Data Handling School Progression Table

Dated: Spring 2022

Year Group	NC Objectives	Skills/Knowledge	Apps and Links
EYFS	Children recognize that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes. (Old Framework)	• Know how to identify a chart. • Know how to sort physical objects, take a picture and discuss what they have done. • Know how to present simple data on a digital device. • Use a simple pictogram or set of photos to count and organize information.	J2e Data is a useful site for exploring some aspects of Data Handling in EYFS and KS1. This is a site which usually requires a school subscription which we don't have. As such the use of the material is limited and can't be saved. ABCYA.Com has some nice little games and activities for data sorting: Fuzz Bugs, Strolling with my Gnomies. Top Marks Data handling Games
1	Co2/1.4 Use technology purposefully to create, organize, store, manipulate and	• Look at how data is represented digitally. • Contribute to making a pictogram. • Know how to sort images or text into two or more categories on a digital device. • Know how to collect data on a topic. • Know how to create a tally chart and pictogram digitally. • Know how to record themselves explaining what they have done and what it shows.	J2e Data is a useful site for exploring some aspects of Data Handling in EYFS and KS1. This is a site which usually requires a school subscription which we don't have. As such the use of the material is limited and can't be saved.

2	retrieve digital content.	• Know how to sort digital objects into a range of charts such as Venn diagrams, carroll diagrams and bar charts using different apps and software. • Ask questions on sets of data. • Consider how they will collect information (data). • Know how to orally record themselves explaining what the data shows. • Know how to create a branching database (decision trees) using questions (physically). • Collect data and use it to generate graphs and charts to find a simple answer. • Save and retrieve data sets to show to others.	Teach Computing has a Year 1 unit around Grouping Data and a Year 2 unit on Pictograms which may have some useful lesson ideas and information which can be drawn into our own planning. iLearn 2 Primary Computing also has a unit on Data Handling. This is a unit designed for Year 2 and is the only free unit available without a school subscription. Introducing Data Handling KS1 Top Marks Data handling Games
3	Co2/1.6 Select, use and combine a variety of software (including internet services) on a	• Find out information from a pre-prepared database, and use it to answer and ask straight forward questions. • Contribute towards a database. • Construct and use a branching database (physically and on screen). • Record data in a variety of ways and present it for others. • Know how to start to input data into a spreadsheet. • Understand and use the terminology: table, column, row, cell, spreadsheet, graph.	Teach Computing has some excellent lesson ideas which could be drawn from on Branching databases. This is a Year 3 Unit. BBC Cracking Computing – Working With Data

4	range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analyzing, evaluating and presenting data and information.	• Plan and create a database to answer questions. • Identify different types of data. • Ask questions carrying out simple searches on a database. • Present data in an appropriate format. • Know how to create an online multiple choice questionnaire (Use Google Forms) and use the data to answer questions and present findings. • Know how to input data into a spreadsheet and export the data in a variety of ways: charts, bar charts, graphs and pie charts. • Know how to format the layout and presentation of cells. • Understand and use the terminology: formatting, questionnaire, active cell, autofit, multiple choice, checkbox.	Top Marks Data handling Games
5		• Know how to create and publish an online questionnaire and analyse the results (Google Forms). • Know how to spot poor quality data or anomalies within a data set. • Know how to use simple formulae to solve calculations including =SUM and other statistical functions. • Know that changing inputs changes the output. • Know how to edit and format different cells in a spreadsheet (eg. Swap between money, percentages, datas etc). • Understand and use the terminology: formula bar, autosum, auto fill, value, input, output.	Teach Computing has a series of lessons on Spreadsheets which can be used to draw information from if needed. This is a Year 6 unit. Further information on data modelling using Spreadsheets can be found in one of their year 7 units and might prove useful for staff knowledge of further progression. Use Microsoft Excel and develop their understanding to include Google Sheets.
6		• Know and use the whole data process: generate, process, interpret, store and present information. • Know how to write spreadsheet formula to solve more challenging maths problems (+, -, X and /). • Interrogate a database to provide answers to questions.	

| | | - Present findings using more complex data sets which make use of full formatting tools to manipulate the aesthetics of the data.
- Know how to create and publish their own online quiz or more complex questionnaire (Google Forms).
- Understand the advantages of spreadsheets over manual methods.
- Understand and use the terminology: range, =, fill, conditional formatting. | |

How to Guides and Help Videos

Technology For Teachers and Students is a really useful YouTube resource for those that need to upskill themselves - https://www.youtube.com/watch?v=lxq_46nY43g   In particular, for this progression the following videos could be beneficial although there are numerous videos on how to use and make the best or Excel.

The beginner's guide to Excel - https://www.youtube.com/watch?v=rwbho0CgEAE

Intermediate Excel Skills - https://www.youtube.com/watch?v=lxq_46nY43g