

Statistics

sample

Summer Term Block 5

Name _____ Class _____

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Year 3 Summer Term Block 5

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Interpret pictograms

1 Tom asks the children in his class how many pets they have. He draws the information in a pictogram.

Key  = 1 child

Number of pets	Number of children
0	
1	
2	
3	
4 or more	

a) How many children have one pet?


b) How many children have no pets?








c) How many more children have two pets than three pets?

d) Is it possible to tell how many children have exactly four pets? _____

Explain your answer.

2 The pictogram shows the number of ice creams sold each day.

Key  = 5 ice creams

Day	Number of ice creams sold
Monday	
Tuesday	
Wednesday	
Thursday	
Friday	
Saturday	
Sunday	

a) On which day were the most ice creams sold?

b) On which two days were 20 ice creams sold?
_____ and _____

c) How many ice creams were sold on Thursday?





d) How many more ice creams were sold on Friday than on Thursday?

e) More ice creams were sold in total on Saturday and Sunday than during the rest of the week.

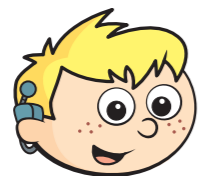
Do you agree? _____

3 The pictogram shows the colours of cars in a car park.

Key  = 2 cars

Colour	Number of cars in car park
red	
blue	
white	
yellow	

- a) How many cars are red?
- b) How many cars are blue?
- c) How many cars are there in total?
- d) How many more white cars than red cars are there?
- e)



The total number of blue and yellow cars is the same as the number of white cars.


Do you agree with Max? _____






Show your workings.

f) Ask a partner some other questions about the pictogram.

4 The pictogram shows the number of stickers Class 3 and Class 4 get each day.






Class 3

Key  = 5 stickers

Day	Number of stickers
Monday	
Tuesday	
Wednesday	
Thursday	
Friday	

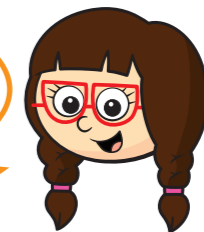
Class 4

Key  = 10 stickers

Day	Number of stickers
Monday	
Tuesday	
Wednesday	
Thursday	
Friday	

a)

Both classes got the same number of stickers on Wednesday.



Do you agree with Jo? _____

Explain your answer.

b) Which class got more stickers in total for the week? _____

Draw pictograms

- 1 The table shows how many of each type of fruit there is in a basket.

Fruit	apple	orange	banana	pear
Number	6	8	3	5

Use the table to complete the pictograms.

- a) **Key** ● = 1 piece of fruit

Fruit	Number
apple	
orange	
banana	
pear	

- b) **Key** ● = 2 pieces of fruit

Fruit	Number
apple	
orange	
banana	
pear	

Compare answers with a partner.



- 2 Class 3 are asked how many pets they have. Here are the results.

Children with 0 pets	8
Children with 1 pet	14
Children with 2 pets	9
Children with 3 pets	5
Children with 4 or more pets	2

- a) Eva starts a pictogram to show the results.

Complete the pictogram and the key.

Key ▲ = children

Pets	Number of children
0 pets	▲ ▲ ▲ ▲
1 pet	
2 pets	
3 pets	
4 or more pets	

- b) How did you know what value to choose for the key?



3 Amir wants to use a pictogram to show this data.

Day	Minutes spent on the bus
Monday	60
Tuesday	20
Wednesday	50
Thursday	50
Friday	80

a) What symbol could Amir use? Draw a key to show what each symbol represents.

b) Draw the pictogram for Amir.

Monday	Tuesday	Wednesday	Thursday	Friday

Compare pictograms with a partner.

What is the same and what is different?



4 Some people voted for their favourite colour.

- 10 people voted for red.
- Twice as many people voted for blue as voted for red.
- Half as many people voted for green as voted for red.
- Three times as many people voted for yellow as voted for green.
- 5 fewer people voted for other as voted for yellow.

a) Use the information to complete the pictogram.

Key _____

Colour	Number of people

Compare answers with a partner.

Did you use the same key?

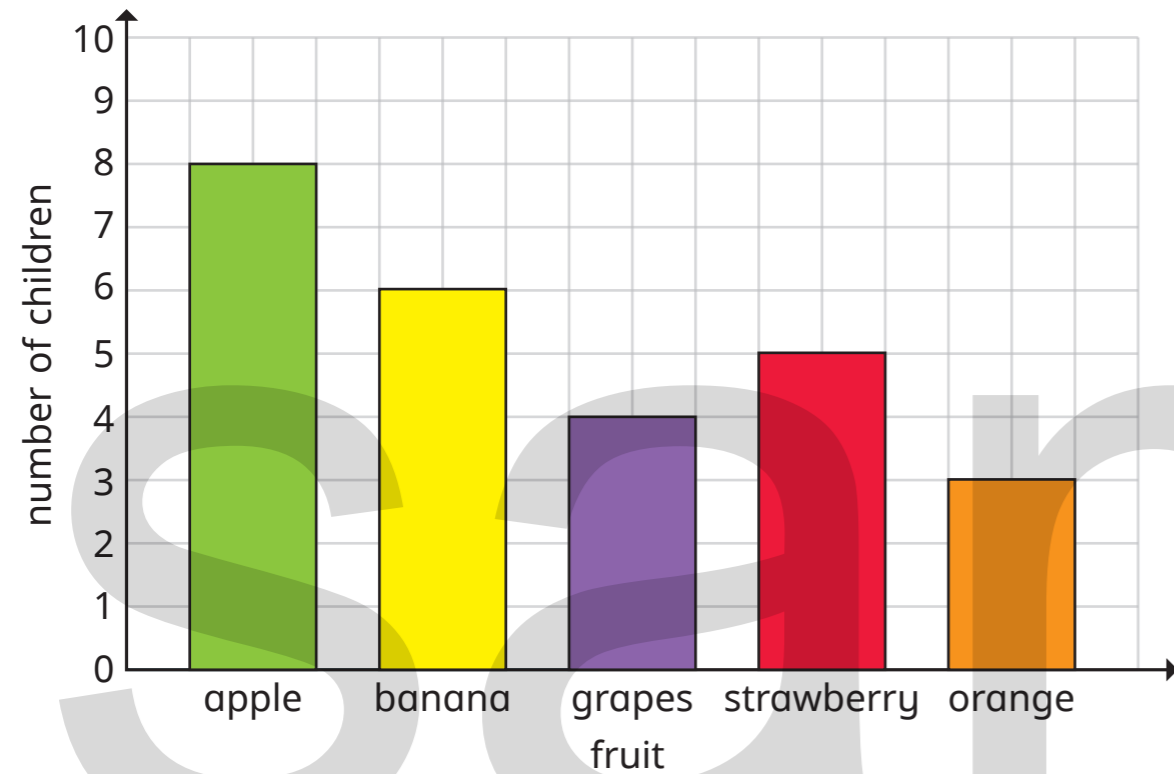
b) How many people voted in total?



Interpret bar charts

- 1 All the children in Class 3 choose their favourite fruit.

The bar chart shows the results.

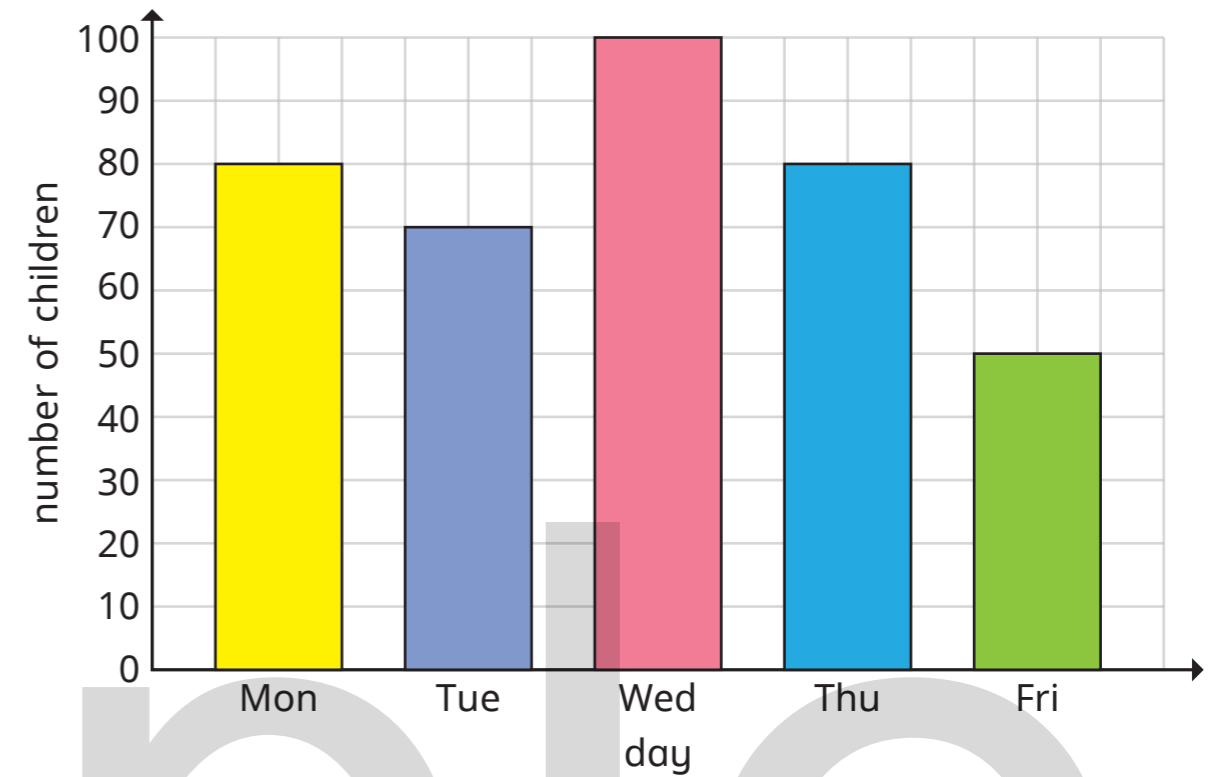


Use the bar chart to answer the questions.

- a) What is the most popular fruit? _____
- b) How can you tell just by looking?

- c) What is the least popular fruit? _____
- d) How many more children chose apples than chose grapes?
- e) How many children are there in Class 3?

- 2 The bar chart shows how many children attend an after-school club each day.

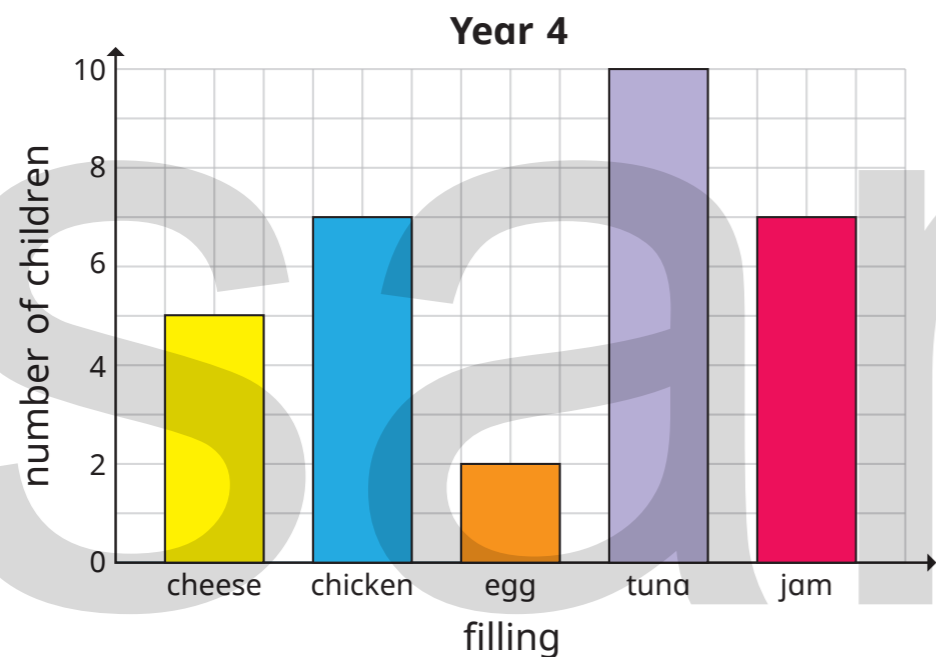
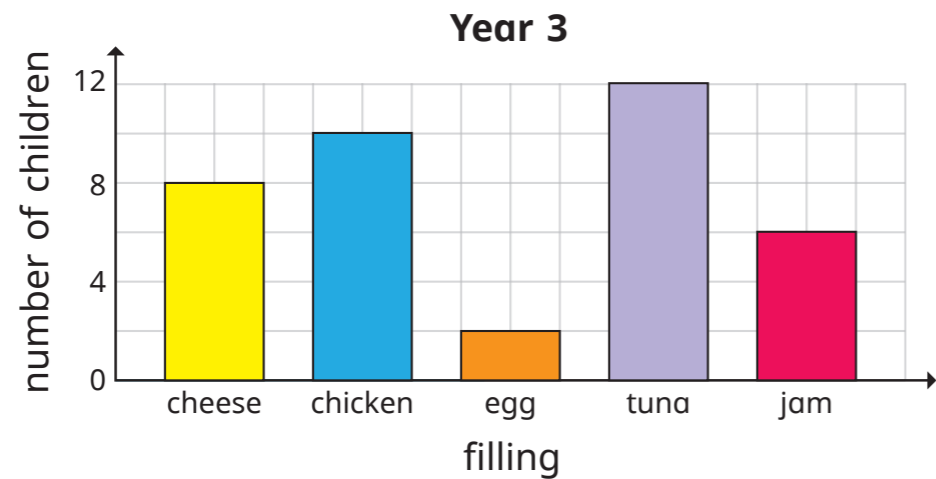


Use the bar chart to answer the questions.

- a) How many children attend an after-school club on Monday?
- b) On which day do the most children attend? _____
- c) On which day do the fewest children attend? _____
- d) How many more children attend an after-school club on Tuesday than on Friday?

How did you work it out?

- 3 The bar charts show the favourite sandwich fillings of children in Year 3 and Year 4



a) How many children were asked in Year 3?

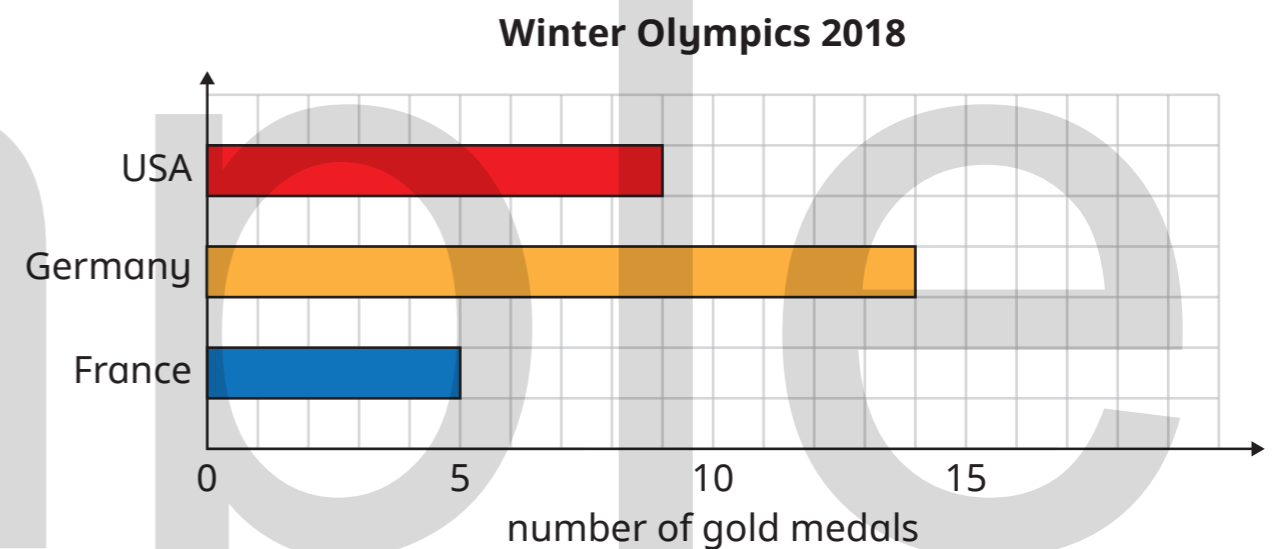
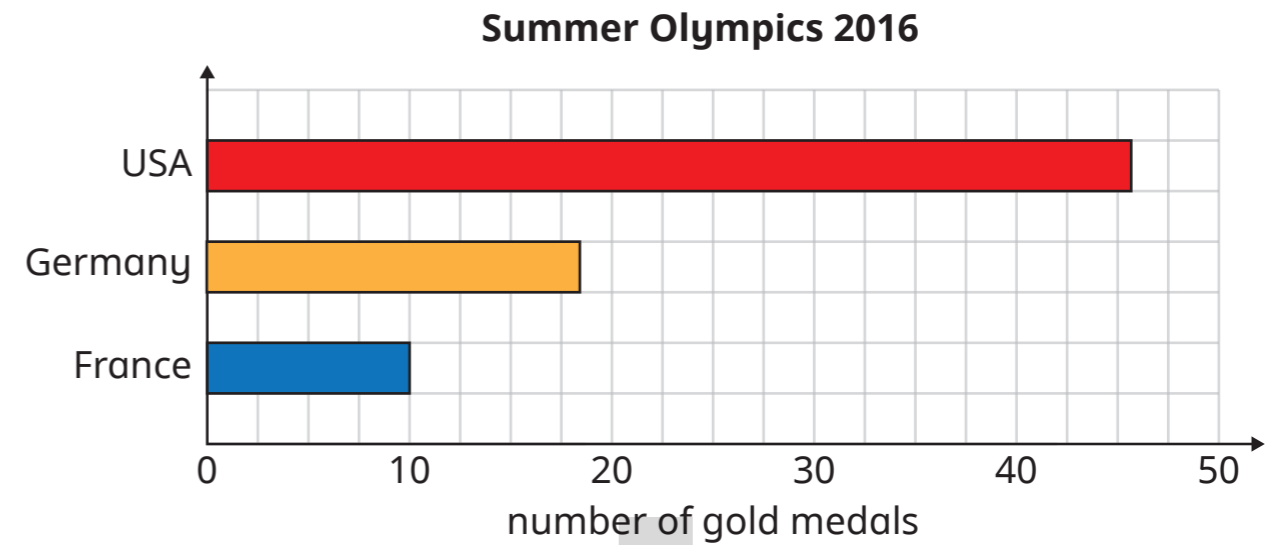
b) How many children were asked in Year 4?

c) Which sandwich filling got the same number of votes in Year 3 as Year 4? _____

What else can you work out from the bar chart? _____

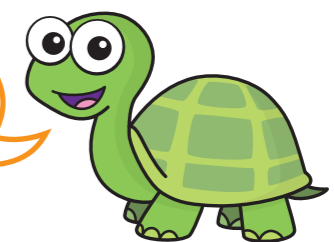


- 4 The bar charts show the number of gold medals won by some countries in the Summer and Winter Olympics.



a)

Germany won more medals at the Winter Olympics than the Summer Olympics as the bar is longer.



Is Tiny correct? _____

How do you know? _____

b) Which country won the most medals in total? _____

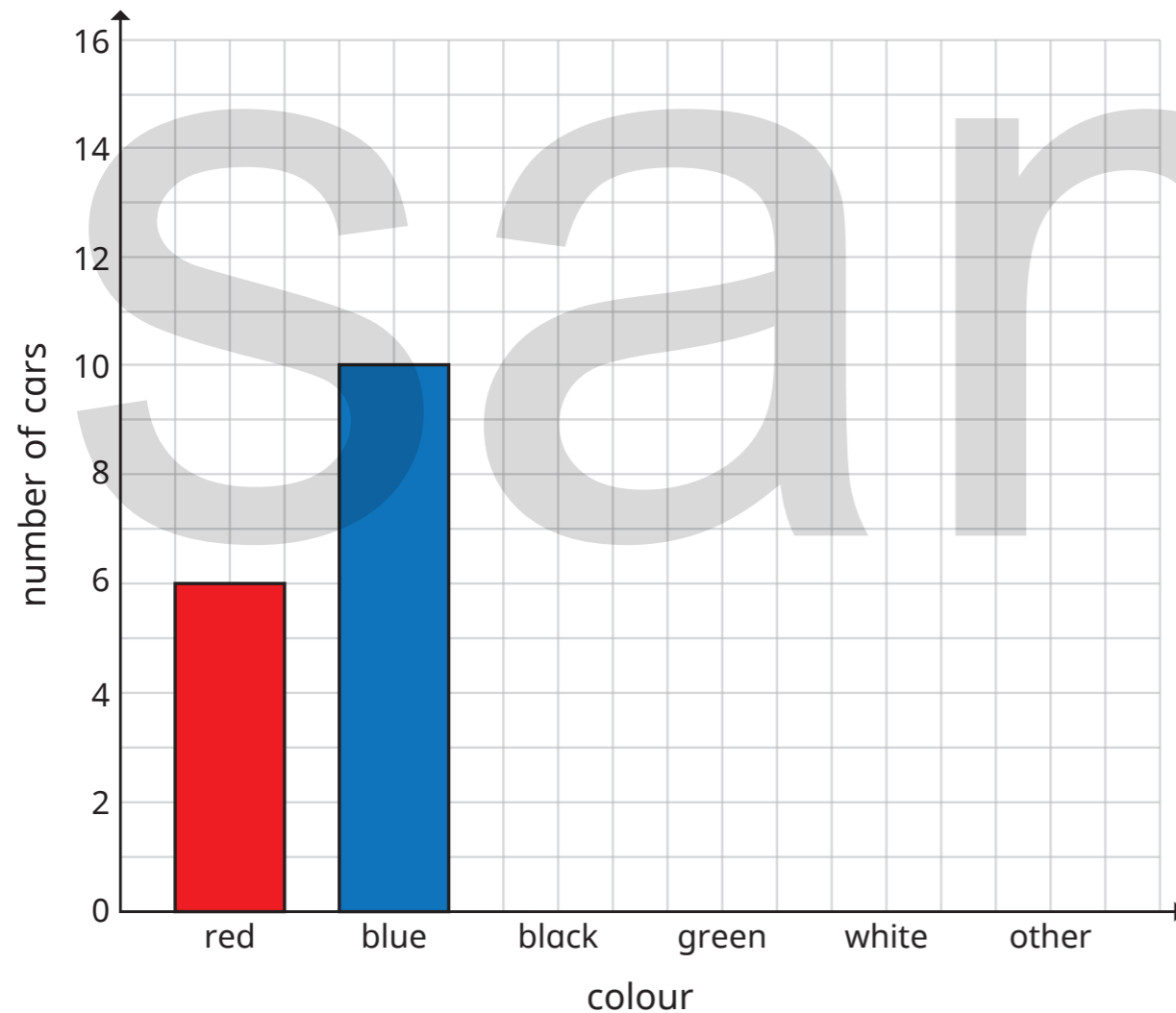


Draw bar charts

- 1 The table shows the colours of cars in a car park.

Colour	red	blue	black	green	white	other
Cars	6	10	8	4	12	15

- a) Complete the bar chart to show the information.



- b) How many cars are there in total?

- c) How many more white than red cars are there?

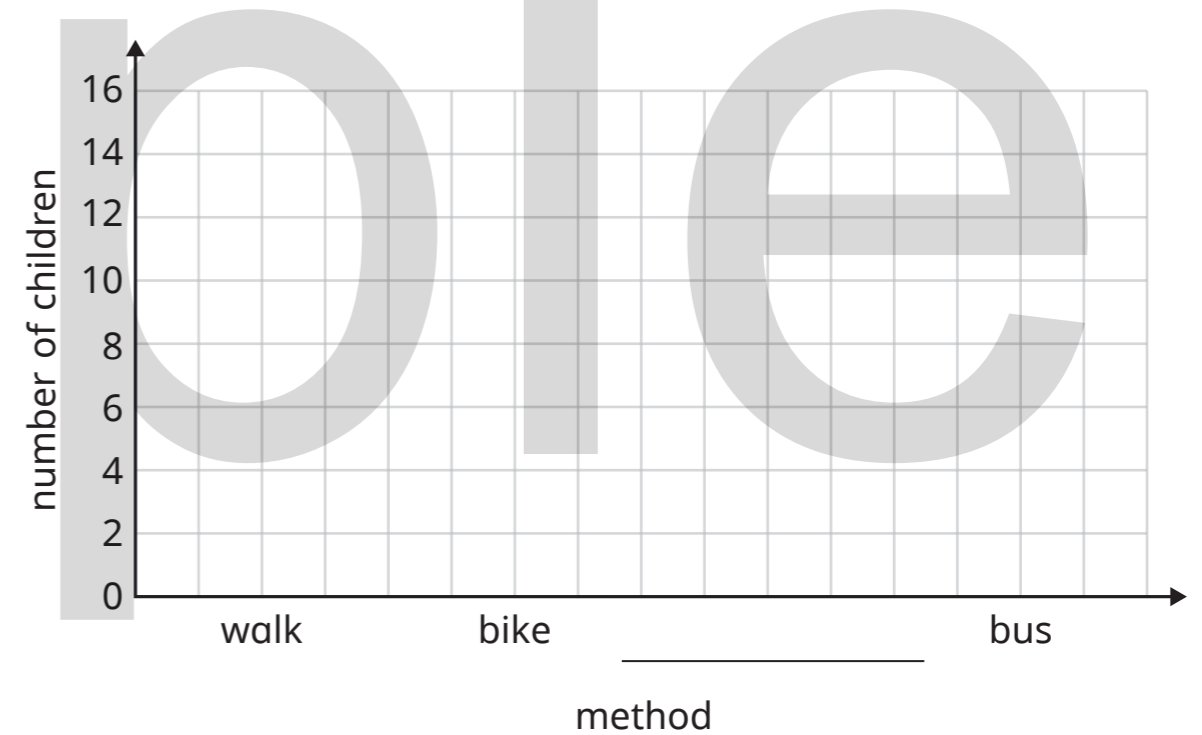
- 2 Some children are asked how they get to school.

The tally chart shows the results.

Method	Tally	Total
walk		
bike		
car		
bus		

- a) Complete the tally chart.

- b) Draw a bar chart to show the data.



- c) Which chart do you prefer? Circle your answer.

tally chart

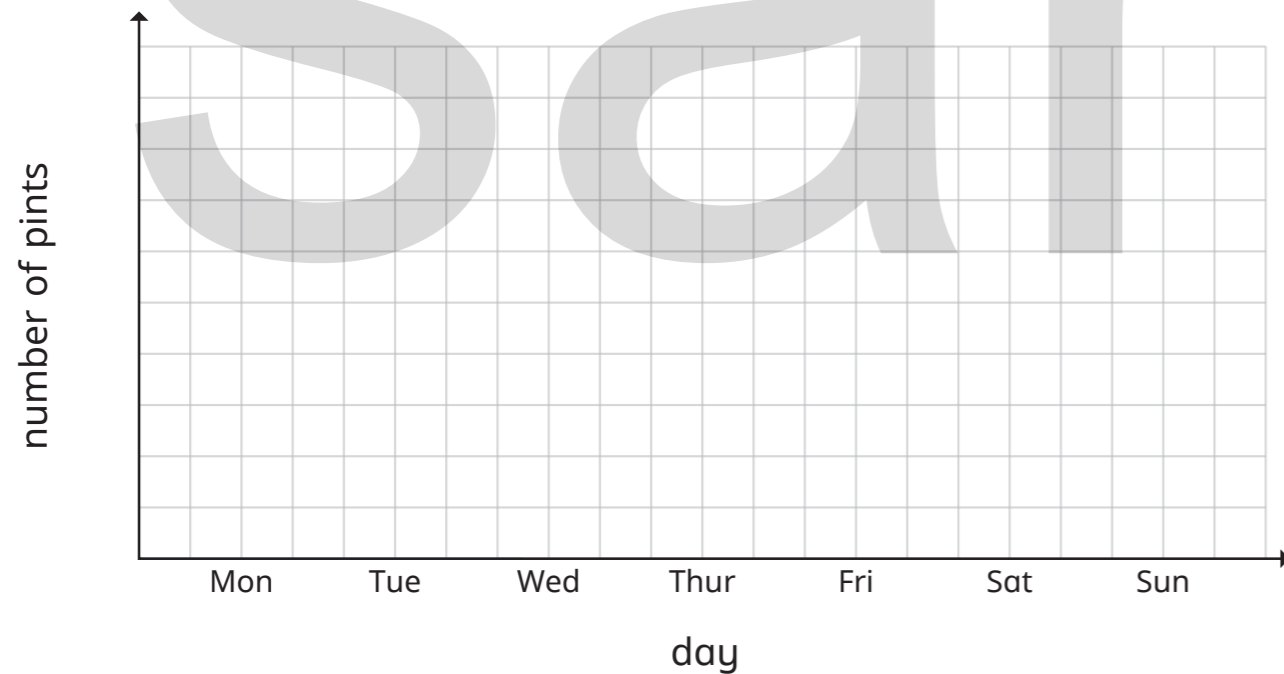
bar chart

Explain your choice.

- 3 The table shows the number of pints of milk a milkman delivers each day for a week.


Day	Number of pints
Monday	75
Tuesday	60
Wednesday	55
Thursday	65
Friday	70
Saturday	80
Sunday	20






- a) Draw a bar chart to show this information.



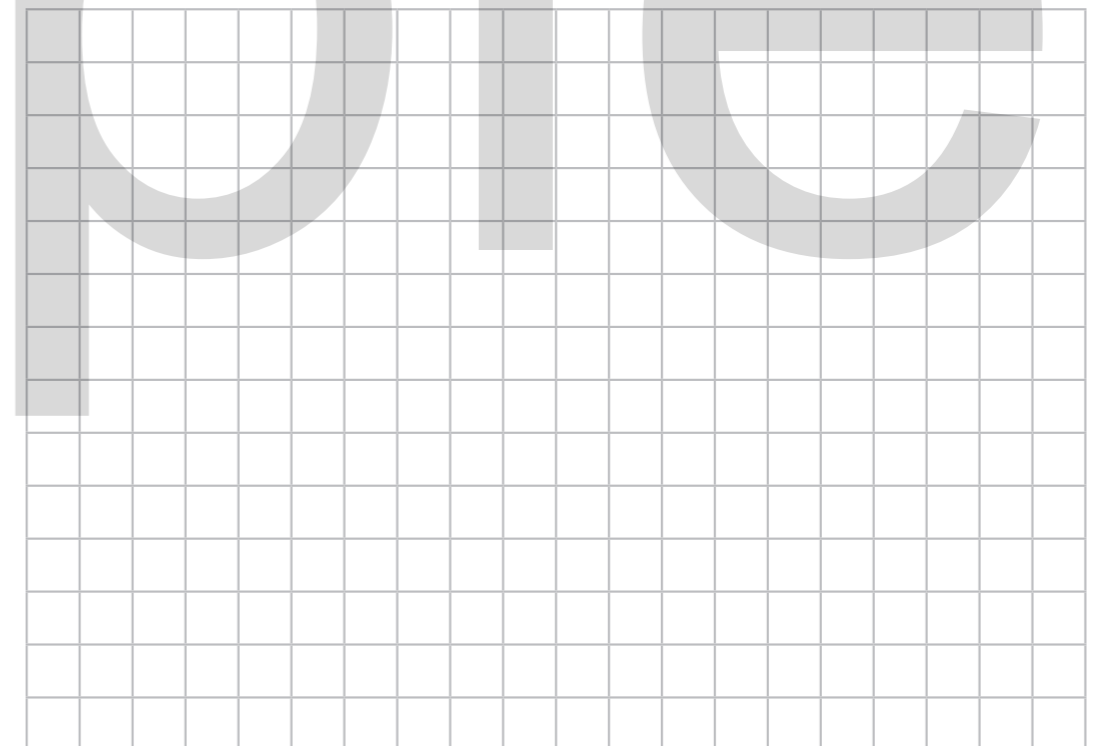
- b) What can you work out from the bar chart?

- 4 The pictogram shows the number of ice creams sold each day.

Key  = 5 ice creams

Day	Number of ice creams sold
Monday	
Tuesday	
Wednesday	
Thursday	
Friday	

- Draw a bar chart to show this data.



Collect and represent data

1 Ask the people in your class their favourite colour out of red, blue, pink, green and yellow.

a) Record the results in the tally chart.

Colour	Tally	Total
red		
blue		
pink		
green		
yellow		

b) Draw a pictogram to show the results.

Key _____

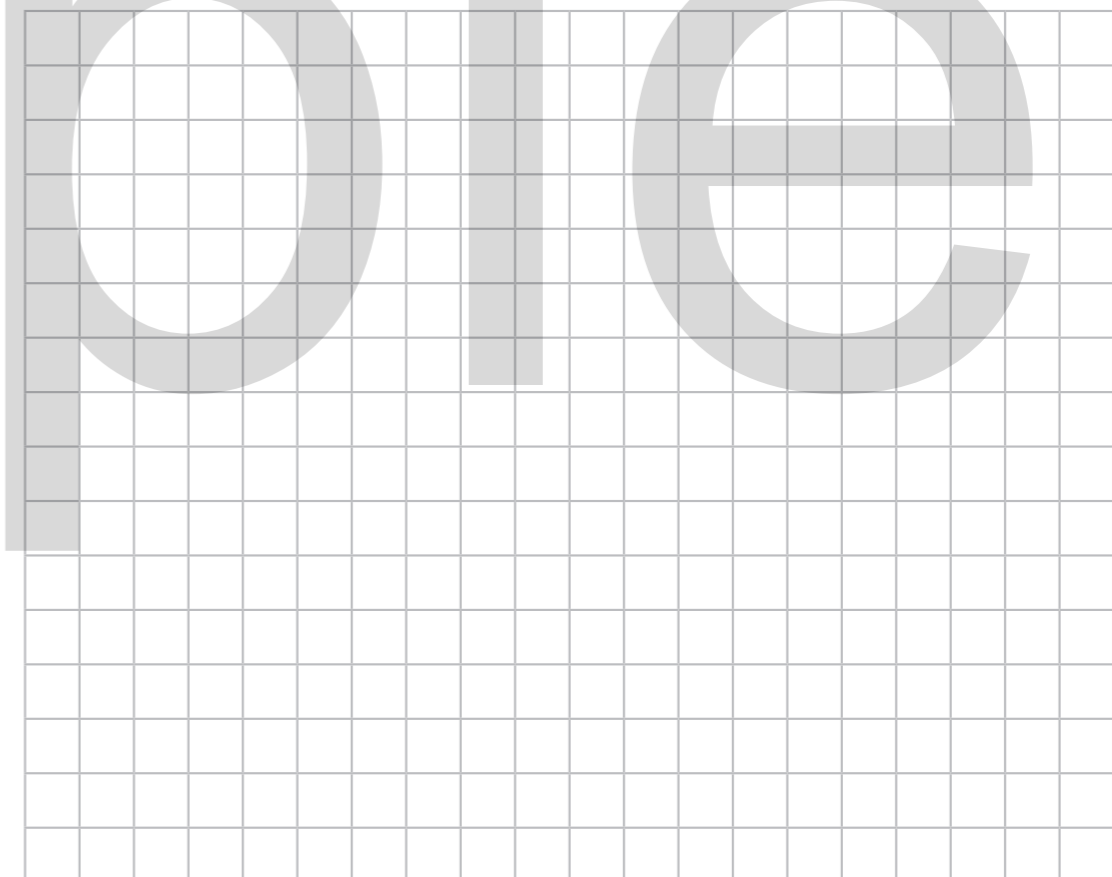
Colour	Number of children
red	
blue	
pink	
green	
yellow	

2 Ask the people in your class what their favourite fruit is out of apple, banana, orange, pear and grapes.

a) Record the results in the tally chart.

Fruit	Tally	Total
apple		
banana		
orange		
pear		
grapes		

b) Draw a bar chart to show the results.

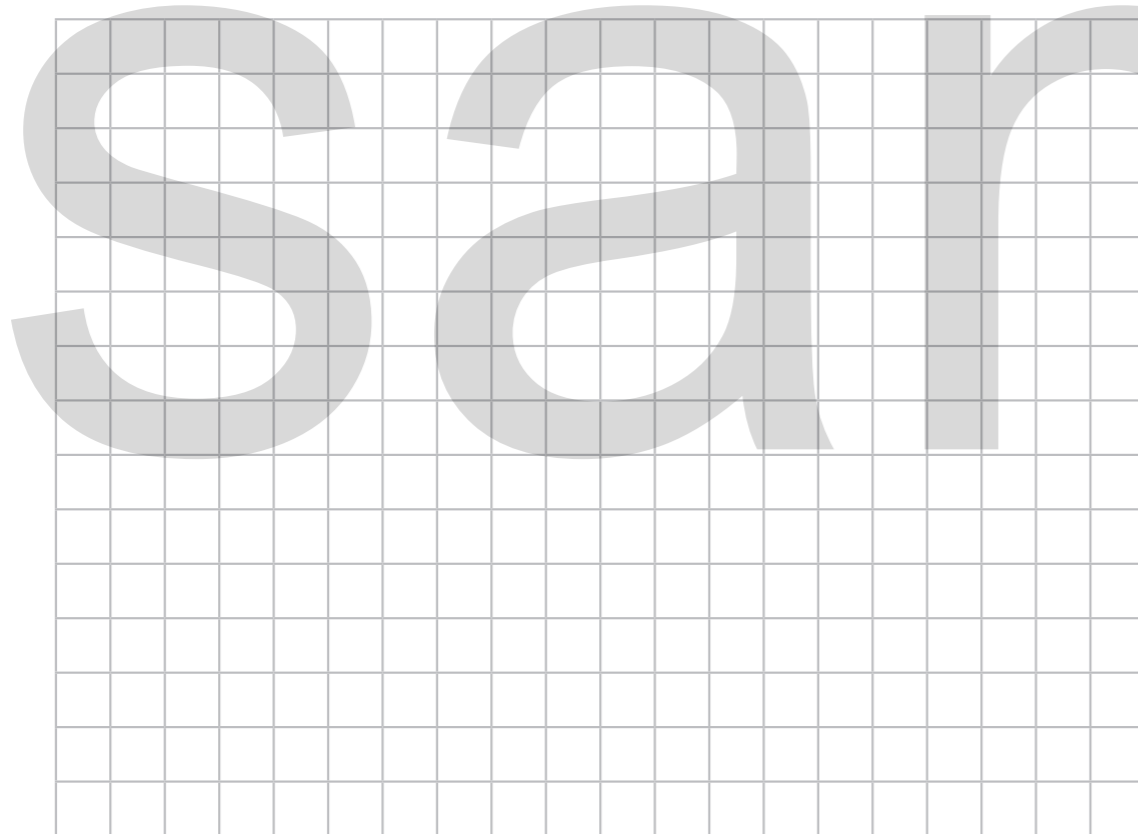


3 Ask the people in your class how many pets they have.

a) Record the results in the tally chart.

Pets	Tally	Total
0		
1		
2		
3		
4 or more		

b) Draw a chart to show the results.



Compare answers with a partner.

Did you draw the same type of chart?



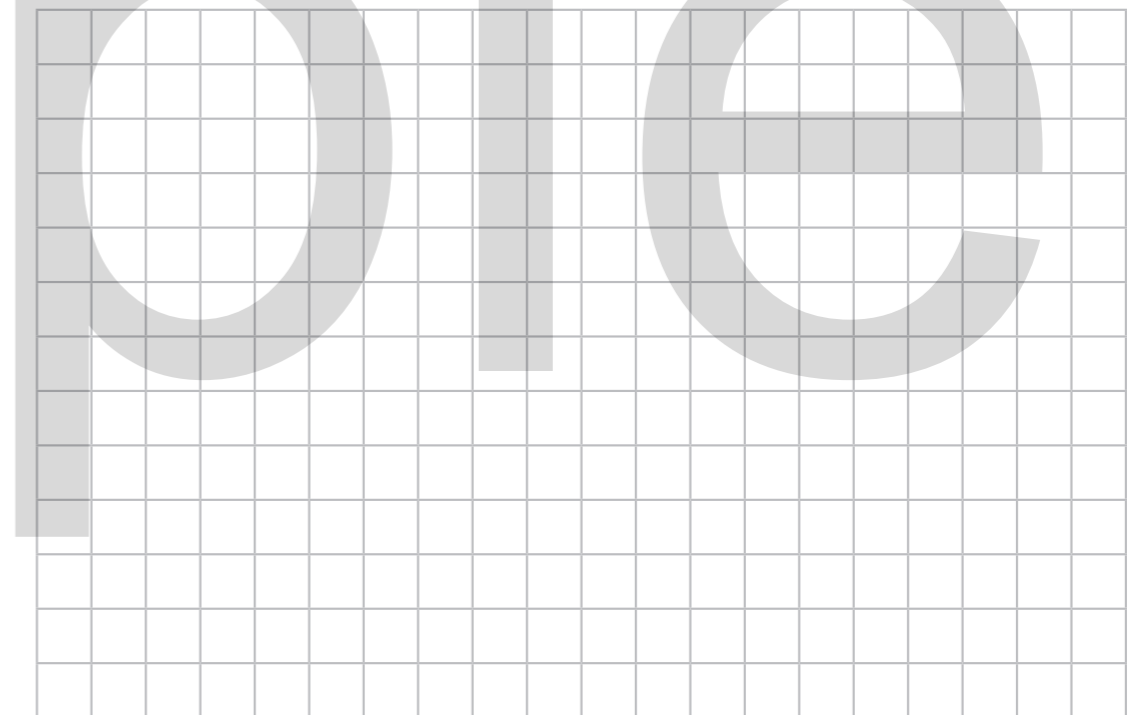
4 Get 20 crayons or counters in different colours.

a) How many of each colour have you got?

Complete the table.

Colour	Tally	Total

b) Draw a chart to show the results.



Compare answers with a partner.

Did you draw the same type of chart?



Two-way tables

- 1 Children from two classes are asked whether they prefer football or rugby.

The results are shown in the table.

	Football	Rugby	Total
Class 3	18	12	30
Class 4	22	8	30
Total	40	20	60

a)



There are the same number of children in each class.

Do you agree with Ron? _____

Explain your answer.

- b) How many children from Class 3 prefer football?

- c) How many children from Class 4 prefer rugby?

- d) How many more children prefer football than rugby?

What else can you find out?

- 2 Jack, Kim, Max and Dora take part in a competition.

The table shows their points for each round.

	Round 1	Round 2	Round 3	Round 4	Total
Jack	5	5	7	4	
Kim	7	3	6	8	
Max	8	4	3	5	
Dora	6	2	6	3	
Total					

- a) Work out the totals and complete the table.

- b) The highest number of points wins each round.

Who won each round?

Round 1 _____

Round 3 _____

Round 2 _____

Round 4 _____

- c) The child with the highest number of total points wins the competition.

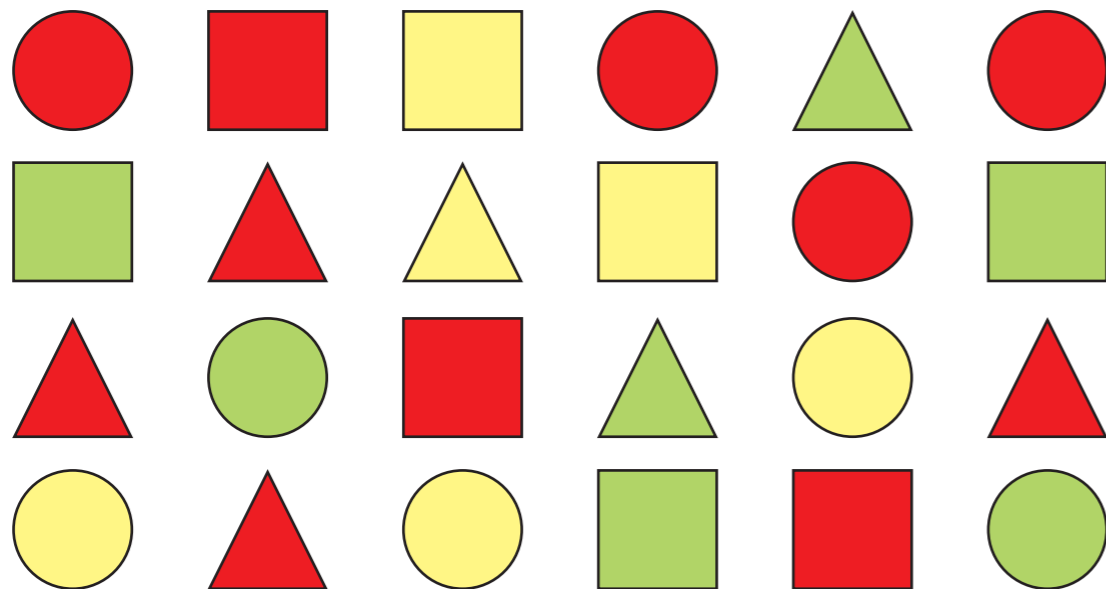
Who won the competition? _____

- d) Which round do you think was hardest? _____

Which round do you think was easiest? _____

Explain your answers.

3 Here are some shapes.



a) Use the shapes to complete the table.

	Red	Yellow	Green	Total
Square				
Circle				
Triangle				
Total				

b) How many squares are there in total?

c) How many green shapes are there in total?

d) How many more red shapes are there than yellow shapes?

What else can you work out?

4 The table shows the number of newspapers and magazines sold by a shop from Monday to Friday.

Day	Number of newspapers	Number of magazines
Monday	126	103
Tuesday	148	113
Wednesday		87
Thursday	150	223
Friday	103	186

a) How many newspapers and magazines were sold in total on Tuesday?

b) How many more magazines were sold on Thursday than on Wednesday?

c) There were 650 newspapers sold in total.

How many newspapers were sold on Wednesday?

d) On which day do you think new magazines come out?

Why?

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sample

sample

