**Using Data**

**Whole School Overview**

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| Year Group | Learning Objectives | Key Skills |
| R | * To be aware that ICT can help organise and sort items. | * Use ICT online games to sort objects or count objects. |
| 1 | * To use ICT to begin to organise items. * To begin to use technology to create graphs and pictograms, recognising the a link between data collected and the information presented on screen. | * Use ICT to sort objects into groups according to a give criteria, or criteria which the child identifies themselves. * Begin to use technology to create graphs and pictograms. |
| 2 | * To use technology to create graphs and amend created graphs. * To begin to create their own branching databases using ICT, identifying objects and questions to classify data. | * Use technology to create graphs and pictograms, adding labels and amending the charts as appropriate. * Begin to create their own branching database using ICT, identifying objects using yes or no questions. |
| 3 | * To understand the basic structure of a database. * To be able to add data to a pre-made database. * To use the data in a pre-made database to generate graphs and charts. * To use technology to create graphs and charts. | * Continue to use technology to create graphs and charts. * Understand which a database is, and the basic structure of a database. * Create graphs from pre-made databases, and enter their own data into a database and generate graphs using these. Use other software to present these findings as appropriate. |
| 4 | * To continue to use technology, including spreadsheets to create graphs and present data in different ways. * To be able to design and create a basic database, including using basic data validation. * To use a database to answer questions by constructing queries. | * Plan and create their own database, creating fields and applying simple data validation. * Use pre-made databases and those which they have created themselves to answer questions by constructing basic queries. e.g to find the most common * Use other software to present these findings as appropriate * Begin to use a spread sheet to enter data and create graphs. |
| 5 | * To continue to use, search, enter data into and create their own databases * To continue to use technology, including spreadsheets to create graphs and present data in different ways. | * Continue to use the computer and spreadsheets to create and alter graphs and charts. * Continue to use, query and create their own databases as appropriate, linking into work across the curriculum. * If appropriate and cross curricular links present the opportunity, begin to explore spreadsheets entering basic formulae. |
| 6 | * To continue to use, search, enter data into and create their own databases. * To continue to use technology, including spreadsheets to create graphs and present data in different ways. * To be able to design, construct, evaluate and modify simple models i.e. enter data, enter formulae, copy cells and use simple formatting in a spreadsheet. * To use a spreadsheet to draw a graph to show data * To understand that ICT allows quick and easy changes to be made to different variables once a spreadsheet is set up. Talk about how the spreadsheet helps them to manipulate a model easily | * Continue to use, query and create their own databases as appropriate, linking into work across the curriculum * Understand what a spreadsheet is and the basic features of a spreadsheet and how these may be used in real life applications. * Linked into a theme, or real life application, create a spreadsheet, enter basic formulae (simple calculations and SUM) and change data in a spreadsheet to model situations and answer ‘What if…’ questions. |