

Ashwell Primary School
Maths Curriculum
Statistics – Skills & Knowledge Progression



YEAR 2 – Statistics

Core knowledge to be acquired:

- Interpret and construct simple pictograms, tally charts, block diagrams and simple tables.
- Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity.
- Ask and answer questions about totalling and comparing categorical data.

Key Vocabulary (in addition to previous year group):

group, sort, set, list, table, tally, graph, chart, pictogram, represent, label, title, most/least popular, most/least common

Prior knowledge / skills this builds on:

- Data handling and statistics is not mandatory in the maths curriculum prior to year 2, but pupils will have learned to sort, count, group and compare objects in Nursery, Reception and Year 1.
- Pupils may have seen data tables and graphs in Science or Computing lessons.

What comes next:

- Interpret and present data using bar charts, pictograms and tables.
- Solve one-step and two step questions [e.g.: 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts, pictograms and tables.

YEAR 3 – Statistics

Core knowledge to be acquired:

- Interpret and present data using bar charts, pictograms and tables.
- Solve one-step and two step questions [e.g.: 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts, pictograms and tables.

Key Vocabulary (in addition to previous year group):

bar chart, frequency table, Carroll diagram, Venn diagram, axis, axes, diagram

Prior knowledge / skills this builds on:

- Interpret and construct simple pictograms, tally charts, block diagrams and simple tables.
- Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity.
- Ask and answer questions about totalling and comparing categorical data.

What comes next:

- Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.
- Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.

YEAR 4 – Statistics

Core knowledge to be acquired:

- Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.
- Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.

Key Vocabulary (in addition to previous year group):

survey, questionnaire, data

Prior knowledge / skills this builds on:

- Interpret and present data using bar charts, pictograms and tables.
- Solve one-step and two step questions [e.g.: ‘How many more?’ and ‘How many fewer?’] using information presented in scaled bar charts, pictograms and tables.

What comes next:

- Complete, read and interpret information in tables, including timetables.
- Solve comparison, sum and difference problems using information presented in a line graph.

YEAR 5 – Statistics

Core knowledge to be acquired:

- Complete, read and interpret information in tables, including timetables.
- Solve comparison, sum and difference problems using information presented in a line graph.

Key Vocabulary (in addition to previous year group):

database, bar line chart, line graph, maximum/minimum value, outcome

Prior knowledge / skills this builds on:

- Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.
- Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.

What comes next:

- Interpret and construct pie charts and line graphs and use these to solve problems.
- Calculate and interpret the mean as an average.

YEAR 6 – Statistics

Core knowledge to be acquired:

- Interpret and construct pie charts and line graphs and use these to solve problems.
- Calculate and interpret the mean as an average.

Key Vocabulary (in addition to previous year group):

pie chart, mean (mode, median, range as estimates for this), statistics, distribution

Prior knowledge / skills this builds on:

- Complete, read and interpret information in tables, including timetables.
- Solve comparison, sum and difference problems using information presented in a line graph.

What comes next:

Key Stage 3: Statistics

- describe, interpret and compare observed distributions of a single variable through: appropriate graphical representation involving discrete, continuous and grouped data; and appropriate measures of central tendency (mean, mode, median) and spread (range, consideration of outliers)
- construct and interpret appropriate tables, charts, and diagrams, including frequency tables, bar charts, pie charts, and pictograms for categorical data, and vertical line (or bar) charts for ungrouped and grouped numerical data
- describe simple mathematical relationships between two variables (bivariate data) in observational and experimental contexts and illustrate using scatter graphs