Computing 24-25

Year 4 – Microsoft excel – Graphs & Data

Remember when:
Typing, Formatting (word & excel), Editing

Key vocabulary

By the end of this unit children must be able to:

- Log into teams and open excel files.
- Select and input data to create a graph/ bar chart / pie chart
- Add labels and title to the bar chart.
- I can identify data that can be gathered over time
- I can use data from a sensor to answer a given question and interpret the data
- I can sort data to find information

bar chart	data
graph	table
pie chart	cell
column	row
line	Column
scatter	Data loggers

In Year 3:

- change the format of a cell – percentage, decimal places, currency.
- change the height and width of columns and rows.
- sort data in a table using different criteria.
- create filters to filter out data.

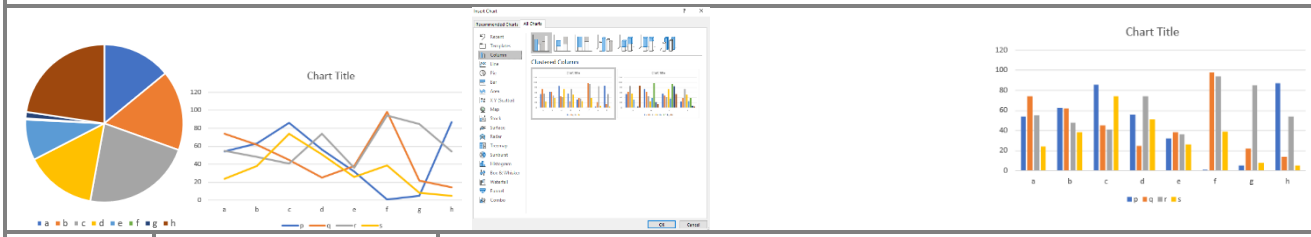
National curriculum:

- Select, use and combine a variety of software (including internet services) on a 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.

Science – Lower key stage 2/Year 4

- Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.
- They should learn how to use new equipment, such as data loggers, appropriately. They should collect data from their own observations and measurements, using notes, simple tables and standard units, and help to make decisions about how to record and analyse this data.

Features



	Title / Focus	Lesson outline
	Lesson 1- Introduction to Excel **LO-** To recap formatting cells inb Excel **Sticky Knowledge-** To change the format, height, width of cells.	Children explore Excel features – Why do we use excel? Change format of the cell – percentage, decimals, currency. Change height and width of columns and rows.
	Lesson 2 Answering questions **LO-** To explain that data gathered over time can be used to answer questions **Sticky Knowledge-** I can identify data that can be gathered over time	Teach Computing- Lesson 1- Data Logging Learners will consider what data can be collected and how it is collected. They will think about data being collected over time. Learners will also think about questions that can and can't be answered using available data, and reflect on the importance of collecting the right data to answer questions.
	Lesson 3 **LO-** To use a digital device to collect data automatically **Sticky Knowledge-**	Teach Computing- Lesson 2- Collecting Data Learners will build on the idea of collecting data over time, and be introduced to the idea of collecting data automatically using computers such as data loggers. They will also be introduced to the concept that computers can capture data from the physical world using input devices called 'sensors'. Learners will establish that

I can use data from a sensor to answer a given question	sensors can be connected to data loggers, which can automatically collect data while not attached to a computer.
Lesson 4 Analysing data **LO-** To recognise how a computer can help us analyse data **Sticky Knowledge-** I can sort data to find information	Teach Computing- Data Logging Lesson 4 Learners will open an existing data file and use software to find out key information. They will analyse a data file which is a five-hour log of hot water cooling to room temperature.
Lesson 5 Create a table **LO- To display data collected** **Sticky Knowledge**- I can interpret data that has been collected using a data logged	Children to create a table of their data collected in the previous sessions Children to create a bar chart from the data collected last lesson. Children to add labels and title to bar chart. Children to create a pie chart from data collected.. Children to add labels and titles to pie chart.