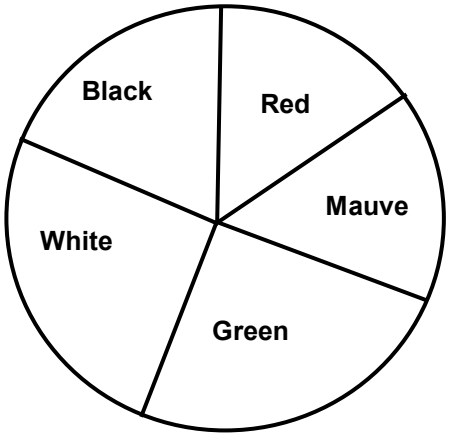
1. Toy cars are sold in these colours: *red*, *mauve*, *green*, *white* or *black*. The pie chart shows as a percentage the frequency of each colour sold.



Colour	Percentage
Red	16%
Mauve	16%
Green	24%
White	24%
Black	20%

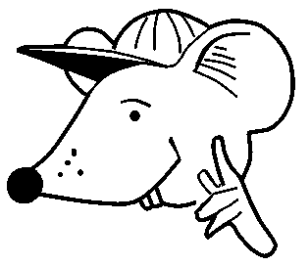
a) Complete the table below. Show how many cars of each colour were sold if there were 100, 400 or 50 cars altogether.

	Total Number of Cars		
Colour	**100**	**400**	**50**
Red			
Mauve			
Green			
White			
Black			

Don't forget:

100% means <u>all</u> the cars.

Use your answers for 100 cars to work out the answers for 400 and 50 cars.

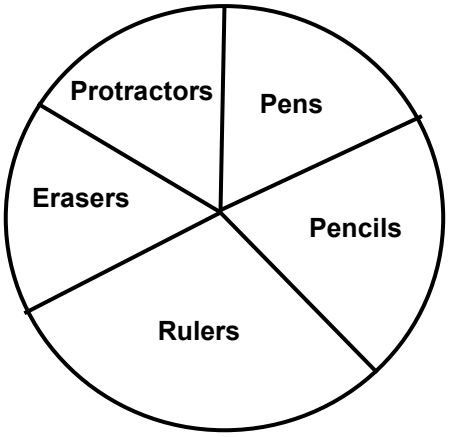


b) One car is picked at random. What is the probability that it is mauve?

c) One car is picked at random. What is the probability that it is red or green?

d) One car is picked at random. What is the probability that it is **not** red?

1. A school shop sold the following items: *pens, pencils, rulers, erasers* and *protractors*.
The pie chart shows as a percentage the frequency of each item sold.



Item	Percentage
Pens	18%
Pencils	20%
Rulers	30%
Erasers	16%
Protractors	16%

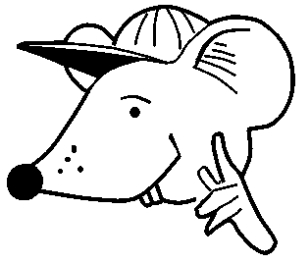
a) Complete the table below. Show how many of each item were sold if 100, 200 or 50 items were sold altogether.

	Total Number of items		
Item	**100**	**200**	**50**
Pens			
Pencils			
Rulers			
Erasers			
Protractors			

Don't forget:

100% means all the items.

Use your answers for 100 items to work out the answers for 200 and 50 items.

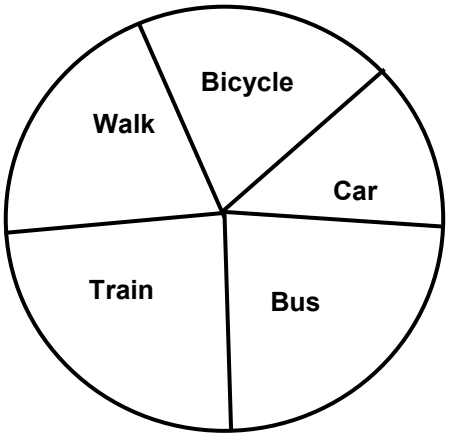


b) One item is picked at random. What is the probability that it is a ruler?

c) One item is picked at random. What is the probability that it is a pen or a pencil?

d) One item is picked at random. What is the probability that it is **not** an eraser?

1. Children come to school either on a *bicycle*, in a *car*, on a *bus*, by *train* or by *walking*. The pie chart shows as a percentage the number of children that use each method of transport.



Transport	Percentage
Bicycle	20%
Car	12%
Bus	24%
Train	24%
Walk	20%

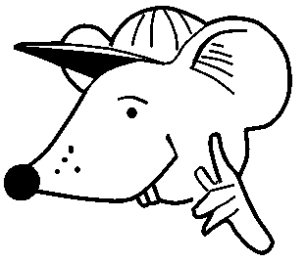
a) Complete the table below. Show how many pupils used each method of transport if there were 200, 800 or 500 pupils altogether.

	Total Number of Pupils		
Transport	**200**	**800**	**500**
Bicycle			
Car			
Bus			
Train			
Walk			

Don't forget:

100% means <u>all</u> the pupils.

Think about 100 children first to help you work out the answers.

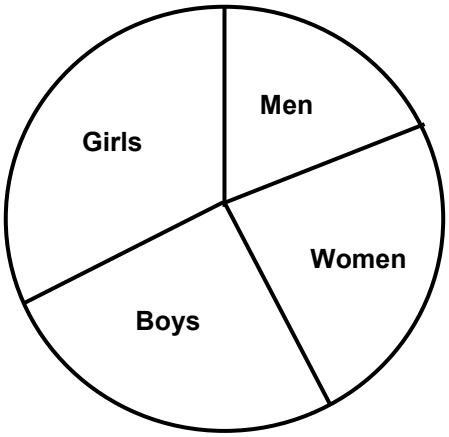


b) One pupil is picked at random. What is the probability that she walks to school?

c) One pupil is picked at random. What is the probability that he comes by car or by bus?

d) One pupil is picked at random. What is the probability that she does **not** walk to school?

1. The pie chart shows as a percentage the number of *men, women, boys* and *girls* that see a film in the cinema.



	Percentage
Men	19%
Women	24%
Boys	25%
Girls	32%

a) Complete the table below. Show how many men, women, boys and girls went to the cinema if there were 600, 1 000 or 300 people altogether.

	Total Number of People		
	600	**1 000**	**300**
Men			
Women			
Boys			
Girls			

Don't forget:

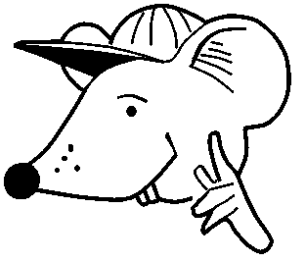
100% means all the people.

Think about 100 people first to help you work out the answers.

b) One person is picked at random. What is the probability the chosen person is a boy?

c) One person is picked at random. What is the probability that the chosen person is an adult?

d) One person is picked at random. What is the probability that the chosen person is **not** a girl?



Answers

Page 1

1. a)

Red	**16**	**64**	**8**
Mauve	**16**	**64**	**8**
Green	**24**	**96**	**12**
White	**24**	**96**	**12**
Black	**20**	**80**	**10**

b) $^{16}/_{100}$ or $^{4}/_{25}$ or equivalent
c) $^{40}/_{100}$ or $^{2}/_{5}$ or equivalent
d) $^{84}/_{100}$ or $^{21}/_{25}$ or equivalent

Page 2

1. a)

Pens	**18**	**36**	**9**
Pencils	**20**	**40**	**10**
Rulers	**30**	**60**	**15**
Erasers	**16**	**32**	**8**
Protractors	**16**	**32**	**8**

b) $^{30}/_{100}$ or $^{3}/_{10}$ or equivalent
c) $^{38}/_{100}$ or $^{19}/_{50}$ or equivalent
d) $^{84}/_{100}$ or $^{21}/_{25}$ or equivalent

Page 3

1. a)

Bicycle	**40**	**160**	**100**
Car	**24**	**96**	**60**
Bus	**48**	**192**	**120**
Train	**48**	**192**	**120**
Walk	**40**	**160**	**100**

b) $^{20}/_{100}$ or $^{1}/_{5}$ or equivalent
c) $^{36}/_{100}$ or $^{9}/_{25}$ or equivalent
d) $^{80}/_{100}$ or $^{4}/_{5}$ or equivalent

Page 4

1. a)

Men	**114**	**190**	**57**
Women	**144**	**240**	**72**
Boys	**150**	**250**	**75**
Girls	**192**	**320**	**96**

b) $^{25}/_{100}$ or $^{1}/_{4}$ or equivalent

c) $^{43}/_{100}$

d) $^{68}/_{100}$ or $^{17}/_{25}$ or equivalent