Look Back

The pictogram shows the favourite planets of a group of children.

a How many children are shown? **26** 2+5+11+8=26

b Why is the key important? Discuss with your partner.
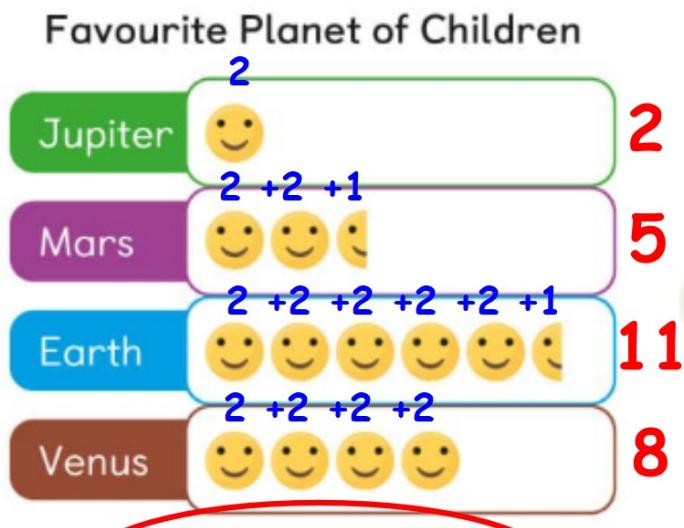
**It tells us what each picture mea
Without the key, we will not be
tell exactly how many children ch
each planet**

Favourite Planet of Children

2

| Jupiter | 🙂 | **2** |

2 +2 +1

| Mars | 🙂🙂🙂 | **5** |

2 +2 +2 +2 +2 +1

| Earth | 🙂🙂🙂🙂🙂🙂 | **11** |

2 +2 +2 +2

| Venus | 🙂🙂🙂🙂 | **8** |

Key: Each 🙂 = 2 children

How could we represent
the data on a bar chart?

Thinking Cap

If each 😊 represents 10 or 20 children, discuss with your partner what changes and what does not change about the pictogram.

The symbol in the key is unchanged.

Favourite Planet of Children

| Planet	Pictogram	10 children	20 children
Jupiter	😊	10	20
Mars	😊 😊 (	25	50
Earth	😊 😊 😊 😊 😊 (	55	110
Venus	😊 😊 😊 😊	40	80

Key: Each 😊 = 2 children

Let's Learn

a   The **pictogram** and **bar chart** show the number of apples Kwan picked over 3 months.

A bar chart shows the frequency of data using bars.

title

Number of Apples Kwan Picked

y-axis

scale

Number of Apples Kwan Picked
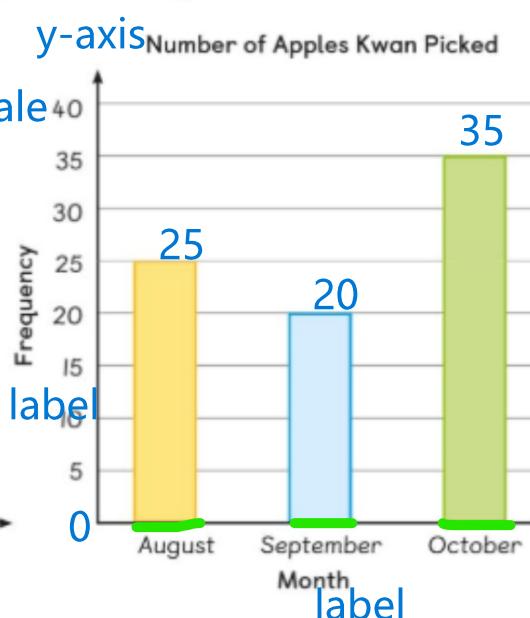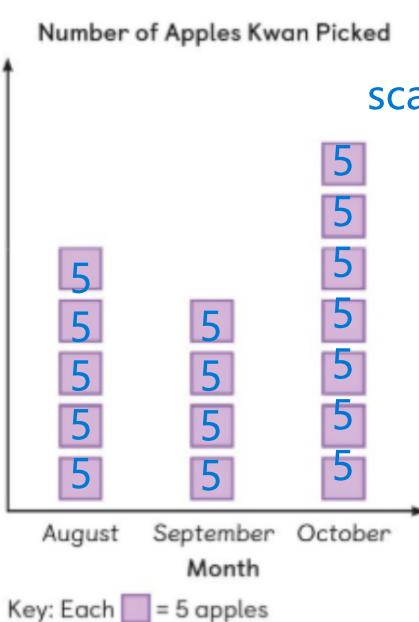
We should use a ruler when we draw the bars.

The width of the bars should be the same.
The spaces between the bars should be equal.

5
5
5
5
5

5
5
5
5

5
5
5
5
5
5
5

	40
	35	35
	30
Frequency	25	25
	20	20
	15
label	10
	5
0		August	September	October

width

x-axis

August   September   October
Month

Month
label

Key: Each ☐ = 5 apples

In the bar chart, the numbers on the vertical axis are in skip counts of 5.

Critique what is the same and what is different when a different scale is used.

So, it has a **scale** of ___**5**___.

Number of Apples Kwan Picked

(Bar graph: Frequency on y-axis from 5 to 40, Month on x-axis. August = 25, September = 20, October = 35.)
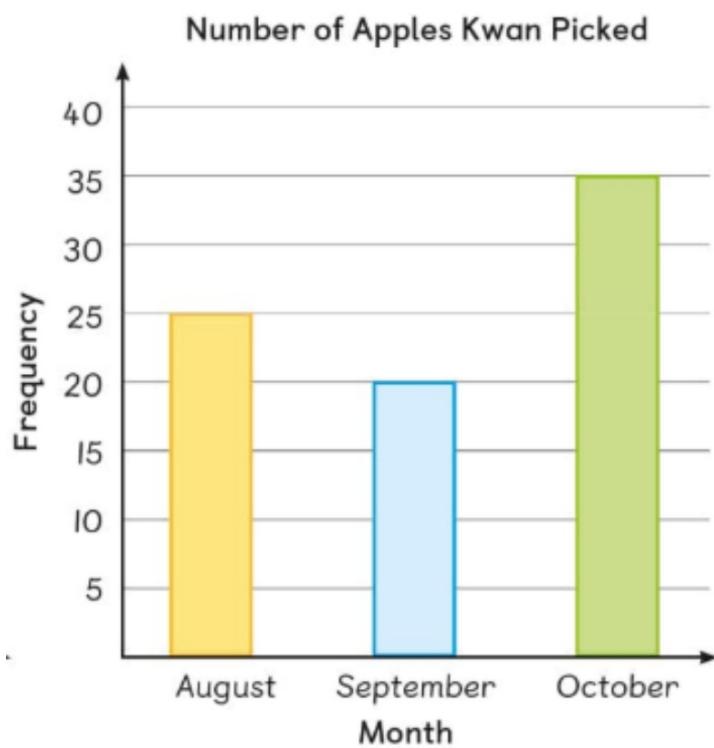
b Kwan picked __20__ apples in September.

__5__ more apples were sold in August than in September.

25 - 20 = 5

In total, Kwan picked __80__ apples.

25 + 20 + 35 = 80

difference (compare)

Let's Practise

I The table shows the favourite types of books of 470 students.

Type of book	Mystery	Romance	Comic	Adventure	Non-fiction
Frequency	140	50	90	80	110

a Use a scale of 20 to complete the bar chart.
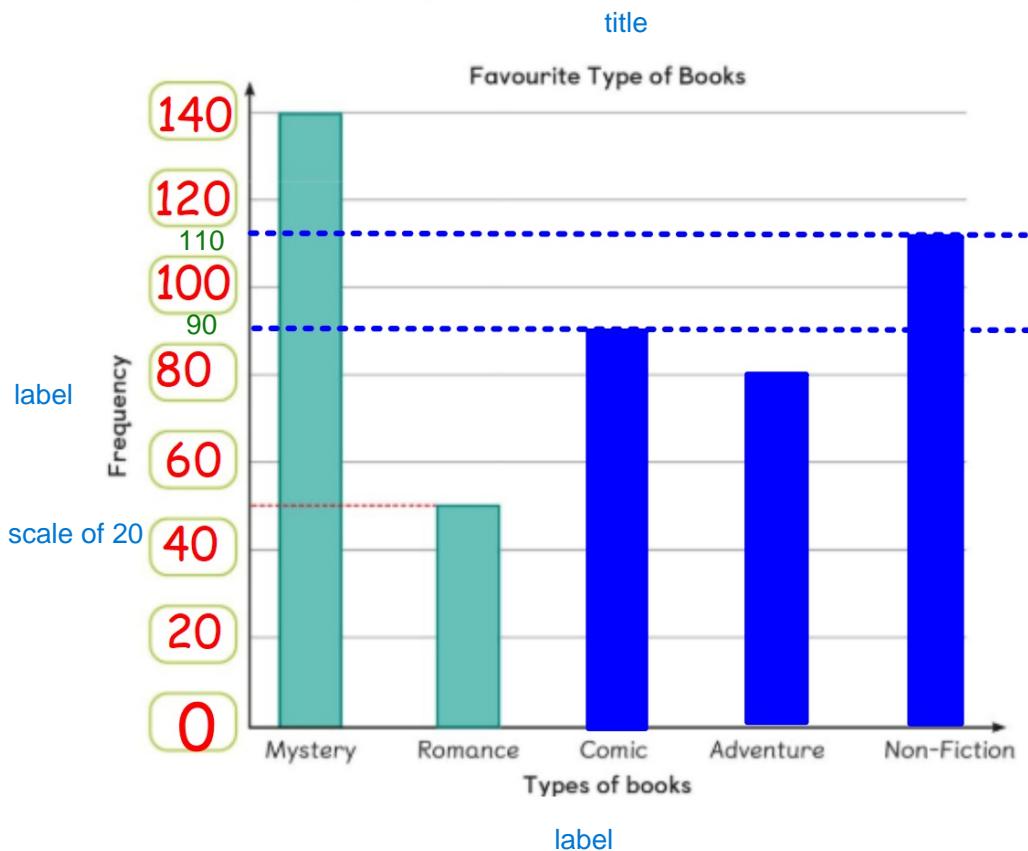
title

Favourite Type of Books

140
120
110
100
90
80
60
40
20
0

label

scale of 20

Frequency

Mystery   Romance   Comic   Adventure   Non-Fiction

Types of books

label

Type of book	Mystery	Romance	Comic	Adventure	Non-fiction
Frequency	140	50	90	80	110

b The most popular type of book is __Mystery__.

110 - 90 =

c __20__ more students like non-fiction books than comic books.

difference (compare)

d The total number of students who like __Romance__ and __Comic__ books is equal to the number of students who like mystery books.

140 = 90 + 50

2 The bar chart shows Sam's maths test scores in two tests.

Sam's Maths Test Scores
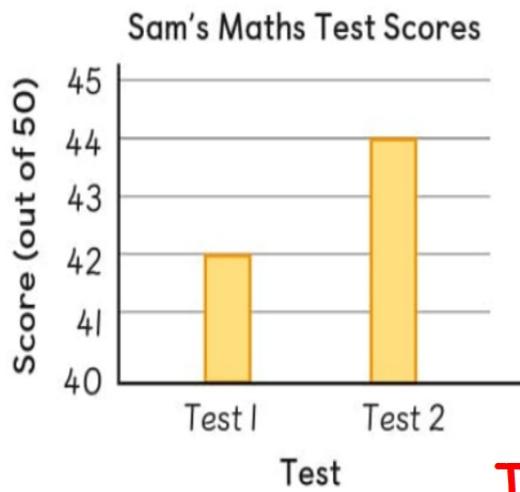
Ellie thinks that Sam's maths scores have doubled.

Is she correct? **No**

Test 1 42
Test 2 44
The difference is 2 not double

double 42 is 84

doubling is multiplying by 2 or adding the same number twice

3 The bar charts show the number of cans Classes A and B collected. title

y-axis   title   y-axis

Cans Collected by Class A   **Cans Collected by Class B**

label

Number of cans

scale of 20   Jan   Feb   Mar   Apr   scale of 10   Jan   Feb   Mar   Apr   x-axis
x-axis

Month   **Month** label
label
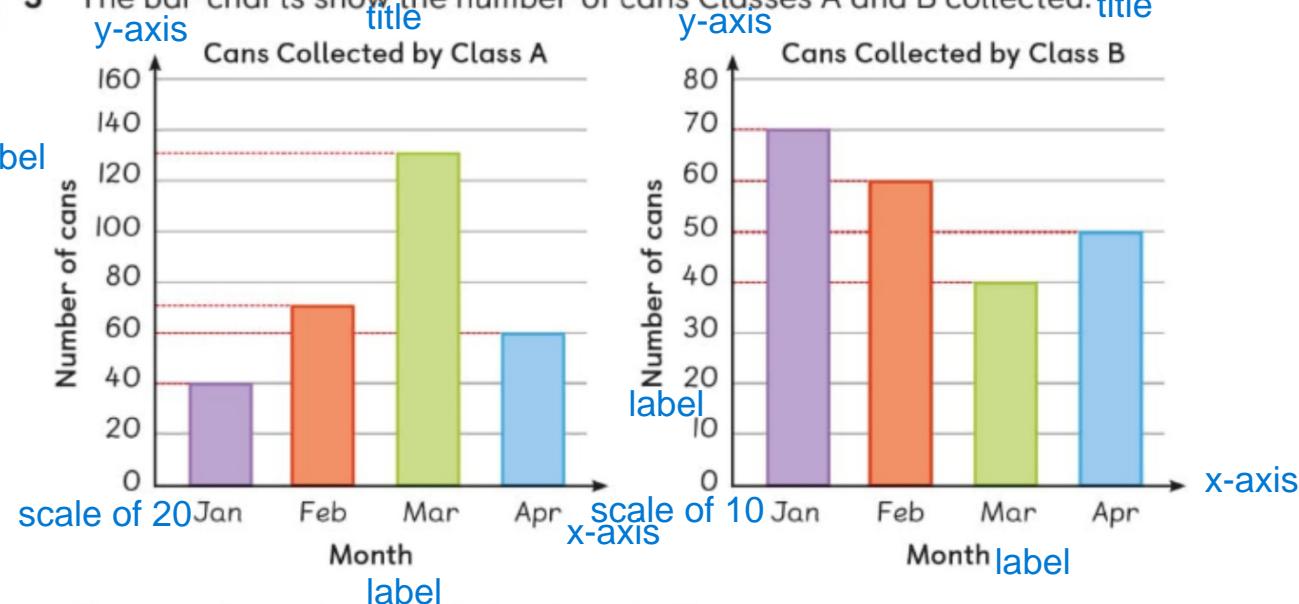
Improve the statements below to make them true.

a In April, Class B collected 10 more cans than Class A.
Class A collected 10 more than Class B

b Class B collected more cans because the bars are taller.
Class A collected more because the scale is doubled

c The number of cans collected by Class A in March is the same as the
number of cans collected by Class B in February.
Class A 60 in April
Class B 60 in February