## Year 4 - Summer Block 4 - Statistics - Interpret Charts

## About This Resource:

This PowerPoint has been designed to support your teaching of this small step. It includes a starter activity and an example of each question from the Varied Fluency and Reasoning and Problem Solving resources also provided in this pack. You can choose to work through all examples provided or a selection of them depending on the needs of your class.

## National Curriculum Objectives:

Mathematics Year 4: (4S1) Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs
Mathematics Year 4: (4S2) Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs

More Year 4 Statistics resources.

Did you like this resource? Don't forget to review it on our website.

## Year 4 - Summer Block 4 - Statistics

## Step 1: Interpret Charts

What is each increment worth on these scales?


What is each increment worth on these scales?

| 0 | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | \| |  |  |  |  |  |  | \| |  |
| 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |
|  | I |  |  |  |  |  |  |  |  |  |
| 0 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 |
|  | \| | \| |  |  | 1 |  |  |  | I |  |
| 0 | 4 | 8 | 12 | 16 | 20 | 24 | 28 | 32 | 36 | 40 |

## Varied Fluency 1

Look at this pictogram.


Fill in the blanks in the table.

| $<£ 5$ | $£ 6-£ 10$ | $£ 11-£ 15$ | $£ 16-£ 20$ |
| :---: | :---: | :---: | :---: |
|  |  | 10 |  |

## Varied Fluency 1

Look at this pictogram.


Fill in the blanks in the table.

| $<£ 5$ | $£ 6-£ 10$ | $£ 11-£ 15$ | $£ 16-£ 20$ |
| :---: | :---: | :---: | :---: |
| 15 | 15 | 10 | 5 |

## Varied Fluency 2

Think of one question to ask about the information in this tally chart:

Holiday Destinations

| UK | $\\|$ |
| :--- | :--- |
| Europe | $\\|\\|$ |
| Rest of the <br> World | $\\|$ |

Think of one question to ask about the information in this tally chart:

Holiday Destinations

| UK | $\\|$ |
| :--- | :--- |
| Europe | $\\|\\|$ |
| Rest of the <br> World | $\\|$ |

Various answers, for example:
How many people stayed in the UK for their holiday?
Which is the least popular destination?
How many people were asked in total?
How many more people stayed in the UK than travelled to Europe?

## Varied Fluency 3

Use the information in the table to create a bar chart.
Colour of Cars Passing the School

| Silver | 35 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Red | 40 |  |  |  |
| Blue | 55 |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  | Silver | Red |  |  |

## Varied Fluency 3

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Use the information in the table to create a bar chart.

| Silver | 35 |
| :---: | :---: |
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Colour of Cars Passing the School


Colour

## Varied Fluency 4

Use the bar chart to answer the questions.

Cake Sales


How many cakes were sold on Monday?

What is the most cakes sold in one day?

On which day were the least amount of cakes sold?

## Varied Fluency 4

Use the bar chart to answer the questions.

Cake Sales


Mon Tues Wed Thurs Fri

How many cakes were sold on Monday? 45

What is the most cakes sold in one day? 60 on Wednesday

On which day were the least amount of cakes sold? Tuesday and Thursday

## Reasoning 1

The school kitchen are collecting ideas for recipes by asking the children their favourite food.


Jayden
I think a choice of 4 meals and a bar chart would work best.

Who do you agree with and why?

## Reasoning 1

The school kitchen are collecting ideas for recipes by asking the children their favourite food.


Jayden
I think a choice of 4 meals and a bar chart would work best.

Who do you agree with and why?
Hakeem
Hakeem has the best idea because...

## Reasoning 1

The school kitchen are collecting ideas for recipes by asking the children their favourite food.


I think a choice of 4 meals and a bar chart would work best.

Who do you agree with and why?
Hakeem
Hakeem has the best idea; it will be quick and simple to collect the data and make people's decision making much easier.

## True or false?

## The lines on a chart are called axels.

Explain your answer.

## True or false?



## Explain your answer.

False, the lines are called the $y$-axis and the $x$-axis (or axes).

## Problem Solving 1

Mr Thompson says this tally chart is not easy to interpret.

Height of Pupils in Oak Class

| $<1$ metre | $\|\|\|\|\|\|\|\|\|\|\|\|\|\|\|\|\mid$ |
| :---: | :---: |
| $>1$ metre | $\|\|\|\|\|\|\|\|\|\|\mid$ |

Find 2 ways in which you could make the chart easier to interpret.

## Problem Solving 1

Mr Thompson says this tally chart is not easy to interpret.

Height of Pupils in Oak Class

| < 1 metre | $\|\|\|\|\|\|\|\|\|\|\|\|\|\|\|\|\mid$ |
| :---: | :---: |
| $>1$ metre | $\|\|\|\|\|\|\|\|\|\|\mid$ |

Find 2 ways in which you could make the chart easier to interpret.
The tally should be 5 strokes so counting is easier.
The options could be broken into smaller steps e.g. 90 cm to $1 \mathrm{~m}, 1 \mathrm{~m}$ to $1.5 \mathrm{~m}, 1.5$ to 2 m as the data is not very useful with such a large range.

