



Mathematics progression of concepts – Year 2
statistics

Key vocabulary:

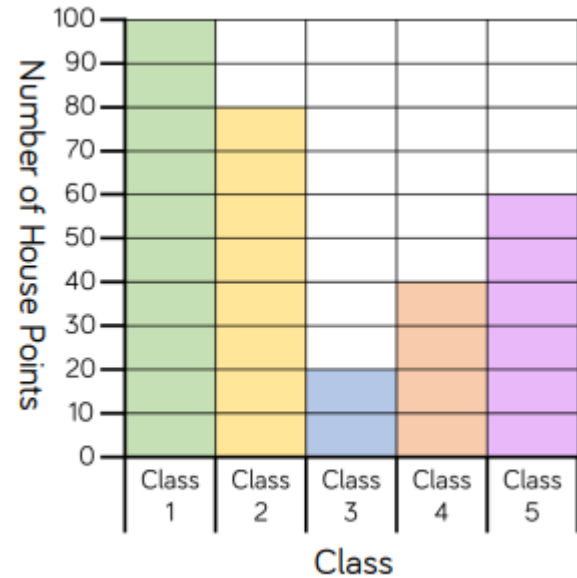
count sort vote tally graph block graph pictogram
represent group set list table label title most
popular least popular

Previously, I have learnt...

Number bonds

- to count beyond 20
- to compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other

Representations and manipulatives



In year 2, I am learning...

Interpret, construct and present data

- to interpret and construct simple pictograms, tally charts, block diagrams and simple tables
- to ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity
- to ask and answer questions about totaling and comparing categorical data

In year 3, I will learn...

Interpret, construct and present data

- to interpret and present data using bar charts, pictograms and tables

Solving problems

- solve one-step and twostep questions [e.g. 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables.

In my future I can...

Across the curriculum

- science – understanding data
- DT – taking measurements
- PE – keeping score, measuring, angles
- geography – coordinates, maps
- computing – databases, coding

Life skills

- shopping and budgeting
- critical thinking
- playing sport
- map reading
- interpreting statistics
- working with computers

Careers

- shop worker
- bank cashier
- architect
- doctor
- nurse
- teacher
- computer programmer

| Favourite Colour | Tally | Total |
|------------------|-------|-------|
| Blue | | |
| Red | | |
| Yellow | | |
| Green | | |

| Hair Colour | | Total |
|-------------|---------------|-------|
| Black | ○ ○ ○ ○ ○ | 5 |
| Blonde | ○ ○ ○ ○ ○ ○ ○ | |
| Brown | | 9 |
| Ginger | ○ ○ ○ ○ | 4 |



Mathematics progression of concepts – Year 3
statistics

Key vocabulary:

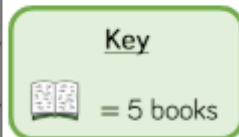
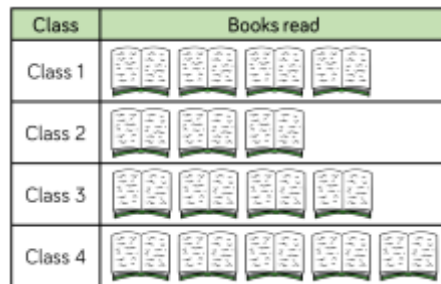
count sort vote tally graph block graph pictogram
represent group set list table label title most
popular least popular chart bar chart table venn diagram

In year 2, I have learnt...

Interpret, construct and present data

-to interpret and construct simple pictograms, tally charts, block diagrams and simple tables
-to ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity
-to ask and answer questions about totaling and comparing categorical data

Representations and manipulatives



| | Whitney | Jack | Eva | Mo | Teddy | Annie |
|------------|---------|------|-----|----|-------|-------|
| Football | ✓ | | ✓ | ✓ | | ✓ |
| Rugby | | | ✓ | | ✓ | |
| Tennis | ✓ | ✓ | | ✓ | | ✓ |
| Cricket | | | ✓ | | ✓ | |
| Basketball | | ✓ | ✓ | ✓ | | ✓ |

In year 3, I am learning...

Interpret, construct and present data

-to interpret and present data using bar charts, pictograms and tables

Solving problems

- solve one-step and twostep questions [e.g. 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables.

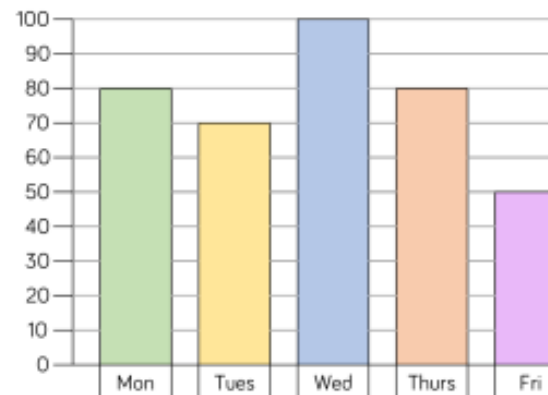
In year 4, I will learn...

Interpret, construct and present data

- to interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs

Solving problems

-to solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.



In my future I can...

Across the curriculum

-science – understanding data
-DT – taking measurements
-PE – keeping score, measuring, angles
-geography – coordinates, maps
-computing – databases, coding

Life skills

-shopping and budgeting
-critical thinking
-playing sport
-map reading
-interpreting statistics
-working with computers

Careers

-shop worker
-bank cashier
-architect
-doctor
-nurse
-teacher
-computer programmer



Mathematics progression of concepts – Year 4
statistics

Key vocabulary:

count sort vote tally graph block graph pictogram
represent group set list table label title most
popular least popular chart bar chart table venn diagram
continuous data time graph survey questionnaire

In year 3, I have learnt...

Interpret, construct and present data

-to interpret and present data using bar charts, pictograms and tables

Solving problems

- solve one-step and twostep questions [e.g. 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables.

In year 4, I am learning...

Interpret, construct and present data

- to interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs

Solving problems

-to solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.

In year 5, I will learn...

Interpret, construct and present data

- to complete, read and interpret information in tables, including timetables

Solving problems

-to solve comparison, sum and difference problems using information presented in a line graph

In my future I can...

Across the curriculum

- science – understanding data
- DT – taking measurements
- PE – keeping score, measuring, angles
- geography – coordinates, maps
- computing – databases, coding

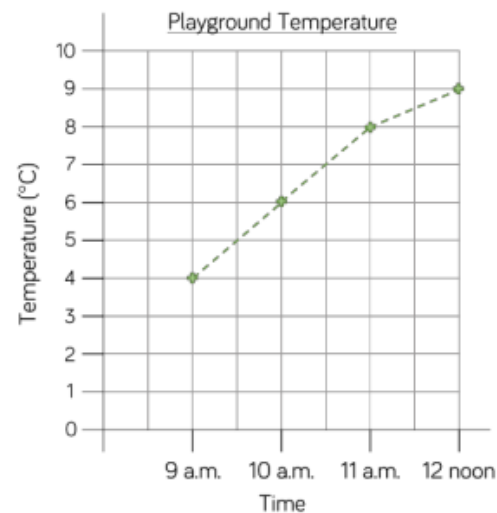
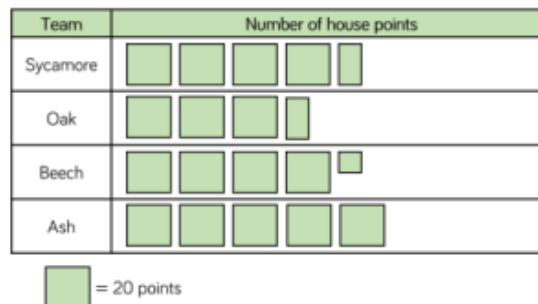
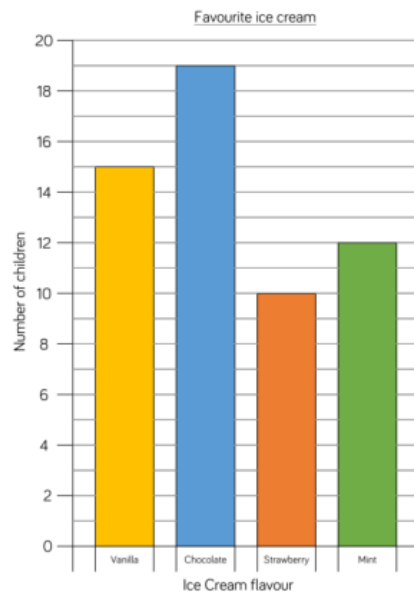
Life skills

- shopping and budgeting
- critical thinking
- playing sport
- map reading
- interpreting statistics
- working with computers

Careers

- shop worker
- bank cashier
- architect
- doctor
- nurse
- teacher
- computer programmer

Representations and manipulatives





Mathematics progression of concepts – Year 5 statistics

Key vocabulary:

count sort vote tally graph block graph pictogram represent
group set list table label title most popular least popular
chart bar chart table venn diagram continuous data time graph
survey questionnaire line graph database value scale

In year 4, I have learnt...

Interpret, construct and present data

- to interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs

Solving problems

-to solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.

In year 5, I am learning...

Interpret, construct and present data

- to complete, read and interpret information in tables, including timetables

Solving problems

-to solve comparison, sum and difference problems using information presented in a line graph

In year 6, I will learn...

Interpret, construct and present data

-to interpret and construct pie charts and line graphs and use these to solve problems

Solving problems

-to calculate and interpret the mean as an average

In my future I can...

Across the curriculum

- science – understanding data
- DT – taking measurements
- PE – keeping score, measuring, angles
- geography – coordinates, maps
- computing – databases, coding

Life skills

- shopping and budgeting
- critical thinking
- playing sport
- map reading
- interpreting statistics
- working with computers

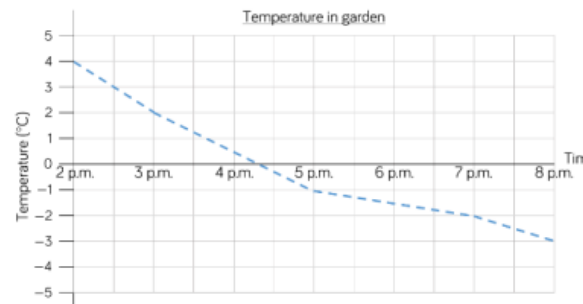
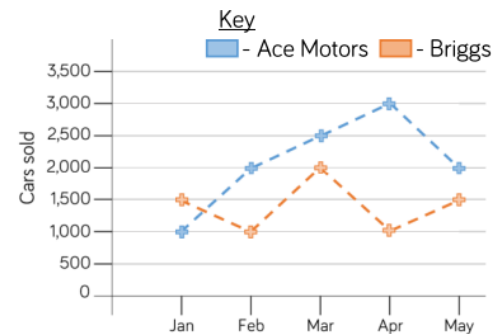
Careers

- shop worker
- bank cashier
- architect
- doctor
- nurse
- teacher
- computer programmer

Representations and manipulatives

| | Bus Timetable | | | | |
|---------------|---------------|-------|-------|-------|-------|
| Halifax | 06:05 | 06:35 | 07:10 | 07:43 | 08:15 |
| Shelf | 06:15 | 06:45 | | 07:59 | 08:31 |
| Shelf Village | 06:16 | 06:46 | 07:23 | 08:00 | 08:32 |
| Woodside | 06:21 | 06:50 | 07:28 | | |
| Odsal | 06:26 | 06:55 | 07:33 | 08:15 | 08:45 |
| Bradford | 06:40 | 07:10 | 07:48 | 08:30 | 09:00 |

| Planet | Time for Revolution | Diameter (km) | Time for Rotation |
|---------|---------------------|---------------|-------------------|
| Mercury | 88 days | 4,878 | 59 days |
| Venus | 225 days | 12,104 | 243 days |
| Earth | 365 days | 12,756 | 24 hours |
| Mars | 687 days | 6,794 | 25 hours |
| Jupiter | 12 years | 142,984 | 10 hours |
| Saturn | 29 years | 120,536 | 11 hours |
| Uranus | 84 years | 51,118 | 17 hours |
| Neptune | 165 years | 49,500 | 17 hours |





Mathematics progression of concepts – Year 6 statistics

Key vocabulary:

count sort vote tally graph block graph pictogram represent
group set list table label title most popular least popular chart
bar chart table venn diagram continuous data time graph survey
questionnaire line graph database value scale mean mode
range pie chart construct distribution

In year 5, I have learnt...

Interpret, construct and present data

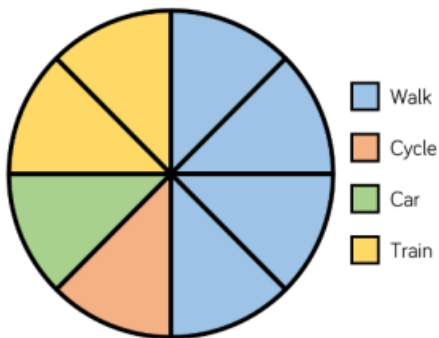
- to complete, read and interpret information in tables, including timetables

Solving problems

-to solve comparison, sum and difference problems using information presented in a line graph

Representations and manipulatives

Coppingham Primary School



In year 6, I am learning...

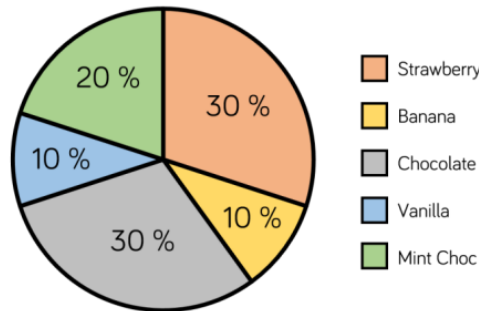
Interpret, construct and present data

-to interpret and construct pie charts and line graphs and use these to solve problems

Solving problems

-to calculate and interpret the mean as an average

Favourite Ice Cream Flavours



In KS3, I will learn...

-to describe, interpret and compare observed distributions of a single variable through appropriate graphical representation involving discrete, continuous and grouped data
-to describe, interpret and compare observed distributions of a single variable through appropriate mean, mode, median and range
-to construct and interpret appropriate tables, charts and diagrams, including frequency tables, bar charts, pie charts and pictograms for categorical data and vertical line charts for ungrouped and grouped numerical data

In my future I can...

Across the curriculum

- science – understanding data
- DT – taking measurements
- PE – keeping score, measuring, angles
- geography – coordinates, maps
- computing – databases, coding

Life skills

- shopping and budgeting
- critical thinking
- playing sport
- map reading
- interpreting statistics
- working with computers

Careers

- shop worker
- bank cashier
- architect
- doctor
- nurse
- teacher
- computer programmer

