Year 3
Maths Mastery Activities

In this pack you will find activities for all of the Year 3 Statistics objectives that will allow children to demonstrate mastery in each objective. They could be used to introduce a maths topic, as a problem solving task or as an extension/challenge activity.

On the contents page, you will find links (either use ctrl click or run the PowerPoint) to all the different objectives and the activity to demonstrate mastery. The activities are designed to be printed and cut out so that children can stick them into books before completing the task. You can return to page 1 of the contents page by using the link in top left of each sheet. Answers (where appropriate) have also been included.

This resource will save you the hours of time it takes to keep on finding or creating resources for each objective that will allow children to demonstrate mastery and it provides an excellent evidence base for teacher judgements.

If you have any questions or issues with the resource, please contact me at mrlongsmaths@gmail.com
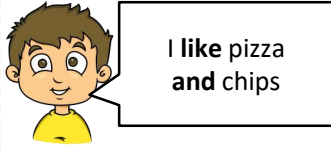
Statistics

- Interpret and present data using bar charts, pictograms and tables

- Solve one-step and two-step questions using information presented in scaled bar charts and pictograms and tables
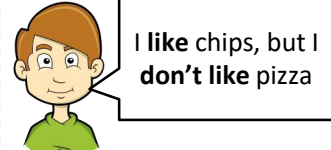
LO: Interpret and present data using bar charts, pictograms and tables

The children have been **sorted** depending on whether they like **pizza** and **chips**. However, **one** of them is in the **wrong box** and another one is **missing**. Can you **fix** the Carroll diagram?
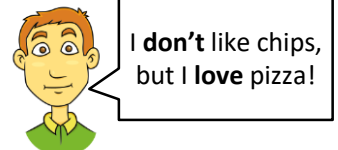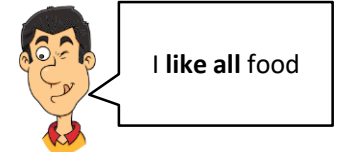
Ben: I **like** pizza **and** chips

Ben

Danny: I **like** chips, but I **don't like** pizza

Danny

Jill: I **like** pizza, but I **don't like** chips

Jill

	likes pizza	does not like pizza
likes chips	Ben	Danny Jill
does not like chips	Jack	Mariam

Mariam: I **don't like** pizza **or** chips

Mariam

Jack: I **don't** like chips, but I **love** pizza!

Jack

Omar: I **like all** food

Omar

Look at this **pictogram**. It shows a group of children's favourite animal:
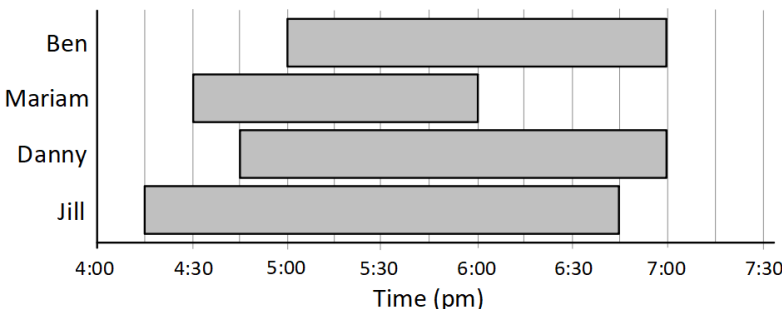
= 3 children

Monkey
Tiger
Snake
Elephant

Can you spot the **problem** with this pictogram? **Explain** your reasoning…

This bar represents how Mariam spent her **£100** birthday money…

books	cinema	clothes	watch
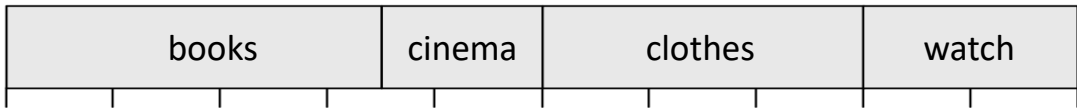
Write down **all** the **information** you can get from this **chart**…

This bar chart shows how when the children were watching TV one evening…

Ben
Mariam
Danny
Jill

4:00   4:30   5:00   5:30   6:00   6:30   7:00   7:30
Time (pm)

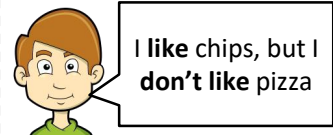How long did **each** child spend watching TV?

ANSWER SHEET

The children have been **sorted** depending on whether they like **pizza** and **chips**. However, **one** of them is in the **wrong box** and another one is **missing**. Can you **fix** the Carroll diagram?
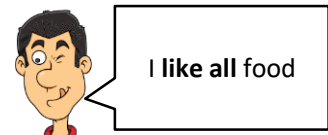
Ben: I **like** pizza **and** chips

Danny: I **like** chips, but I **don't like** pizza

Jill: I **like** pizza, but I **don't like** chips

Mariam: I **don't like** pizza **or** chips

Jack: I **don't** like chips, but I **love** pizza!

Omar: I **like all** food

	likes pizza	does not like pizza
likes chips	Ben / Omar	Danny / Jill
does not like chips	Jack	Mariam

(arrow pointing from Jill to the "does not like chips / likes pizza" box)

Look at this **pictogram**. It shows a group of children's favourite animal:

😊 = 3 children

Monkey 😊😊😊😊😊😊
Tiger 😊😊😊😊◖
Snake 😊😊😊😊😊😊😊
Elephant 😊😊😊😊😊😊😊😊◖

Children should recognise that half of 3 is $1\frac{1}{2}$ and that you can't have half a child!
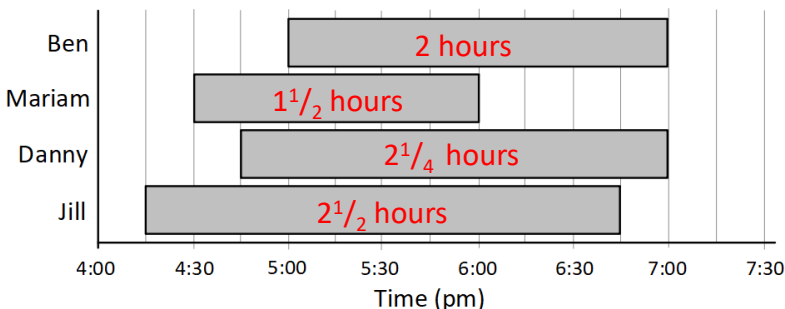
Can you spot the **problem** with this pictogram? **Explain** your reasoning...

This bar represents how Mariam spent her **£100** birthday money...

books £35	cinema £15	clothes £30	watch £20
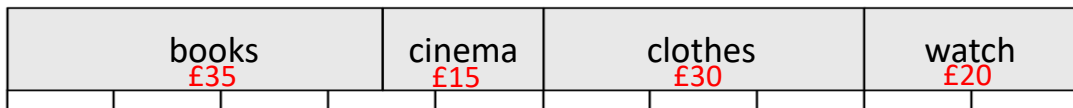
Answers will vary. As well as how much she spent on each thing children could also work out differences between or express in fractions e.g. she spent $\frac{3}{10}$ of the money on clothes

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This bar chart shows how when the children were watching TV one evening...

Ben: 2 hours
Mariam: $1\frac{1}{2}$ hours
Danny: $2\frac{1}{4}$ hours
Jill: $2\frac{1}{2}$ hours

Time (pm): 4:00, 4:30, 5:00, 5:30, 6:00, 6:30, 7:00, 7:30

How long did **each** child spend watching TV?

LO: Solve one-step and two-step questions using information presented in scaled bar charts and pictograms and tables

What does this bar chart show?

legend: ■ like maths □ don't like maths
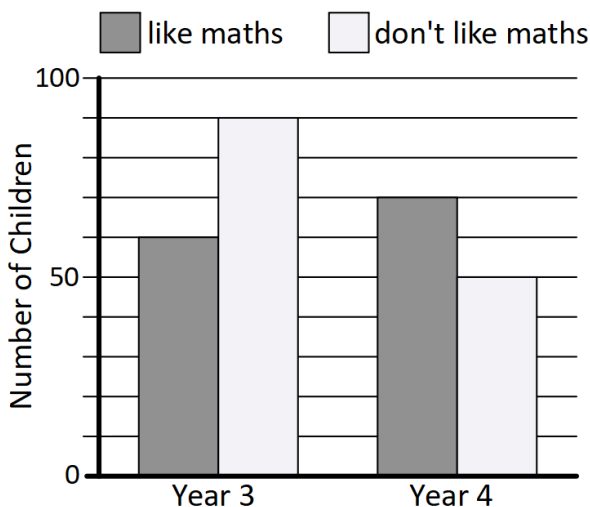
Write **questions** that could be asked about this chart...
(try to include **two-step** questions)

Danny and Ben have **three** lollipops **between** them...

blue (**B**)   red (**R**)   green (**G**)

Complete this **table** to show what each boy could have:

Danny	B					
Ben	R G					

This is part of a bus timetable, but some of the information is missing:

Bus Station	High Street	Supermarket	St Andrew's Church	St Andrew's School	Oak Tree Park	Sport Centre	Police Station
			10:01				

Use these **clues** to **complete** the timetable...

The supermarket is exactly **half way** between the **High Street** and the **Church**

The **entire** bus journey takes **58 minutes**

It takes the bus **9 minutes** to get to the **High Street**

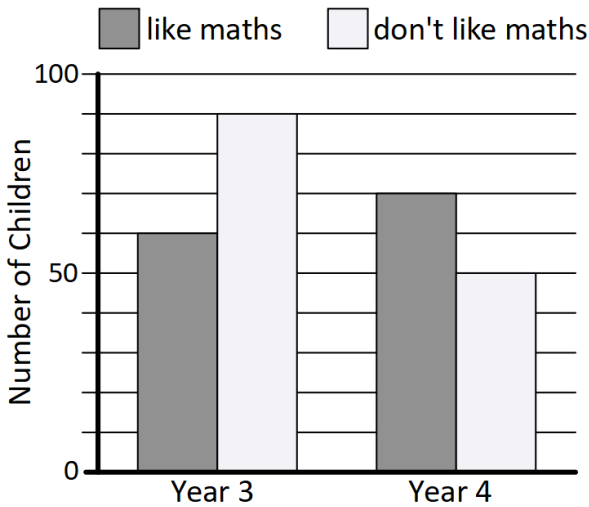The bus stops at the **School** at **quarter past 10** and then the **Park 3 minutes later**

The bus leaves the **Bus Station** at **9:32**

The bus gets to the **Sport Centre 8 minutes** *before* the **Police Station**

ANSWER SHEET

What does this bar chart show?

It shows the children who do or do not like maths in years 3 and 4

Children should write a variety of questions including comparisons, finding the difference and finding the total

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Danny and Ben have **three** lollipops **between** them...

blue (**B**)   red (**R**)   green (**G**)

Complete this **table** to show what each boy could have:

Danny	B	B R	B G R	G	G B	R	R G	
Ben	R G	G		B R	R	G B	B	B G R

Order may vary

This is part of a bus timetable, but some of the information is missing:

Bus Station	High Street	Supermarket	St Andrew's Church	St Andrew's School	Oak Tree Park	Sport Centre	Police Station
9:32	9:41	9:51	10:01	10:15	10:18	10:22	10:30

Use these **clues** to **complete** the timetable...

The supermarket is exactly **half way** between the **High Street** and the **Church**

The **entire** bus journey takes **58 minutes**

It takes the bus **9 minutes** to get to the **High Street**

The bus stops at the **School** at **quarter past 10** and then the **Park 3 minutes later**

The bus leaves the **Bus Station** at **9:32**

The bus gets to the **Sport Centre 8 minutes** *before* the **Police Station**