THIRD SPACE LEARNING

Please note:
Cubes will be needed for some parts of this lesson.

Ready-to-go Lesson Slides
Year 2

Statistics
Lesson 6

Spr1

At Third Space Learning we provide personalised online lessons from specialist maths tutors to support the target groups in your school.

These ready-to-go slides are designed to work alongside our interventions to supplement quality first teaching and raise attainment in maths for all pupils.

To find out more about how you could use our 1-to-1 interventions year-round to boost maths progress in your school then get in touch:

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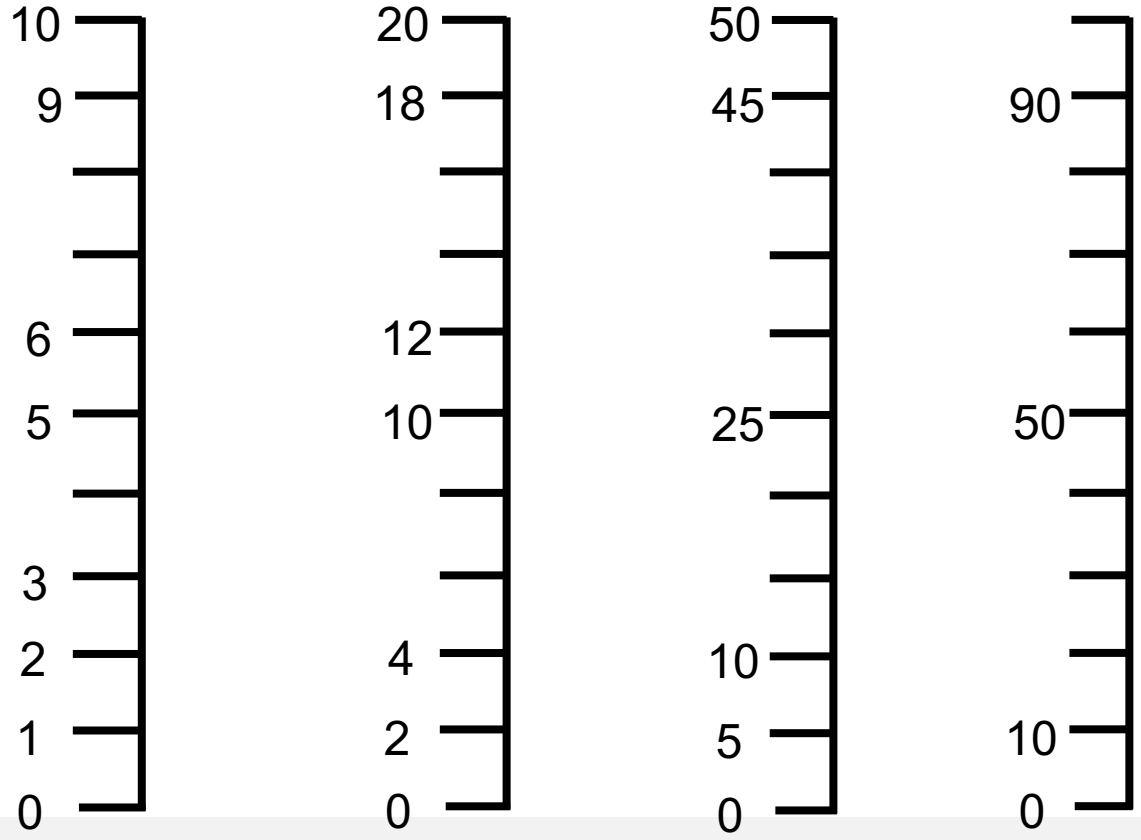
Boosting maths progress through 1-to-1 conversations…

THIRD SPACE LEARNING

To draw and interpret block diagrams

- ❑ I can create a block diagram using cubes and pictures
- ❑ I can read the scale to work out what each block shows
- ❑ I can ask and answers questions about block diagrams



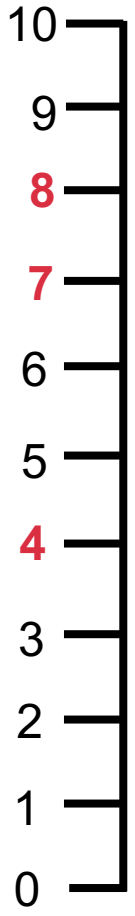
Starter:

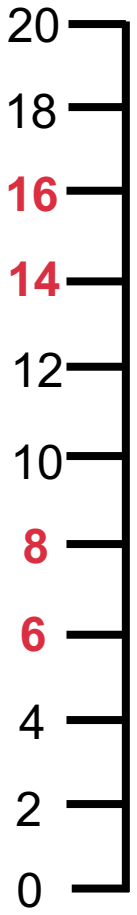
Here are some number lines. Which numbers are missing and how do you know?

To draw and interpret block diagrams

Starter:

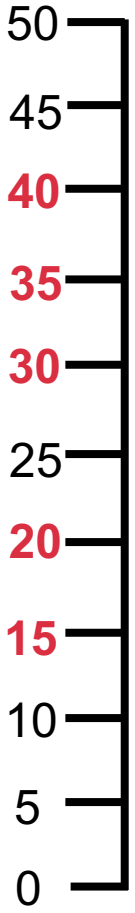
All these numbers are going up in ones.

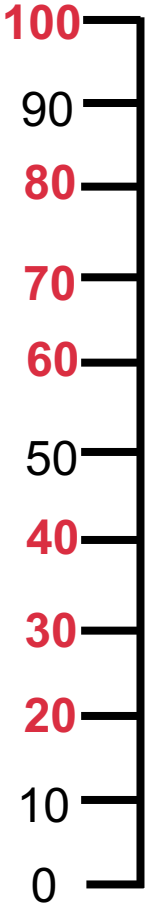




All these numbers are going up in twos.

All these numbers are going up in fives.





All these numbers are going up in tens.

To draw and interpret block diagrams

Talking time:

Oak class is finding out how the children in the class prefer their potatoes.
Here is a table of the results.
Can you make a block diagram to show this data **with real cubes**?

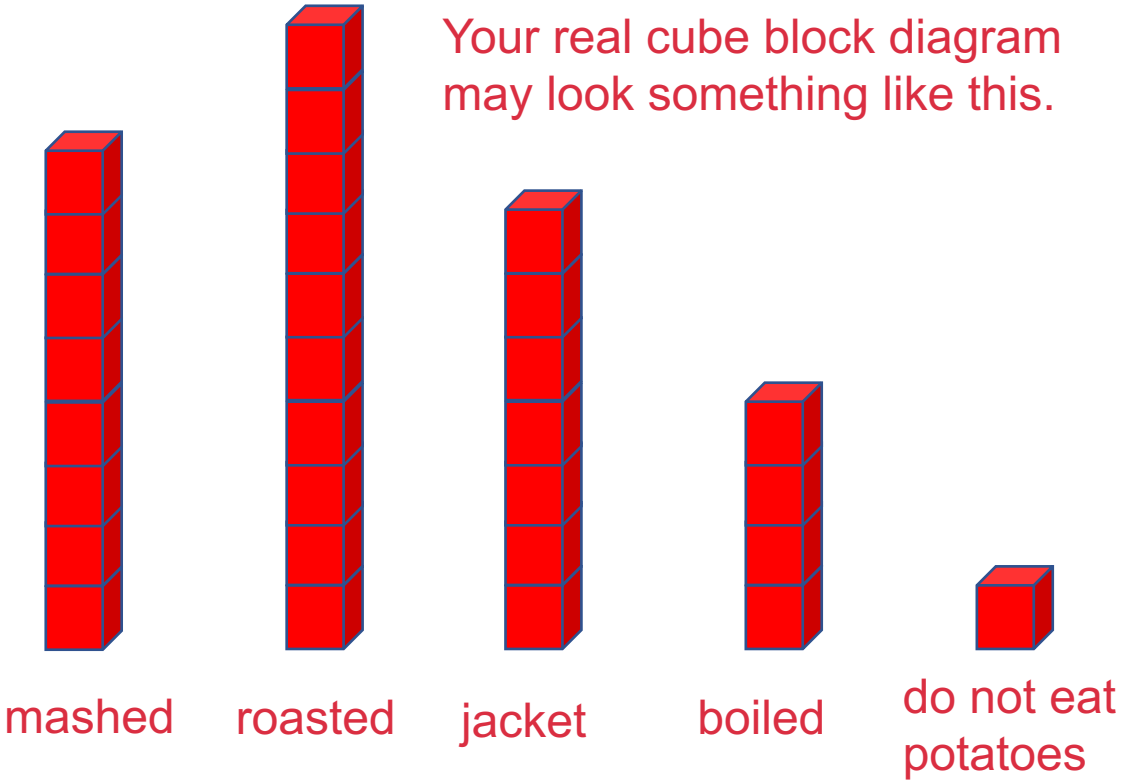
Potato	Number of children
mashed	8
roasted	10
jacket	7
boiled	4
do not eat potatoes	1

To draw and interpret block diagrams

Talking time:

Oak class is finding out how the children in the class prefer their potatoes.
Here is a table of the results.
Can you make a block diagram to show this data **with real cubes**?

Your real cube block diagram may look something like this.

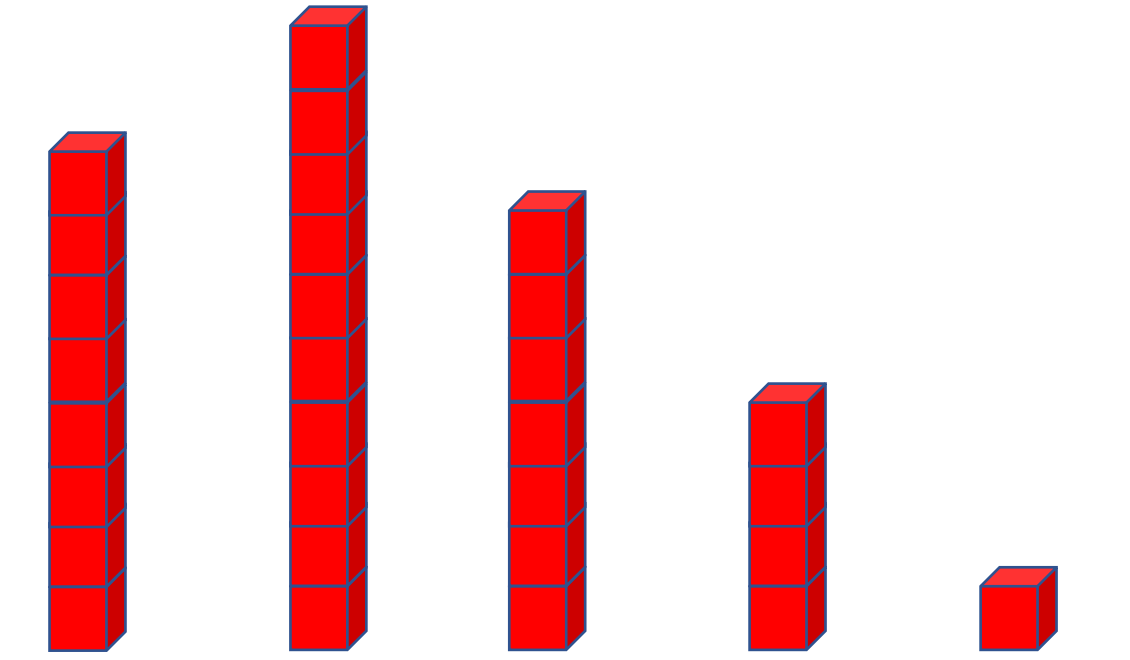


Potato	Number of children
mashed	8
roasted	10
jacket	7
boiled	4
do not eat potatoes	1

To draw and interpret block diagrams

Talking time:

Can you use the real cube block diagram to draw a block diagram?
You will need a title. You will need labels. You will need a scale that is clear.



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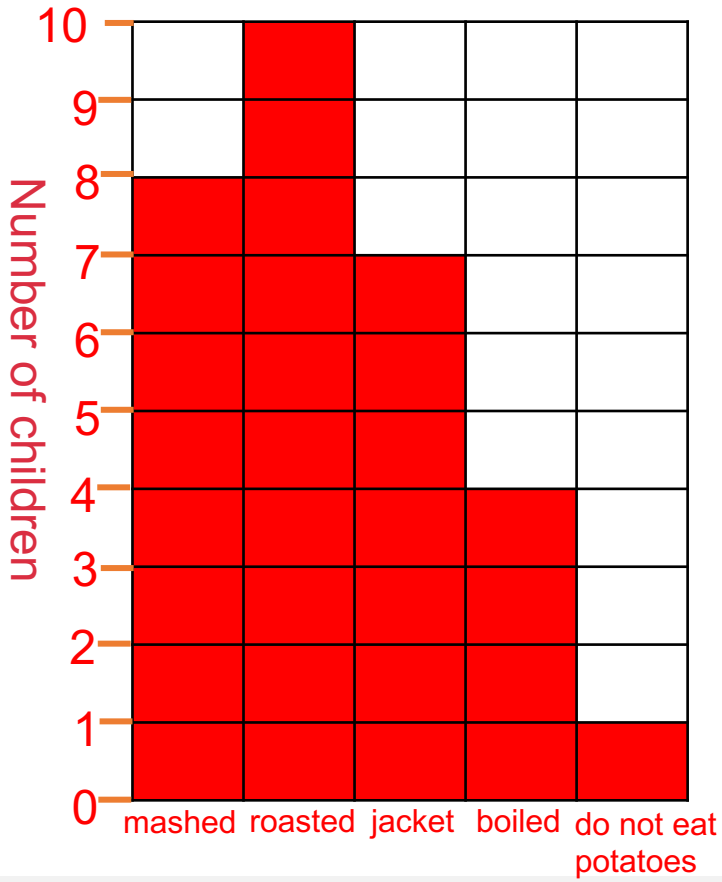
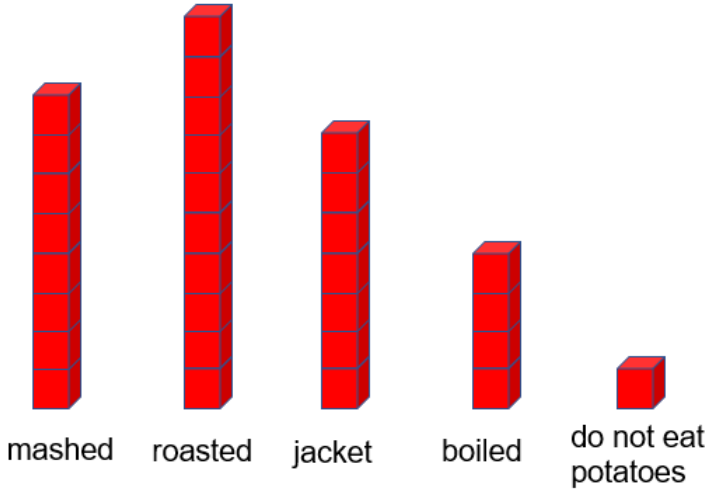


A block diagram to show how Oak class prefer to eat their potatoes.

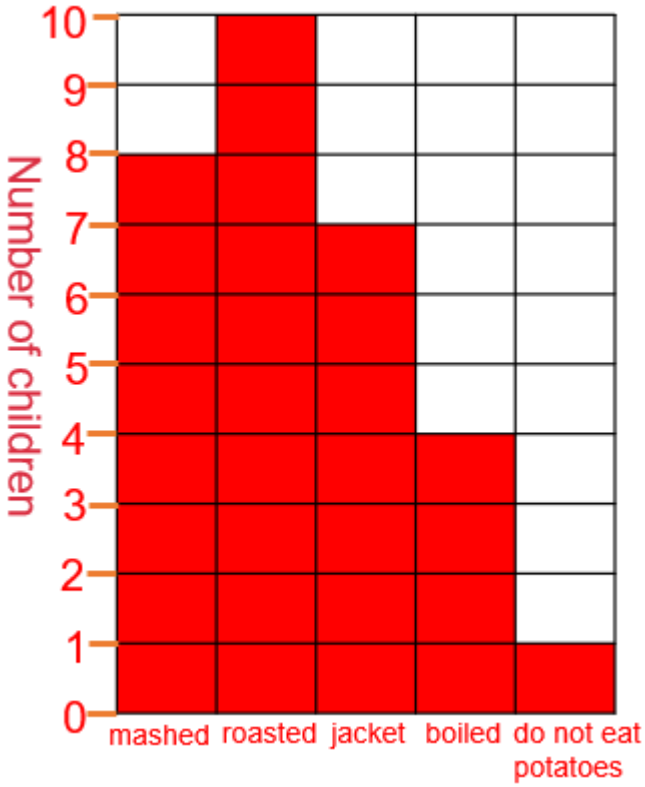


To draw and interpret block diagrams

Talking time:

Use the block diagram to answer the questions.

A block diagram to show how Oak class prefer to eat their potatoes.



Which way of eating potatoes was the most popular?

How many children preferred boiled potatoes?

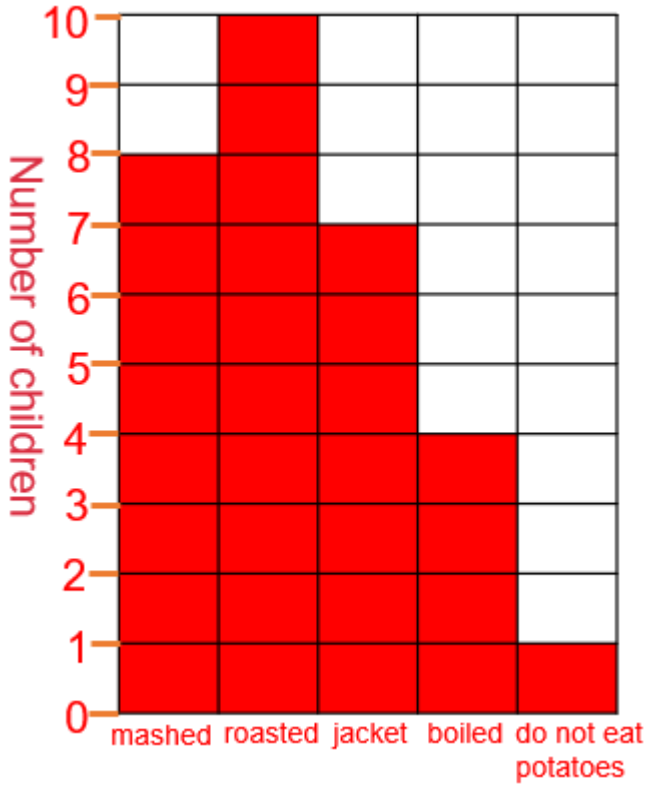
How many more children preferred roasted to jacket potatoes?

To draw and interpret block diagrams

Talking time:

Use the block diagram to answer the questions.

A block diagram to show how Oak class prefer to eat their potatoes.



Which way of eating potatoes was the most popular?

Roasted was the most popular.

How many children preferred boiled potatoes?

Four children chose boiled potatoes.

How many more children preferred roasted to jacket potatoes?

Ten children preferred roasted potatoes and seven chose jacket potatoes. Ten minus seven is three.

To draw and interpret block diagrams

Talking time:

The staff at the school were asked to choose their favourite hot drink at break-time.
Here is a table of the results.
Can you make a block diagram to show this data **with real cubes**? **Every cube represents 2 members of staff**.

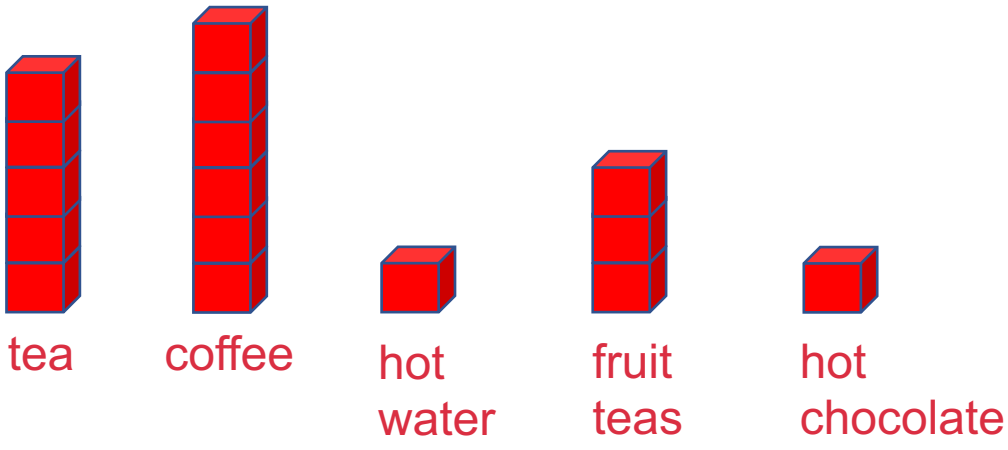
Hot drink	Number of staff
tea	10
coffee	12
hot water	2
fruit teas	6
hot chocolate	2

To draw and interpret block diagrams

Talking time:

The staff at the school were asked to choose their favourite hot drink at break-time.
Here is a table of the results.
Can you make a block diagram to show this data **with real cubes**? **Every cube represents 2 members of staff**.

Your real cube block diagram may look something like this.



Hot drink	Number of staff
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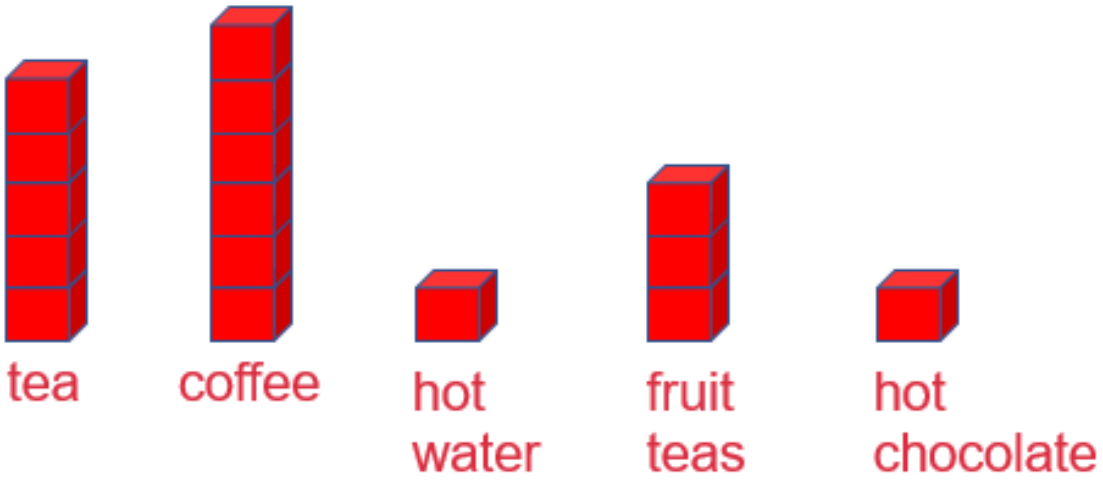
fruit teas	6
hot chocolate	2

To draw and interpret block diagrams

Talking time:

Can you use the real cube block diagram to draw a block diagram?
You will need a title. You will need labels. You will need a scale that is clear.

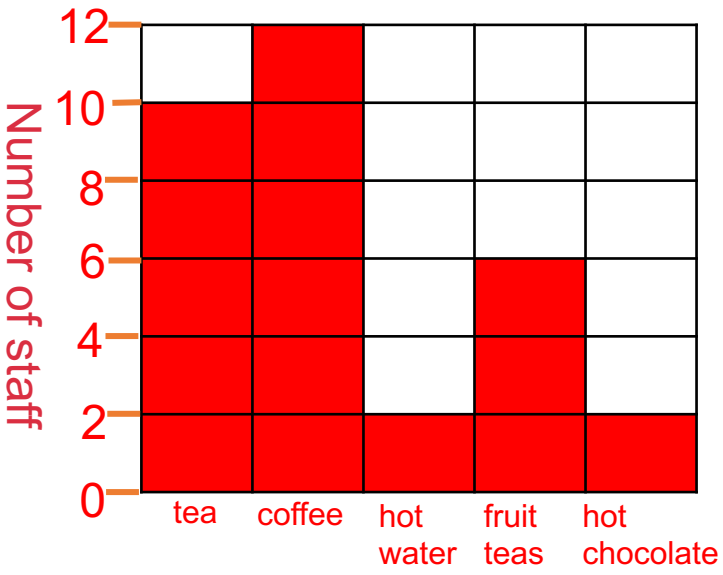


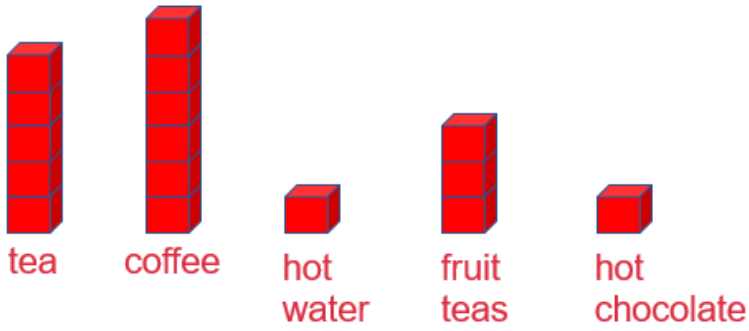
To draw and interpret block diagrams

Talking time:

Can you use the real cube block diagram to draw a block diagram?
You will need a title. You will need labels. You will need a scale that is clear.

A block diagram to show which hot drink staff prefer at break-time.



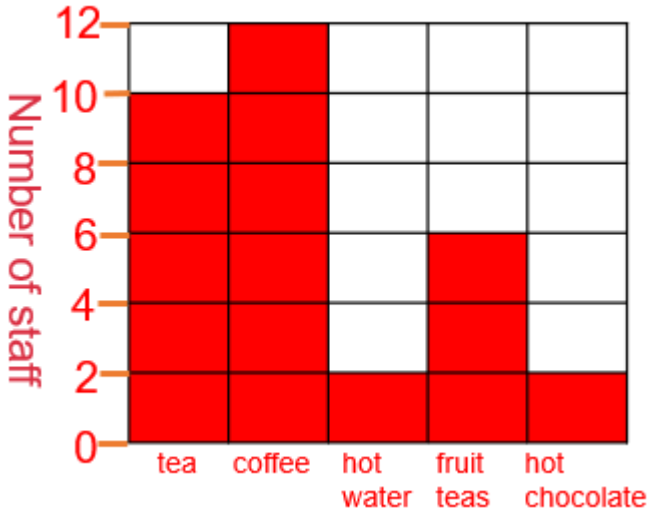


To draw and interpret block diagrams

Talking time:

Use the block diagram to answer the questions.

A block diagram to show which hot drink staff prefer at break-time.



How many staff prefer tea and coffee altogether?

How many more staff prefer tea to fruit teas?

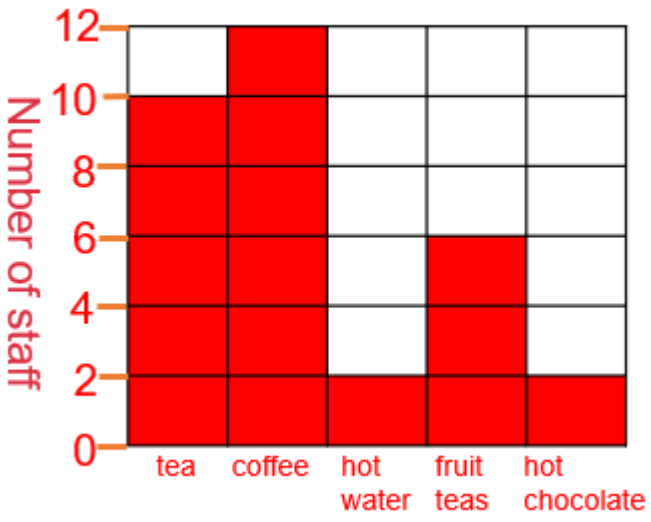
Is it true or false that only one member of staff preferred hot water?

To draw and interpret block diagrams

Talking time:

Use the block diagram to answer the questions.

A block diagram to show which hot drink staff prefer at break-time.



How many staff preferred tea and coffee altogether?
10 members of staff chose tea and 12 chose coffee.
10 + 12 = **22 altogether**.

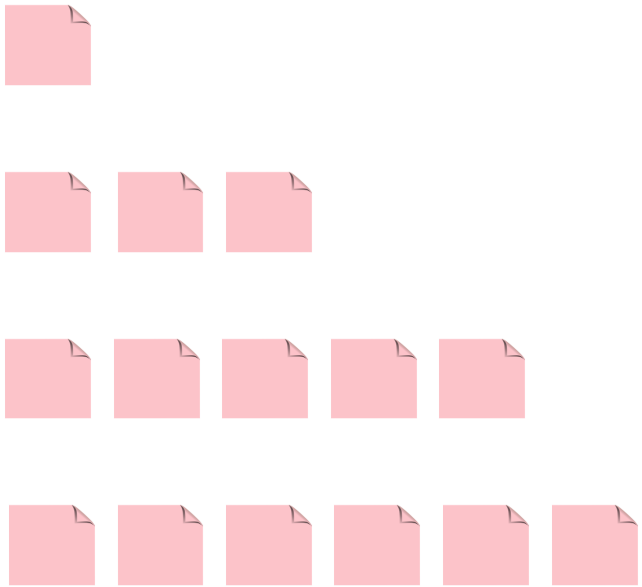
How many more staff preferred tea to fruit teas?
10 members of staff preferred tea and 6 chose fruit teas. 10 – 6 = **4**.

Is it true or false that only one member of staff preferred hot water? False. Each block is worth two, so two members of staff preferred hot water.

To draw and interpret block diagrams

Activity 1:

The 30 children in Willow class were given some sticky notes. They made a horizontal block diagram to show which milkshake was their favourite.
Can you write a title? Can you write the labels?
Can you work out a scale for the block diagram?

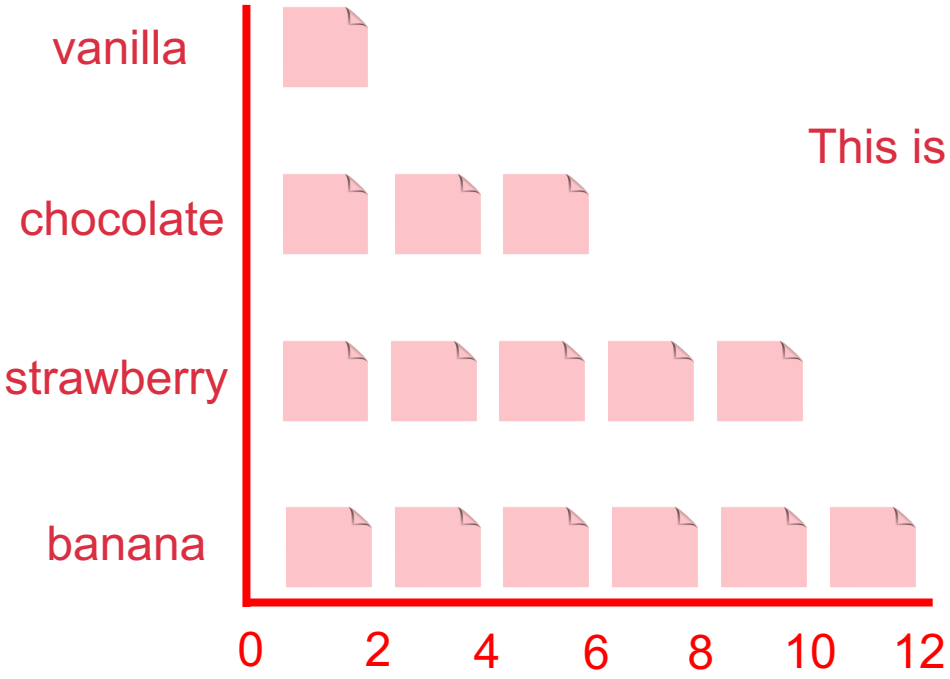


To draw and interpret block diagrams

Activity 1:

The 30 children in Willow class were given some sticky notes. They made a horizontal block diagram to show which milkshake was their favourite.
Can you write a title? Can you write the labels?
Can you work out a scale for the block diagram?

A block diagram to show which milkshake was the favourite in Willow class.



This is one answer.

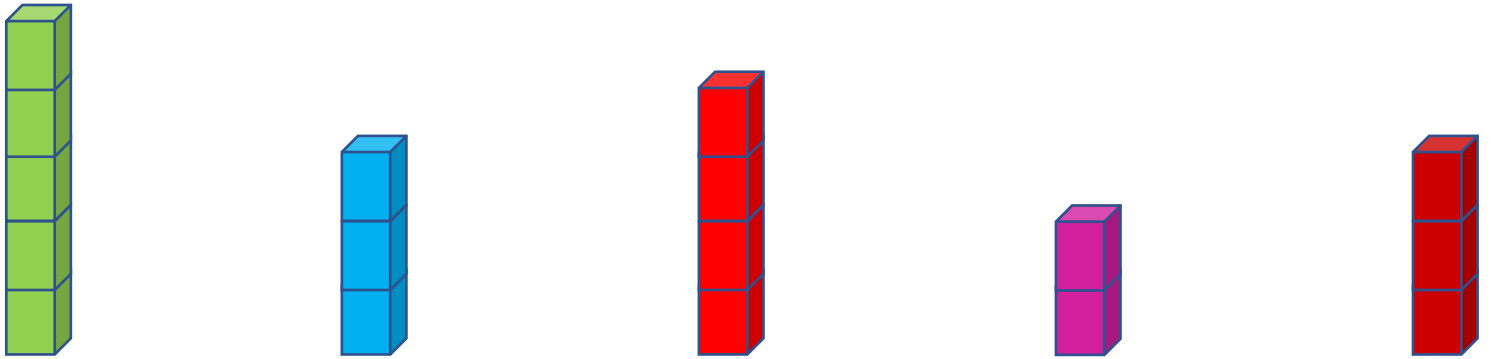
Extension:
Can you think of a different way of completing this bar diagram?

To draw and interpret block diagrams

Talking time:

Here is a block diagram using real cubes.
It shows the number of different types of crisps that a shop sold in meal deals.
Can you draw the block diagram that matches this?

Every cube represents 5 packets of crisps.

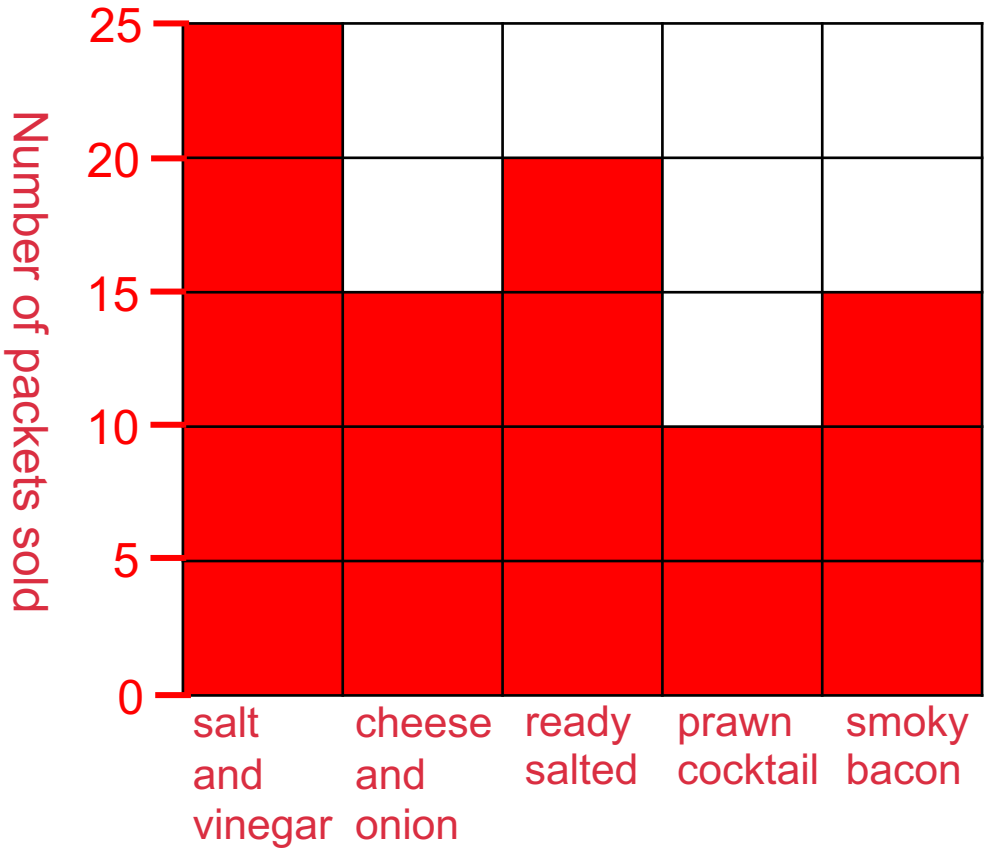


Remember that you need a title, labels for the blocks and a clear scale.

To draw and interpret block diagrams

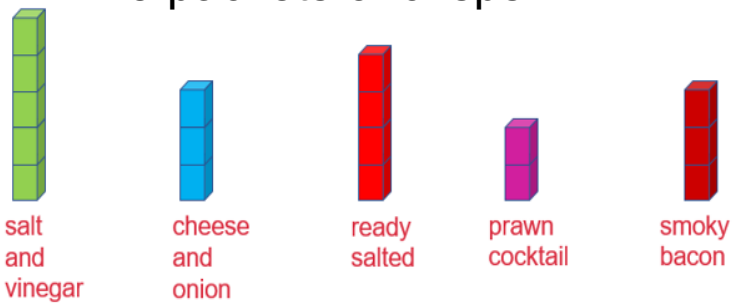
Talking time:

Here is a block diagram using real cubes. It shows the number of different types of crisps that a shop sold in meal deals. Can you draw the block diagram that matches this?



A block diagram to show the number of packets of crisps sold in meal deals.

Every cube represents 5 packets of crisps.



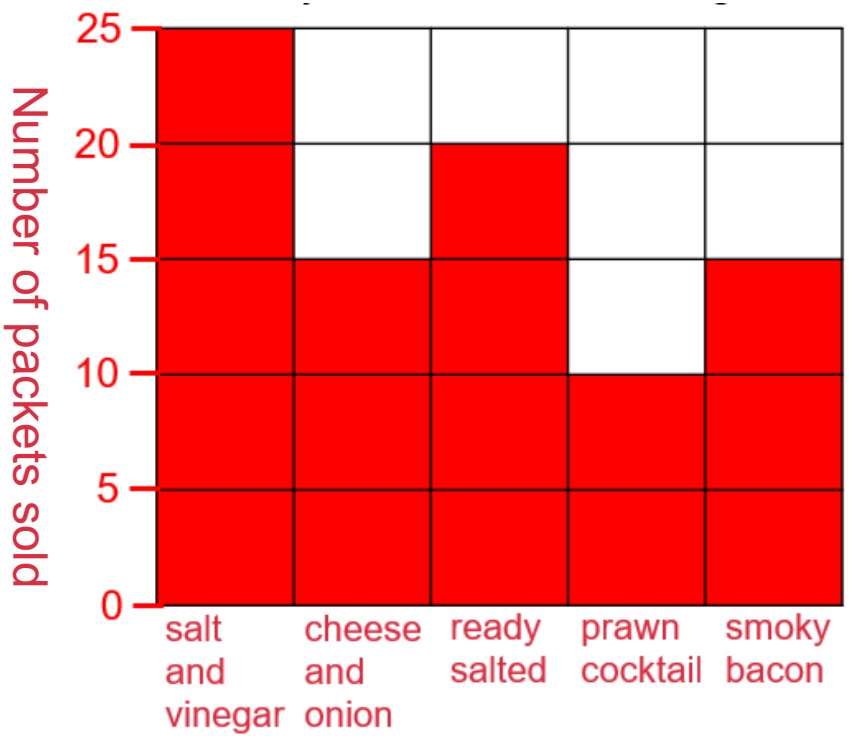
To draw and interpret block diagrams

Talking time:

Use the block diagram to answer the questions.

A block diagram to show the number of packets of crisps sold in meal deals.

Every cube represents 5 packets of Crisps.



How many ready salted packets of crisps were sold?

How many fewer packets of prawn cocktail crisps were sold than salt and vinegar?

How many packets of crisps were sold altogether?

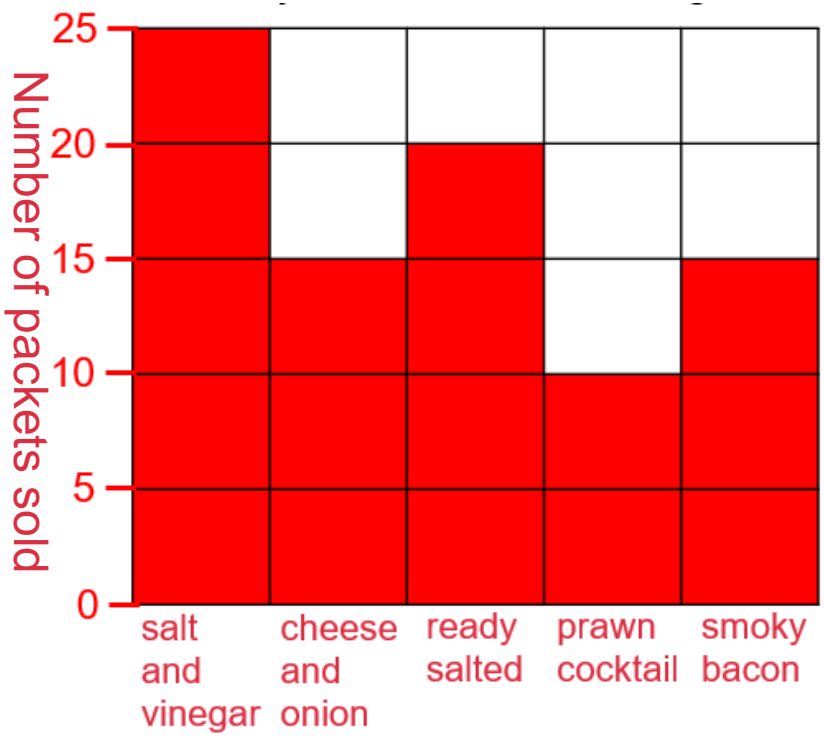
To draw and interpret block diagrams

Talking time:

Use the block diagram to answer the questions.

A block diagram to show the number of packets of crisps sold in meal deals.

Every cube represents 5 packets of crisps.



How many ready salted packets of crisps were sold? 20 packets of crisps were sold.

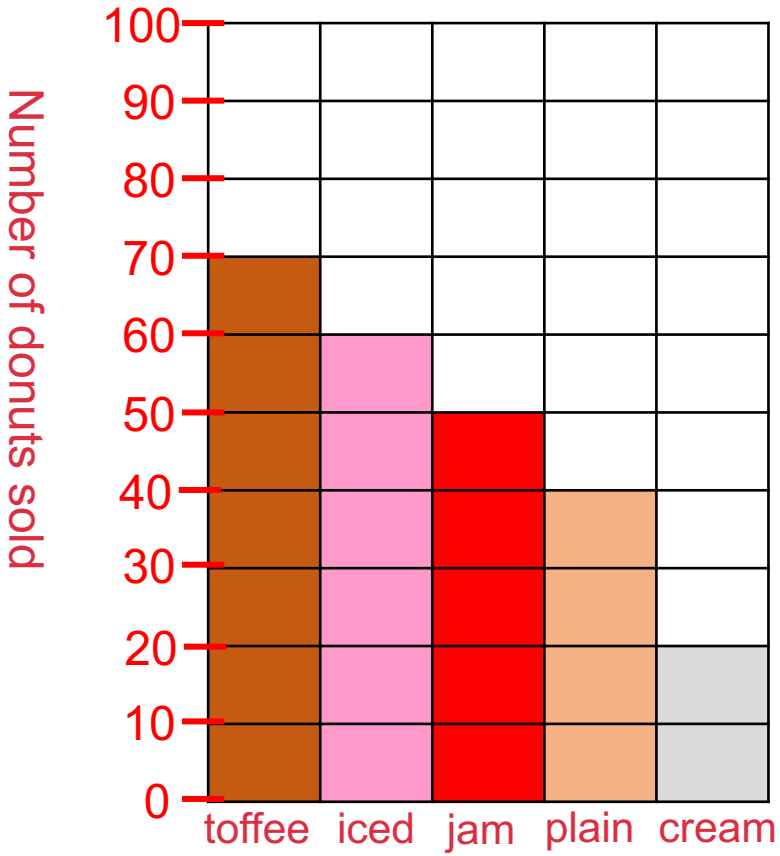
How many fewer packets of prawn cocktail crisps were sold than salt and vinegar?
25 salt and vinegar packets were sold. 10 packets of prawn cocktail were sold.
So, 15 fewer.

How many packets of crisps were sold altogether? 25 + 15 + 20 + 10 + 15 = 85.

To draw and interpret block diagrams

Talking time:

A block diagram to show the number of donuts sold in a cake shop over one month. Use the block diagram to answer the questions.



Which type of donut sold the fewest?

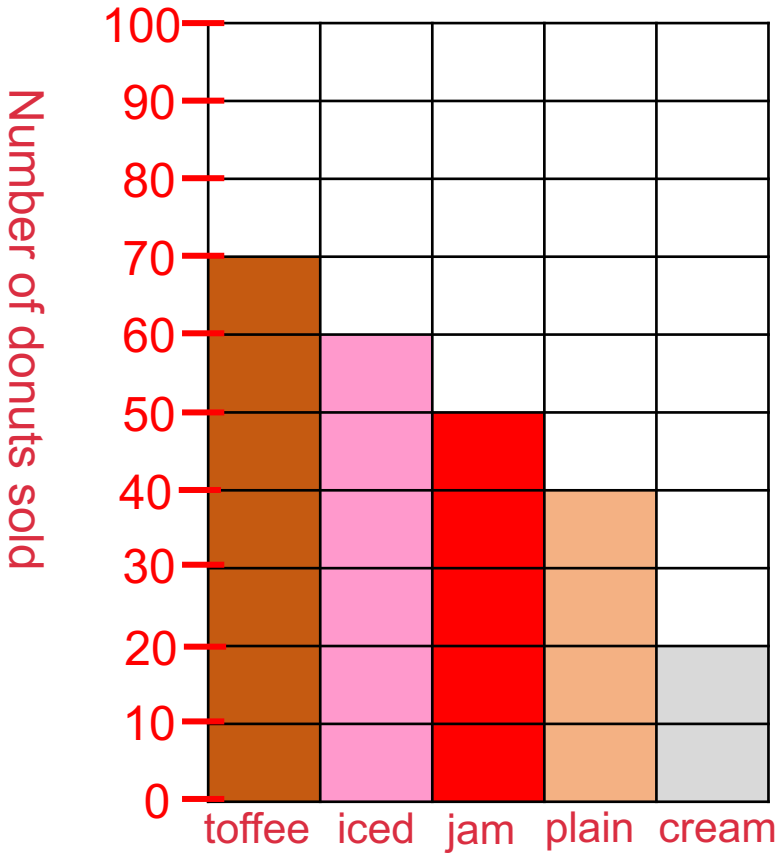
How many more iced donuts were sold than plain donuts?

How many toffee and cream donuts were sold altogether?

To draw and interpret block diagrams

Talking time:

A block diagram to show the number of donuts sold in a cake shop over one month. Use the block diagram to answer the questions.



Which type of donut sold the fewest?
Cream donuts sold the fewest.

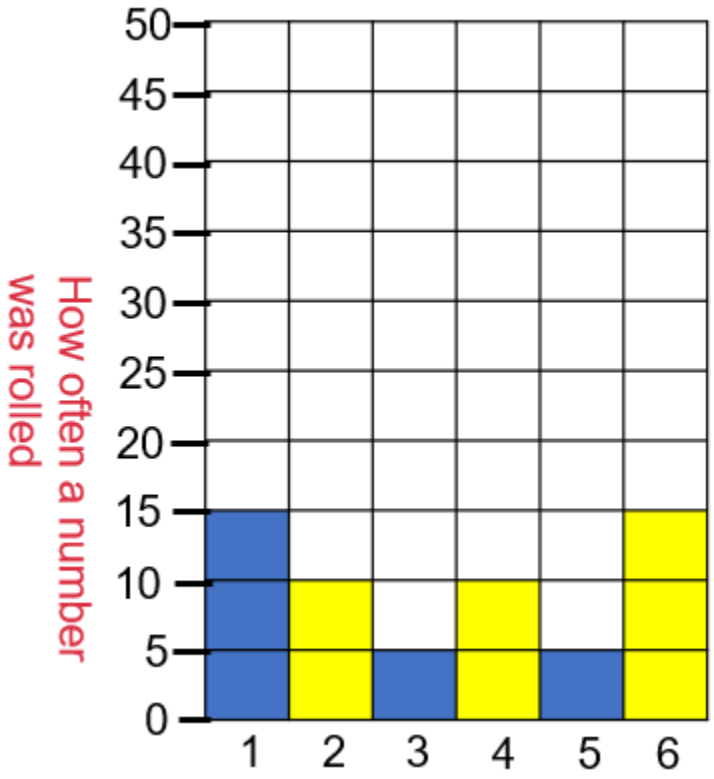
How many more iced donuts were sold than plain donuts? 60 iced donuts were sold and 40 plain donuts were sold. 60 – 40 = 20.

How many toffee and cream donuts were sold altogether? 70 toffee donuts were sold plus 20 cream ones. 70 + 20 = 90.

To draw and interpret block diagrams

Activity 2:

A block diagram to show the number of times the numbers 1, 2, 3, 4, 5 and 6 are rolled on a dice.

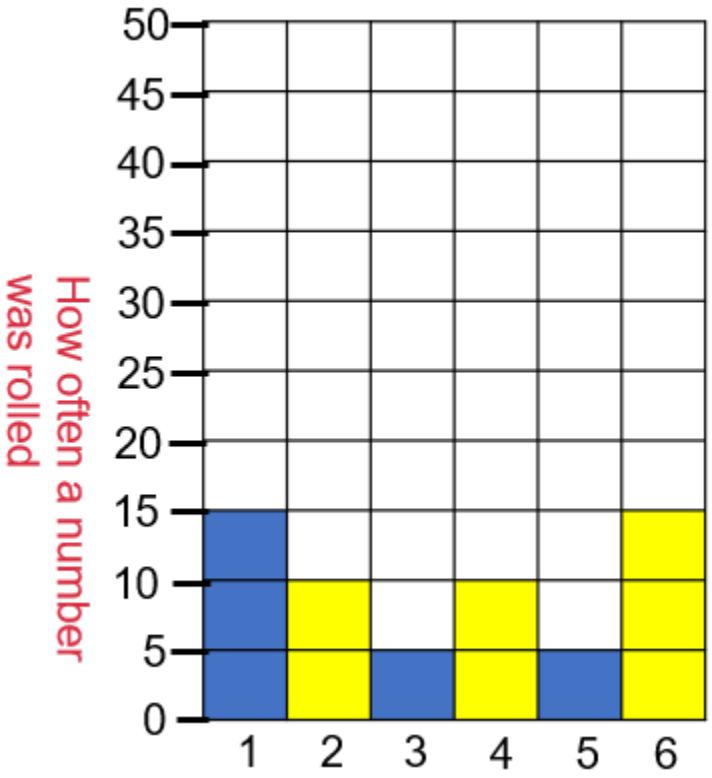


Here is a block diagram about investigating some rolls of a dice. What sort of questions could you ask about the block diagram?

To draw and interpret block diagrams

Activity 2:

A block diagram to show the number of times the numbers 1, 2, 3, 4, 5 and 6 are rolled on a dice.



Here is a block diagram about investigating some rolls of a dice. What sort of questions could you ask about the block diagram?

Some questions might be:

How many times was the number 4 rolled?

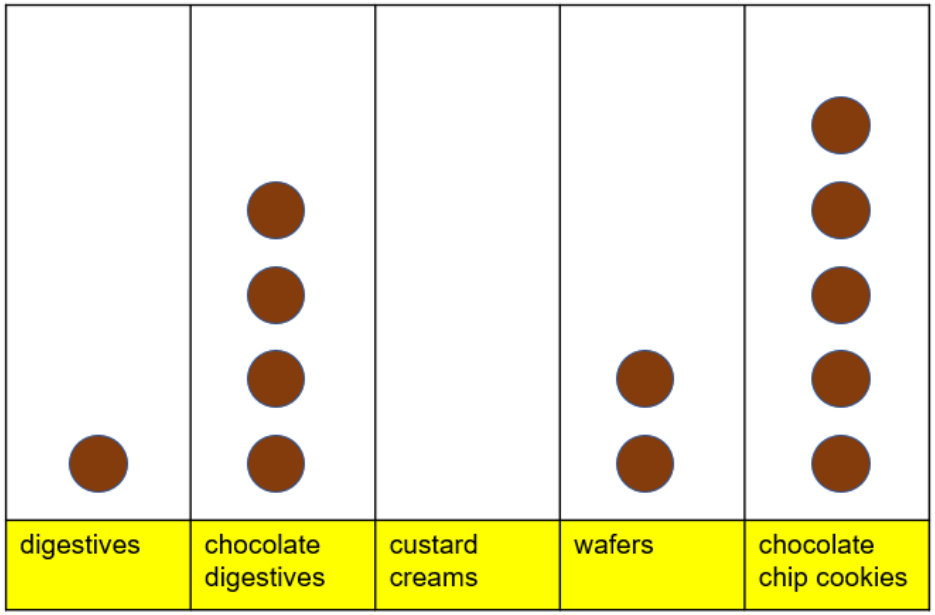
Which numbers were rolled the most?

How many rolls of the dice were there altogether?

To draw and interpret block diagrams

Activity 3:

Alena wants to turn this pictogram into a block diagram.
Can you help her? Can you explain what Alena needs to do?

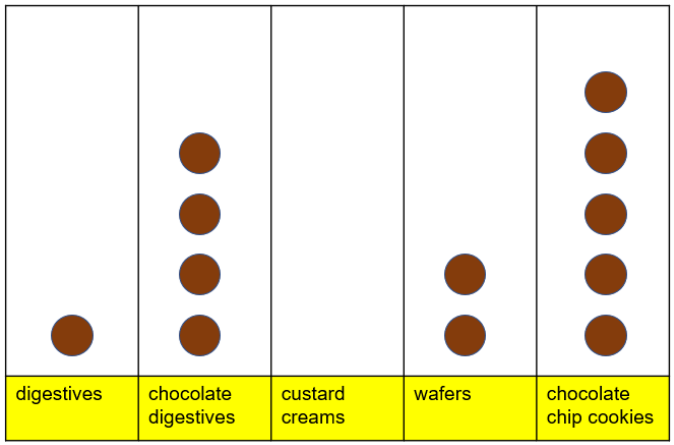


To draw and interpret block diagrams

Activity 3:

Alena wants to turn this pictogram about Key Stage 1's favourite biscuits into a block diagram.
Can you help her? Can you explain what Alena needs to do?

1. Decide on the scale. Look at the biggest number. Each square could be worth 10 or 5.
2. Draw your diagram using a ruler.
3. Give it a title.
4. Label the numbers going up the side.
5. Write your biscuit labels on the bottom.
6. Shade in the numbers of squares for each biscuit.
7. Remember that custard creams had no votes.



Key = 10 children

To draw and interpret block diagrams

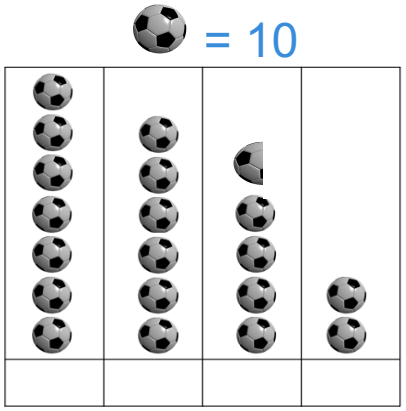
Evaluation:

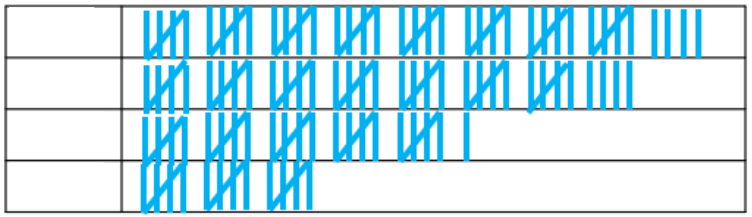
Can you match the right table to the pictogram, block diagram or tally chart?
Can you explain your decisions?

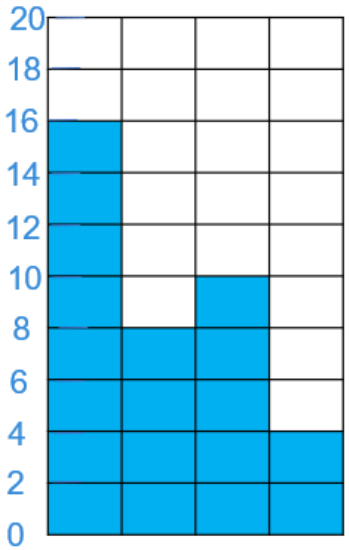
team	goals scored
United	44
City	39
Athletic	26
Rovers	15

team	points scored
United	70
City	60
Athletic	45
Rovers	20

team	top player goals
United	16
City	8
Athletic	10
Rovers	4







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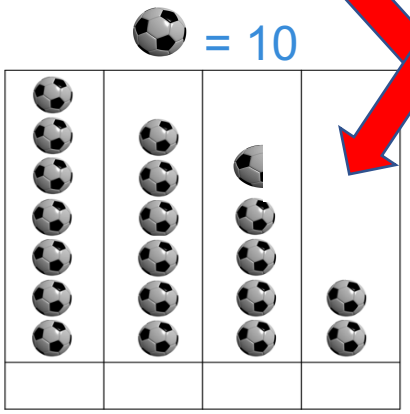

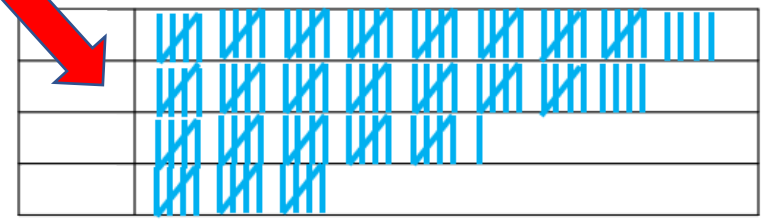

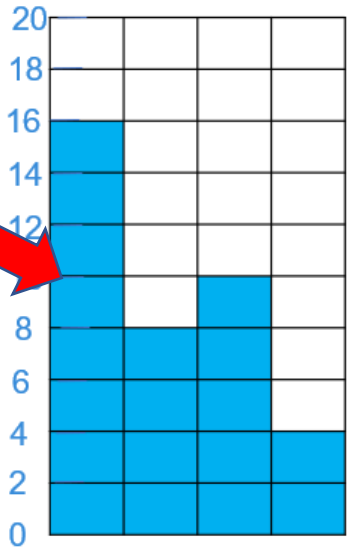

Do you have a group of pupils who need a boost in maths this term?

Each pupil could receive a personalised lesson every week from our specialist 1-to-1 maths tutors.

- Raise attainment
- Plug any gaps or misconceptions
- Boost confidence

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