



## Village Primary School- Computer Curriculum

EYFS		
<p><b>In Nursery...</b> In nursery children get exposed to ‘data’ and ‘information’ in a variety of ways and do a lot of unplugged work on this as part of the daily routines of nursery life including finding their name/picture/logo on coat peg, pigeonhole and self-registration. Children have their first experiences of labelling and sorting in nursery with accessing, choosing and tidying resources in self-initiated time. Words and pictures on all resources as well as silhouettes help children to start sorting, grouping, matching and organising all which are essential foundations for the rest of the data and information strand of computing.</p>	<p><b>In Reception...</b> In reception children continue to access well labelled resources and sort and match during the routines of the day i.e. bookbags, trays, coat pegs and their own resources such as coats. There will be lots of opportunity for cross curricular links with maths where in the first half term (autumn) children spend lots of time sorting objects by colour, shape, size and other attributes.</p> <p>Children are also to be encouraged to understand that ‘information’ can be found in a range of ways such as from adults, books and the internet. Time should be made to model this “I wonder how I could find out...” and children’s questions and interests searched and talked about.</p>	<p><b>In Year 1...</b> Learners are introduced to data and information. Labelling, grouping, and searching are important aspects of data and information. Searching is a common operation in many applications, and requires an understanding that to search data, it must have labels. This unit of work focuses on assigning data (images) with different labels to demonstrate how computers can group and present data.</p>
<p><b>Key vocabulary-</b> label, name, sort, match, organise, group, similar, different</p>		
<p><b>Progression/End Points</b></p>		
<p><b>Spring Term</b></p> <p><b>Nursery:</b> Knows that information can be retrieved from digital devices and the internet (ongoing).</p> <p><b>Reception:</b> Can use the internet with adult supervision to find and retrieve information of interest to them.</p>		
Year 1		
<p><b>Prior knowledge</b></p>	<p><b>In Year 1...</b></p>	<p><b>In Year 2...</b></p>

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<p><b>Key vocabulary-</b> Sort, label, group, match,</p>		
<p><b>Progression/ End Points</b></p>		
<p><b>Spring Term 2</b></p> <ul style="list-style-type: none"> <li>• Add labels to groups once sorted.</li> </ul>		
<p style="text-align: center;">Year 2</p>		
<p><b>Prior knowledge</b></p> <p>Learners are introduced to data and information. Labelling, grouping, and searching are important aspects of data and information. Searching is a common operation in many applications, and requires an understanding that to search data, it must have labels. This unit of work focuses on assigning data (images) with different labels to demonstrate how computers can group and present data.</p>	<p><b>In Year 2...</b></p> <p>In Year 2 learners will use cross curricular links to present data in a range of ways this might be maths, PE, geography or science and should be meaningful and have real life application. There are lots of computer-based programs that help to present this information and children should be presented with a range to be able to decide if paper based or electronic is better (discuss pros and cons).</p>	<p><b>In Year 3...</b></p> <p>Moving on from sorting and presenting data as charts/graphs etc children will learn other text data can be represented by an info graph. As always talking about if paper based or computer-based resources are better for this is important. Children can represent anything relevant to make learning relevant and could be combined with another subject i.e. PSHCE; rules or science. This will also be the case with branching data bases where children will understand it helps sort yes/no information and to make it relevant it should use information relevant to the children i.e. science or history learning.</p>
<p><b>Key vocabulary-</b> Data, collect, label, table, pie chart, bar chart, pictogram, tally, column, row, title.</p>		

## Progression/ End Points.

### Spring Term 2

- Understand what data is and collect it as a tally.
- Use software to label a pictogram and add data to each column.
- Edit a table with correct titles and numbers.
- Use software to create a bar chart/pie chart/line chart suitable for the data.
- Interpret a pictogram/bar chart/line chart.

## Year 3

### Prior knowledge

In Year 2 learners will use cross curricular links to present data in a range of ways this might be maths, PE, geography or science and should be meaningful and have real life application. There are lots of computer-based programs that help to present this information and children should be presented with a range to be able to decide if paper based or electronic is better (discuss pros and cons).

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### In Year 4...

Children should have a good understanding of data, information and different ways of presenting that data i.e. as charts/graphs. In year 4 they start to use widely used software i.e. excel to input, edit and present/represent data in a range of ways. Children should now understand that software such as excel make representing data much easier than unplugged methods. However, this could be discussed. Children must be given opportunities to use excel for real data and information, so they understand real life application for their ability and skill level.

### Key vocabulary-

Infographics; information, graphics, facts, rules, symbols, organiser, text, graphic elements

Branching databases: data, sort, classify, yes/no questions

## Progression/ End Points

**Spring Term 2**

## Infographics:

- Understand what an infographic is and why we use them.
- Search for and add suitable graphic elements.
- Add and format suitable titles and text.
- Label an image using arrows.

## Branching Databases:

- Add and label objects
- Ask questions to sort (classify) objects correctly

## Year 4

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**In Year 5...**

Children, now familiar with a spreadsheet. Will build on learning and understanding to use more of the software i.e. formula to find totals and averages. The children will be able to choose how they represent the data by considering which format shows it best and be able to discuss the benefits i.e. a pie chart v bar chart. Children should be instrumental in deciding the data they are going to input and represent and given options from a range of curriculum subjects, so they really understand the practical application of spreadsheets.

**Key vocabulary-**

Data handling: spreadsheet, excel, exe., cell, pie chart, bar chart, line graph

**Progression/ End Points****Spring Term 2**

- Change appearance of cells in a spreadsheet.
- Find and add data to a spreadsheet, resize cells and use software to create a suitable chart with a title.

## Year 5

<p><b>Prior knowledge</b></p> <p>Children should have a good understanding of data, information and different ways of presenting that data i.e. as charts/graphs. In year 4 they start to use widely used software i.e. excel to input, edit and present/represent data. Children should now understand that software such as excel make representing data much easier than unplugged methods. However, this could be discussed. Children must be given opportunities to use excel for real data and information, so they understand real life application for their ability and skill level.</p>	<p><b>In Year 5...</b></p> <p>Children, now familiar with a spreadsheet. Will build on learning and understanding to use more of the software i.e. formula to find totals and averages. The children will be able to choose how they represent the data by considering which format shows it best and be able to discuss the benefits i.e. a pie chart v bar chart. Children should be instrumental in deciding the data they are going to input and represent and given options from a range of curriculum subjects, so they really understand the practical application of spreadsheets.</p>	<p><b>In Year 6...</b></p> <p>It is hoped by Year 6 that children will automatically use spreadsheets for representing data i.e. to present the results of a science investigation and this option should be built into a range of subjects.</p> <p>The children are given opportunity this unit to look at a range of spreadsheets and investigate it for information. There is a link here with reading comprehension skills and could be used as revision for reading. The children in being 'detectives' will show the culmination of all their skills in data handling.</p>
<p><b>Key vocabulary-</b> Spreadsheet, cell, formula, database, record, field, sort</p>		
<p><b>Progression/ End Points</b></p>		
<p><b>Spring Term 2</b></p> <ul style="list-style-type: none"> <li>• Select and use non-adjacent cells plus resize multiple cell widths and copy/paste cells.</li> <li>• Find data and create a spreadsheet to suit it.</li> <li>• Use formulae to find totals, averages and maximum/minimum numbers</li> <li>• Search a database for specific information.</li> </ul>		
<p style="text-align: center;">Year 6</p>		

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**Key vocabulary-**

Filter, conditional formatting

**Progression/ End Points****Spring Term 2**

- Use comprehension skills to find clues that match the column headings of a spreadsheet.
- Use spreadsheet tools (filters and conditional formatting) to find the specific data to match the clues.