

INTERPRETING, CONSTRUCTING AND PRESENTING DATA					
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Interpret and construct simple pictograms and block graphs using practical equipment.	Interpret and construct simple pictograms, tally charts, block diagrams and simple tables	Interpret and present data using bar charts, pictograms and tables	Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs	Complete, read and interpret information in tables, including timetables	Interpret and construct pie charts and line graphs and use these to solve problems
Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity	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				
SOLVING PROBLEMS					
		Solve one-step and two-step questions [e.g. 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables.	Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.	Solve comparison, sum and difference problems using information presented in a line graph	Calculate and interpret the mean as an average

**Year One Statistics-**

Interpret and construct simple pictograms and block graphs using practical equipment.

Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity

Use objects and pictures to create simple block graphs.

Present information simple graphs where one symbol or block represents one unit.

Use objects and pictures to create simple pictograms.

Understanding vocabulary such as sort, group, set.

Allow children to sort a range of objects and to decide their own criteria eg use a sorting jar with different objects in.

Respond to questions about how they sorted objects and why each object belongs in a set.

Respond to questions such as 'How many?' 'Which is the most/least?'

**Year Two Statistics-**

<p>Interpret and construct simple pictograms, tally charts, block diagrams and simple tables</p>	<p>Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity</p>	<p>Ask and answer questions about totalling and comparing categorical data.</p>
<p>Collect a range of data.</p> <p>Record data as a list</p> <p>Record data as a table.</p> <p>Use objects and pictures to create simple block graphs.</p> <p>Present information in lists, tables and simple graphs where one symbol or block represents one unit.</p> <p>Use objects and pictures to create simple pictograms.</p> <p>Use block graphs and pictograms where one unit equals one and one unit equals more than one.</p>	<p>Understanding vocabulary such as sort, group, set, list, table, most common, most popular, least popular, least common.</p> <p>Allow children to sort a range of objects and to decide their own criteria eg use a sorting jar with different objects in.</p> <p>Respond to questions about how they sorted objects and why each object belongs in a set.</p> <p>Sort a given set of shapes using two criterion such as triangle/not triangle blue /not blue.</p> <p>Ask children to explain their reasons.</p> <p>Use graphs and tables etc which they have recorded to communicate their findings.</p>	<p>Enter data into a simple computer data base.</p> <p>Collect and sort data to test a simple hypothesis eg. Count a show of hands to test the hypothesis 'most children in our class are in bed by 7:30'</p> <p>Respond to questions about the data they have represented eg. How many of our names have five letters?</p> <p>Pose similar questions for others about their data</p>

### Year 3 Statistics

Interpret and present data using bar charts, pictograms and tables

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.

Collect data, interpret and construct simple pictograms.

Collect data, interpret and construct simple tally charts.

Collect data, interpret and construct simple block diagrams.

Collect data, interpret and construct simple tables.

Construct and interpret simple Venn diagrams and Carroll diagrams.

To know which operation to use to solve a given problem

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.

**Year 4 Statistics**

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	To find the mode and range of data.
<p>Read /collate tally charts</p> <p>Draw/read and interpret bar charts/graphs</p> <p>Draw/read and interpret line graphs</p> <p>Draw/read and interpret pictogram scales</p> <p>Read a variety of different scales</p> <p>Changes over time</p>	<p>Understand the vocabulary of comparison, sum, difference</p> <p>Solve problems that involve two steps or more</p> <p>Find starting points and identify key information</p> <p>Understand how to read various tables</p>	<p>To know the vocabulary of mode/range.</p> <p>Find the mode of data.</p> <p>Find the range of data.</p>

**Year 5 - Statistics**

Complete, read and interpret information in tables, including timetables.	Solve comparison, sum and difference problems using information presented in a line graph	To find the mode, median, mean and range of data.
<p>Interpret the information required from tables from the headings/ labels, including Venn diagrams and Carroll diagrams.</p> <p>Gather the data to complete a table.</p> <p>Answer questions related to the data gathered.</p> <p>Be able to read 12hr and 24hr times.</p> <p>Give a time that a bus/train arrives at a particular station by interpreting a timetable.</p> <p>Be able to calculate intervals of time.</p> <p>Give times of a bus, if it comes every 25mins.</p>	<p>To understand the main differences between a bar chart and line graph.</p> <p>To be able to interpret the x and y axis of a graph.</p> <p>To understand that a line graph show continuous data.</p> <p>To recognise basic trends in a line graph.</p> <p>Be able to interpret a line graph - e.g. the temperature at particular times, explaining how they know.</p> <p>Be able to compare e.g. temperatures at different times.</p> <p>Identify an increase/ decrease of a given number?</p> <p>Look at a range of data presented in a few different ways, evaluate their effectiveness.</p> <p>Be able to explain which ones are appropriate and which ones are not and why.</p> <p>Make decisions about how to present a set of data they have, explaining and justifying their choices.</p>	<p>To know the vocabulary of mode/range/median/mean.</p> <p>Find the mode of data.</p> <p>Find the range of data.</p> <p>Find the median of data.</p> <p>Find the mean of data.</p>

### Year 6 - Statistics

Interpret and construct pie charts and line graphs and use these to solve problems

Calculate and interpret the mean as an average.

Make decisions about how different types of data can be presented.

Be able to explain what the mean is.

Consider the type of data that could be presented in a line graph.

To explain what an average is and how and when it can be useful.

Be able to interpret a pie chart.

Give an example of when the mean of a set of data is useful.

Compare the different segments of a pie chart.

Find the mean of a set of data.

Interpret simple fractions of a pie chart -  $\frac{1}{2}$ ,  $\frac{1}{4}$ ,  $\frac{3}{4}$ ,  $\frac{1}{3}$  etc when the total amount represented is known.

When given the mean, suggest possible set of data. (Inverse working)

Be able to answer questions related to both line graphs and pie charts by interpreting the representation.