

## Year 3 – Spring Block 3 – Statistics – Pictograms

### 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 3: (3S1) [Interpret and present data using bar charts, pictograms and tables](#)

Mathematics Year 3: (3S2) [Solve one-step and two-step questions \[for example, 'How many more?' and 'How many fewer?'\] using information presented in scaled bar charts and pictograms and tables](#)





More [Year 3 Statistics](#) resources.





Did you like this resource? Don't forget to [review](#) it on our website.

# Step 1: Pictograms

## Introduction

Jack has used this tally chart to draw the pictogram.

Flavour	Number of Children
Vanilla	
Strawberry	
Lemon	
Apple	

Flavour	Number of Children
Vanilla	
Strawberry	
Lemon	
Apple	





Key:  = 5 children

Has he interpreted the tally chart correctly? What errors can you find?

## Introduction

Jack has used this tally chart to draw the pictogram.

Flavour	Number of Children
Vanilla	
Strawberry	
Lemon	
Apple	

Flavour	Number of Children
Vanilla	
Strawberry	
Lemon	
Apple	



Key:  = 5 children


Has he interpreted the tally chart correctly? What errors can you find?

**No, Jack has not interpreted the tally chart correctly. He should have 2 images for strawberry and 1 image for lemon.**

## Varied Fluency 1

Complete the missing sections using the information below.






Favourite Subject	Number of Children
Maths	
English	
Science	
History	
Art	


Key:  = 2 children

- A. Half the number of children who like Maths, like English.
- B. 4 more children like Art than History.
- C. 3 more people like Science than English.

## Varied Fluency 1

Complete the missing sections using the information below.






Favourite Subject	Number of Children
Maths	
English	
Science	
History	
Art	

Key:  = 2 children

- A. Half the number of children who like Maths, like English.
- B. 4 more children like Art than History.
- C. 3 more people like Science than English.

## Varied Fluency 2

Answer the questions about the pints of milk sold.





Day	Number of pints of milk sold
Monday	
Tuesday	
Wednesday	
Thursday	
Friday	

Key:  = 4 pints sold

- How many pints were sold on Monday?
- How many more pints were sold on Friday than on Thursday?
- How many pints were sold on Wednesday and Friday?
- How many fewer pints were sold on Tuesday than on Monday?

## Varied Fluency 2

Answer the questions about the pints of milk sold.

Day	Number of pints of milk sold
Monday	
Tuesday	
Wednesday	
Thursday	
Friday	





Key:  = 4 pints sold

- A. How many pints were sold on Monday? **20**
- B. How many more pints were sold on Friday than on Thursday? **12**
- C. How many pints were sold on Wednesday and Friday? **58**
- D. How many fewer pints were sold on Tuesday than on Monday? **10**



## Reasoning 1

Zac has created this pictogram.





Pies	Number of Pies Sold
Apple	
Blueberry	
Cherry	
Banoffee	

Key:  = 10 pies sold

He thinks only 15 more apple pies were sold than cherry pies. True or false? Convince me.

## Reasoning 1

Zac has created this pictogram.

Pies	Number of Pies Sold
Apple	
Blueberry	
Cherry	
Banoffee	





Key:  = 10 pies sold

He thinks only 15 more apple pies were sold than cherry pies. True or false? Convince me.

No, Zac is incorrect because...

## Reasoning 1

Zac has created this pictogram.

Pies	Number of Pies Sold
Apple	
Blueberry	
Cherry	
Banoffee	



Key:  = 10 pies sold

He thinks only 15 more apple pies were sold than cherry pies. True or false? Convince me.

**No, Zac is incorrect because 60 apple pies were sold and 35 cherry pies were sold.  $60 - 35 = 25$ . 25 more apple pies were sold compared to cherry pies.**

## Problem Solving 1

Anika is drawing a pictogram. She knows more children have a birthday in Winter than Spring, but fewer children have a birthday in Winter than Autumn.





Season	Number of Birthdays
Spring	
Summer	
Autumn	
Winter	

Key:  = 3 children

Complete the pictogram showing one of the possibilities.

## Problem Solving 1

Anika is drawing a pictogram. She knows more children have a birthday in Winter than Spring, but fewer children have a birthday in Winter than Autumn.

Season	Number of Birthdays
Spring	
Summer	
Autumn	
Winter	





Key:  = 3 children

Complete the pictogram showing one of the possibilities.

**Various answers, for example: See table.**

## Reasoning 2

Archie draws a pictogram to show KS2's favourite time of the day.

Time of Day	Number of Children 1 bell = 8 children
Play time	
Dinner time	
Home time	
Story time	





Twice as many children like dinner time than story time.



Is he correct? Explain your answer.

## Reasoning 2

Archie draws a pictogram to show KS2's favourite time of the day.

Time of Day	Number of Children 1 bell = 8 children
Play time	
Dinner time	
Home time	
Story time	





Twice as many children like dinner time than story time.



Is he correct? Explain your answer.  
No, Archie is incorrect because...

## Reasoning 2

Archie draws a pictogram to show KS2's favourite time of the day.

Time of Day	Number of Children 1 bell = 8 children
Play time	
Dinner time	
Home time	
Story time	

Twice as many children like dinner time than story time.



Is he correct? Explain your answer.

**No, Archie is incorrect because 36 children voted story time and 60 children voted dinner time. That is a difference of 24.**