Computing 24-25

Year 6 – Microsoft excel – Formulas (2)

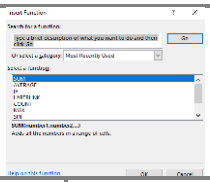
Remember when: Typing, Formatting (word & excel), Editing, Graphs, Formulas	**Key vocabulary**
By the end of this unit children must be able to: • Log into teams and open excel files. • Use formulas to calculate. • Multiply and divide cells. • Create new sheets.	average formulas spreadsheet multiply divide cells

In Year 3:	**In Year 4:**	**In Year 5:**
• Log into teams and open excel files. • 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.	• 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	• Log into teams and open excel files. • Use a formula to calculate the total. • Add columns and rows of data together. • Subtract cells to find remaining.

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.

Features



Title / Focus	**Lesson outline**
Lesson 1- Spreadsheet recap LO- To identify what a spreadsheet is and to input data. Select and input data	Introduce the lesson and the learning objectives. Show slide 3 and explain that in this lesson, learners will collect and organise data. Ask learners to suggest what data they could collect and how it could be organised. Show slide 4. Tell learners that they will roll a dice to generate their data. Explain that in their table groups (typically four to six learners), each learner will roll the dice five times and collect their scores. They should then collect the scores for the whole table and record them in the same place. Learners could use dry wipe boards or pens/pencils and paper. Explain that the purpose of the exercise is to find out who on the table rolled the highest overall total. Do not provide any guidance or suggestions, this is an opportunity for learners to decide for themselves how they will complete the task. In subsequent activities, you will model how they could complete the task effectively. Show learners the blank table on slide 6. Ask them to suggest what they think the column headings (highlighted in blue) could be. After a short discussion, move on to slide 7 and explain that this is one way that learners could record their data. Give out the activity sheet which has a template table and ask learners to organise their data on the sheet. There is an example of what this could look like on slide 8. Show slide 9. Ask learners what they could use to make a table on a computer. Depending on their prior experience, they may suggest word processing packages, such as MS Word or Google Docs; presentation tools, such as MS PowerPoint or Google Slides; or spreadsheet packages, such as MS Excel or Google Sheets. These are all valid answers. Build the slide to reveal (without explanation as to why) that in this case they will record their information in a spreadsheet. Show slide 10 and explain that they need to copy the column headings from the table they completed in the previous activity and enter the data. To do this, they need to open a new spreadsheet in whichever application you have selected.
Lesson 2- -Number Operations **Recap -LO:** I can enter data and	Introduction – class discussion - Current knowledge of spreadsheets (what they're used for, what can they do?) - Cell references – explain the use of cells (everything in a spreadsheet goes into a cell, read across then down when referring to a cell) - Class Activity – cell references (name the cells with the words and numbers in)

formulas into a spreadsheet SK- I can identify cells using rows and columns. To use a formula to calculate the total.	Formatting cells - Explain the different ways cells can be formatted - Explain why cells can and should be formatted. - Demonstrate how to format cells (font, colour, size, borders) Formula - Explain the advantages of using spreadsheets for calculations - Show where a formula appears and what it looks like. - Show the symbols for multiply, subtract, addition and divide – (* - + /) Activity- children to create a spreadsheet about the number of deaths per country in WW2 using the information sheet. Children to use the sum function to add up the totals.
Lesson 3- using formulas LO- To use formulas SK- Use formulas to calculate	Introduction - Recap the use of spreadsheets – class discussion - Purpose of formulas - Lesson 3 power point- costs of trips. - Explain the parts of the table that need to be completed - Discuss the different formulas that can be used to complete the table (addition, subtraction etc.) Activity- children to complete the spreadsheet using the formulas on the trip based activity.
Lesson 4& 5- Creating a spreadsheet/ VE Party planning LO: I can plan and calculate a spending budget SK- Use formulas to calculate. Multiply and divide cells. Create new sheets.	Introduction – class discussion - How can a spreadsheet be used? - Introduce the idea of party planning for a VE day party. The task - Create a shopping budget - 20 people - £60 budget - Explain the criteria for the party – each person must have a mean and a drink etc. The Menu - Children are to create the menu with prices - Use whiteboards to plan the budget before creating a table Class discussion – talk about costs and which items may be the best choice Creating the budget - Demonstrate how to create the table - Ensure the correct formulas are being used in each column to keep running totals about how much each person has spent. Plenary – class discussion - Share the results – who spent closest to the budget, who had the most items on their list etc.

Working towards	**End of Unit Assessment** Working at Age related expectations	Working at a greater depth