

## Mathematics progression of concepts – year 2 statistics

### Key vocabulary:

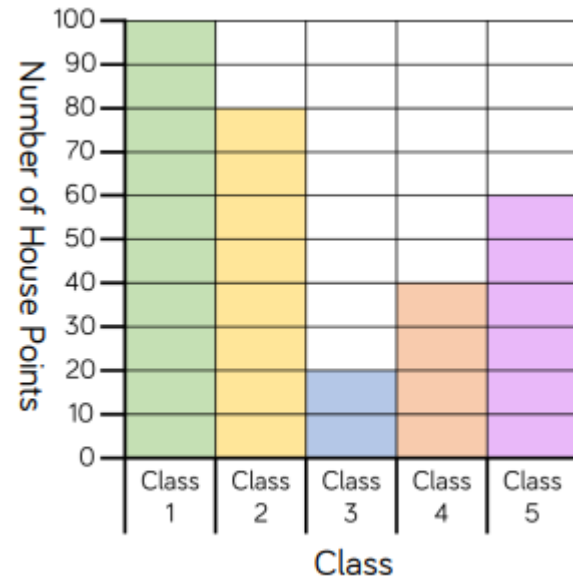
count sort vote tally graph block graph pictogram  
represent group set list table label title most  
popular least popular

### 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

## 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.

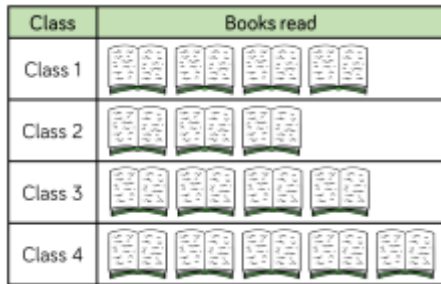
## In my future I can...


**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

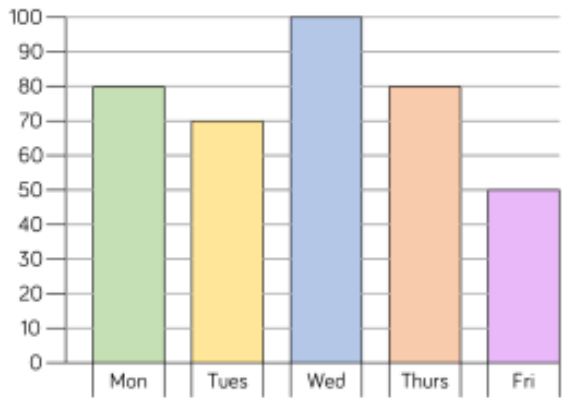
**Careers**  
 -shop worker  
 -bank cashier  
 -architect  
 -doctor  
 -nurse  
 -teacher  
 -computer programmer

### Representations and manipulatives



**Key**  
 = 5 books

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



# 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

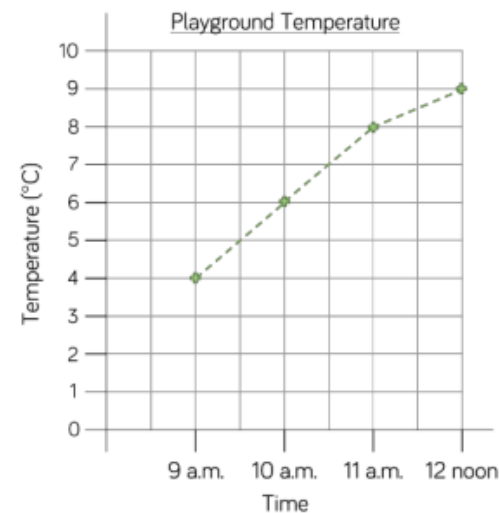
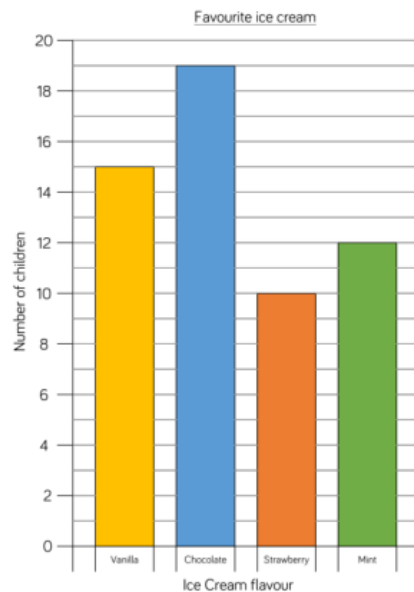
### Life skills

- 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

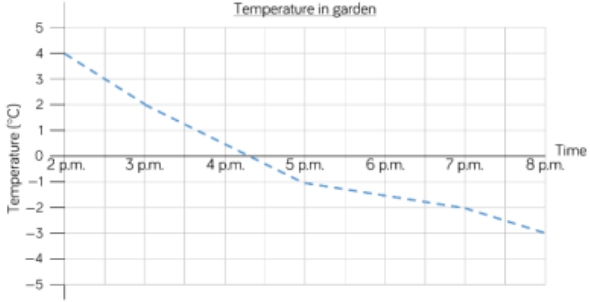
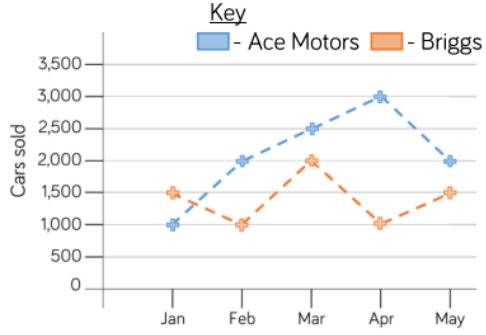
**Life skills**  
 -shopping and budgeting  
 -critical thinking  
 -playing sport  
 -map reading  
 -interpreting statistics  
 -working with computers

**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

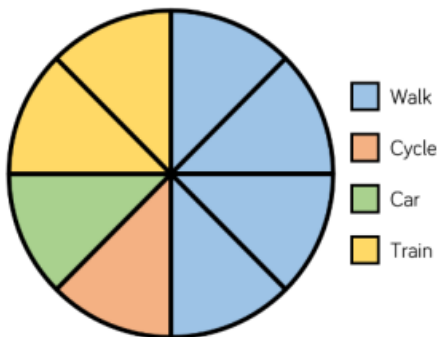
- to complete, read and interpret information in tables, including timetables

#### 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...

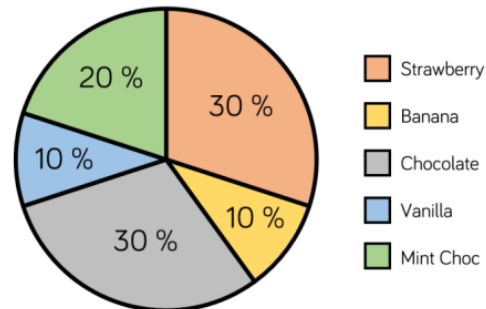
#### Interpret, construct and present data

-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

