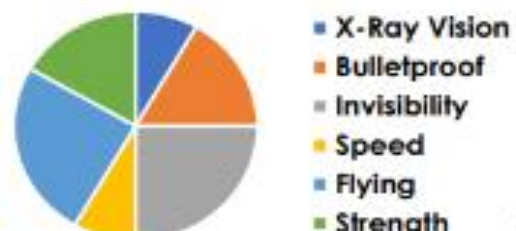
Read and Interpret Pie Charts

4a. Phil says,

> I do not have enough information to work out the total number of votes.

Favourite Time of Day

- Morning
- Lunchtime
- Afternoon
- Evening
- Night

Is he correct? Prove it.

4b. Rosie says,

> I do not have enough information to work out the total number of votes.

Favourite School Year

- Year 3
- Year 4
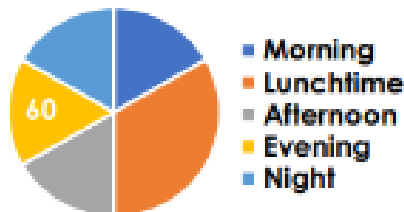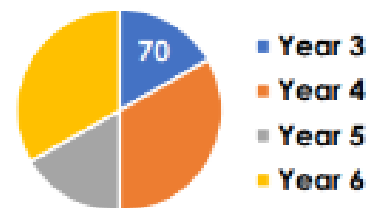- Year 5
- Year 6

Is she correct? Prove it.

5a. Fiona has forgotten what fraction of the pie chart should be given to 'Italian'. Can you work out the fraction from the information below?

Nationality of Hotel Guests	
French	100
Spanish	100
Italian	?
German	50
Total	**300 people**

5b. Ray has forgotten what fraction of the pie chart should be given to 'Elves'. Can you work out the fraction from the information below?

Favourite Group of Characters	
Witches	100
Elves	?
Dragons	50
Knights	50
Total	**250 people**

6a. Imagine a pie chart with the same proportions as the one below was drawn for a survey of 640 people.

Would the 'Spring' category have 80 people in it? Convince me.

Best Season of the Year

- Spring
- Summer

6b. Imagine a pie chart with the same proportions as the one below was drawn for a survey of 540 people.

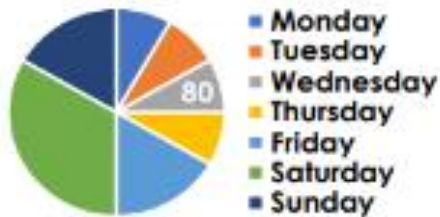Would the 'Paintball' category have 90 people in it? Convince me.

Best Birthday

- Karting
- Paintball

Read and Interpret Pie Charts

7a. Felicity says,

I do not have enough information to work out the number of votes.
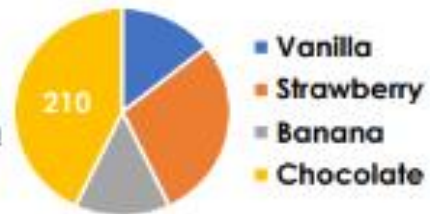
Best Day of the Week

- Monday
- Tuesday
- Wednesday
- Thursday
- Friday
- Saturday
- Sunday

80

Is she correct? Prove it.

7b. Tom says,

I do not have enough information to work out the total number of votes.

Favourite Ice Cream

210

- Vanilla
- Strawberry
- Banana
- Chocolate

Is he correct? Prove it.

8a. Bret has forgotten what fraction of the pie chart should be given to 'Europe'. Can you work out the fraction from the information below?

Continent Living On	
Europe	?
North America	240
South America	80
Asia	160
Oceania	80
Total	**720 people**

8b. Asha has forgotten what fraction of the pie chart should be given to the '2000s'. Can you work out the fraction from the information below?

Favourite Music Era	
1970s	70
1980s	140
1990s	140
2000s	?
2010s	140
Total	**840 people**

9a. Imagine a pie chart with the same proportions as the one below was drawn for a survey of 560 people.

Would the '<12' category have 70 people in it? Convince me.

9b. Imagine a pie chart with the same proportions as the one below was drawn for a survey of 810 people.

Would the '5' category have 80 people in it? Convince me.