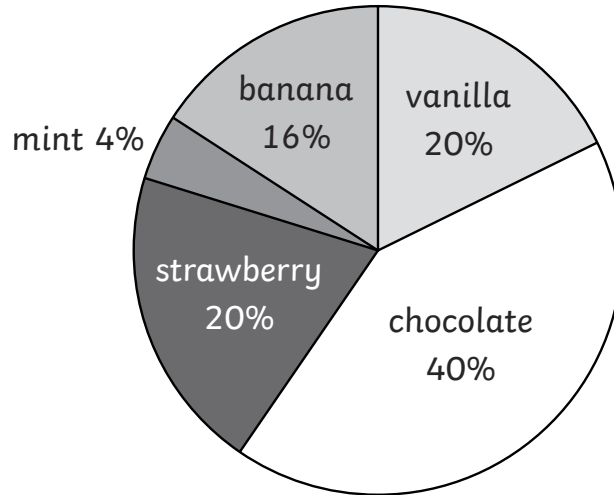# Percentages and Pie Charts

I can solve problems involving the calculation of percentages in pie charts.

Favourite Ice Cream Flavours

- ☐ chocolate
- ☐ vanilla
- ☐ banana
- ☐ mint
- ☐ strawberry

1. 50 people were asked about their favourite ice cream flavour. Use this information to answer these questions about the pie chart:
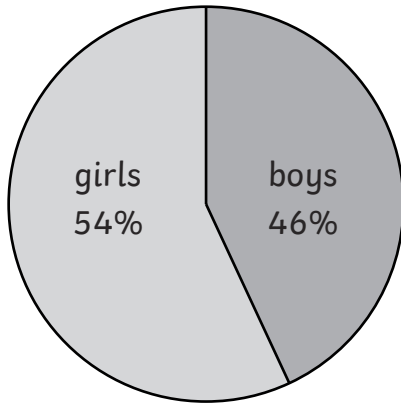
---

a. How many said that chocolate was their favourite?

_____

---

b. How many people said that mint was their favourite?

_____

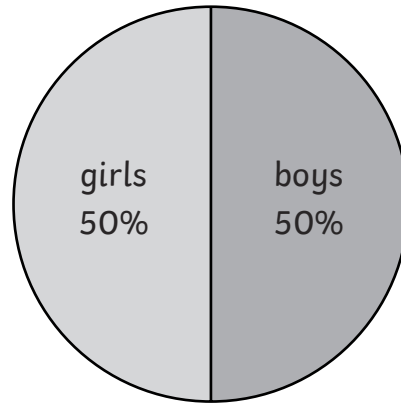c. 10 people like vanilla best of all. True or False? Use a calculation to prove your answer.

_____

Boys and Girls in Year 5

Boys and Girls in Year 6

girls
54%

boys
46%

girls
50%

boys
50%

girls boys

girls boys

2. These pie charts show the number of boys and girls in a school in Year 5 and Year 6. There are 50 children in Year 5 and 60 children in Year 6.

a. How many children are boys in Year 6?

_____

b. How many children are girls in Year 5?

_____

c. There are more girls in Year 5 than Year 6. True or False? Use a calculation to prove your answer.
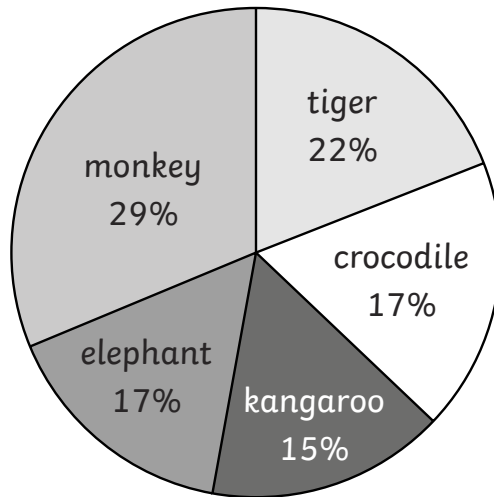
_____

Percentages and Pie Charts

I can solve problems involving the calculation of percentages in pie charts.

Favourite Zoo Animals

- ☐ crocodile
- ☐ tiger
- ☐ monkey
- ☐ elephant
- ☐ kangaroo

1. 200 people were asked about their favourite zoo animal. Use this information to answer these questions about the pie chart:
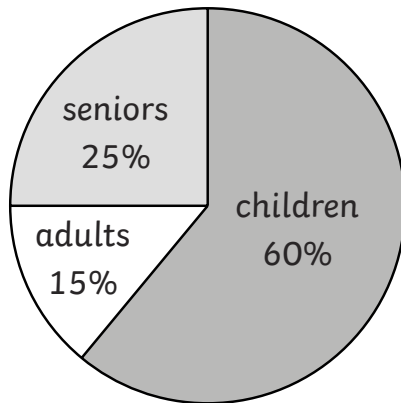
a. How many people like elephants?

_____

b. How many more people liked tigers than kangaroos?

_____

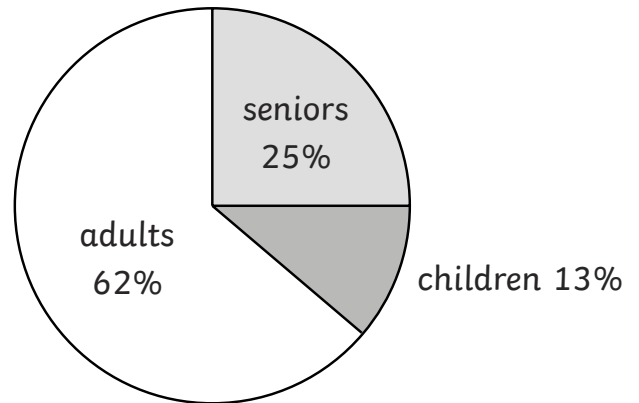c. 14 more people liked monkeys than tigers. True or False? Show a calculation to show how you know.

_____

The Make-up of an Audience at an Afternoon Performance at a Theatre

seniors 25%

adults 15%

children 60%

The Make-up of an Audience at an Evening Performance at a Theatre

seniors 25%

adults 62%

children 13%

☐ adults   ☐ seniors   ▨ children   ☐ adults   ☐ seniors   ▨ children

2. 200 people went to the theatre one afternoon. The same evening, 500 people went to the same theatre. Answer the following questions about the pie chart:

a. How many adults went to the theatre in the afternoon?

_____

b. How many children went to the theatre in the evening?

_____

c. The same number of seniors went to the theatre in the afternoon as the evening. True or False? Use a calculation to show how you know.
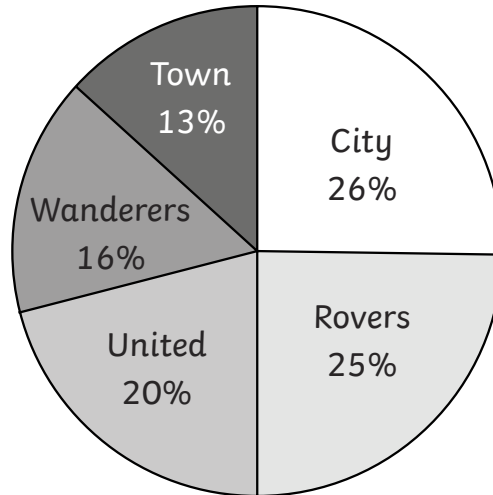
_____

Percentages and Pie Charts

I can solve problems involving the calculation of percentages in pie charts.

Average Attendance at Football Grounds

☐ City   ☐ Rovers   ☐ United   ☐ Wanderers   ☐ Town

1. This pie chart shows the average attendance over a season. Rovers' average attendance was 50 000. Answer these questions about the pie chart:
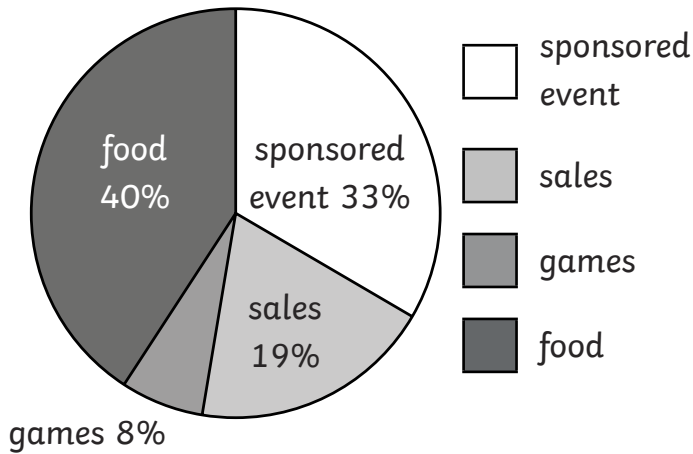
a. How many people on average attended United?

b. How many teams had average attendance over 45 000?

c. City had an average attendance of more than 50 000. True or False? Use a calculation to show how you know.
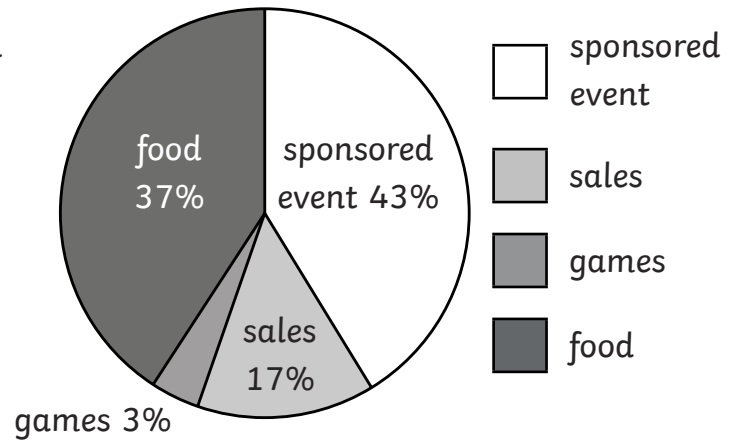
Fundraising 2014

food
40%

sponsored
event 33%

sales
19%

games 8%

- [ ] sponsored event
- [ ] sales
- [ ] games
- [ ] food

Fundraising 2015

food
37%

sponsored
event 43%

sales
17%

games 3%

- [ ] sponsored event
- [ ] sales
- [ ] games
- [ ] food

2. A charity raises money. In 2014, £1000 was raised. They raised £300 more in 2015.
Use this information and the pie charts to answer the following questions:

a. In 2014, how much money was raised on food?

_____

b. How much more money was raised in 2015 on sponsored events than in 2014?

_____

c. More money was raised on sales in 2014 than 2015. True or False?
Use a calculation to show how you know.

_____

Percentages and Pie Charts **Answers**

Question	Answer
1. 50 people were asked about their favourite ice cream flavour. Use this information to answer these questions about the pie chart:	
a	*20*
b	*2*
c	*True. Children include an example of how they calculated the answer.*
2. These pie charts show the number of boys and girls in a school in Year 5 and Year 6. There are 50 children in Year 5 and 60 children in Year 6.	
a	*30 boys*
b	*27 girls*
c	*False. Children include an example of how they calculated the answer.*

Percentages and Pie Charts **Answers**

Question	Answer
1. 200 people were asked about their favourite zoo animal. Use this information to answer these questions about the pie chart:	
a	*34 people*
b	*14 people*
c	*True. Children include an example of how they calculated the answer.*
2. 200 people went to the theatre one afternoon. The same evening, 500 people went to the same theatre. Answer the following questions about the pie chart:	
a	*30 adults*
b	*65 children*
c	*False. Children include an example of how they calculated the answer.*

Percentages and Pie Charts **Answers**

Question	Answer
1. This pie chart shows the average attendance over a season. Rovers' average attendance was 50 000. Answer these questions about the pie chart:	
a	*40 000 people*
b	*Two Teams*
c	*True. Children include an example of how they calculated the answer.*
2. A charity raises money. In 2014, £1000 was raised. They raised £300 more in 2015. Use this information and the pie charts to answer the following questions:	
a	*£400*
b	*£229*
c	*False. Children include an example of how they calculated the answer.*