Unit 5D

Introduction to Spreadsheets

Unit 5D

This unit deals with how to enter numbers, labels and simple formulae into
a spreadsheet, and how to use the data to calculate totals.

Vocabulary

Spreadsheet
Cell
Formula
Sum
Calculate

Resources

Excel Program.
Questionnaire on popular Food + Drink.
Spreadsheet 'Unit 5D'

Assessment

All children will be able to use a spreadsheet to produce a table of data.
Most children will be able to use a spreadsheet to carry out calculations.
Some children will be able to use a spreadsheet to carry out calculations,
and explore the effects of changing the data in a spreadsheet.

Lesson 1

<u>Teacher Task In Class</u>

Discuss the idea of shopping to a budget I.e. weekly food bill. Discuss how totals will need to be recalculated if prices or qualities change.

<u>Pupil Task</u>

Give out questionnaire sheets. Discuss how they are going to plan an imaginary leaving party for a member of staff / year 6.
We need to find out:-
a) What people like to eat and drink.
b) How many people are coming.
c) The cost of food and drink, cups / glasses, plates and serviettes.
In workbooks, groups of 4 can write down the choices for the boxes. (15 minutes work time).
Swop the questionnaires amongst groups, getting individuals to fill in likes. (As groups of 4 - tally marks may be appropriate 11=2, 111=3 111= 4 (whole groups)) (15 minutes work time).
Return questionnaire to originating group. On board give out prices for individual items. Class enter them on questionnaire. Discuss that prices may have gone up by next week.

<u>Learning Outcome</u>

Children understand that casting models may need to be changed.

Lesson 2 + 3

<u>Teacher Task</u>
<u>Still 1</u>

Open up Excel. Show class cells and how to move around them.
Show how to enter numbers and how to create text labels.

Pupil Task

Open a table and enter the questionnaire details with costs (in pairs). Save own database on own floppy disc.

Learning Outcome

Children can enter data into cells.

Lesson 4

Teacher Task
Still 2

Discuss how much easier it is if the computer could act like a calculator.
Show class how to enter a formula into a spreadsheet I.e. C2+C3
Remind children that the sum must begin with =

Pupil Task

Load own spreadsheet. Together do the following:-
　　=C2+C3　　　　　　(note which pupils have problems)
Next alter cell C2 price now do
　　=C2+C3　　　　What happens?
Next try　　　　　　　　　　　Extension
　　=C2-C3　　　　　　　　try =3*C2+C3
　　=C2xC3
　　=C2/C3
Predict then find answer.

Learning Outcome

Children can enter data and formulae into cells, modify the data, make predictions of changes and check results.

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Lesson 5

Teacher Task
Still 3

Show class that =C1 + C2 + C3 + C4 + C5 + C6 (or whichever cell is the line total – it may be D or F) produces a final total of cost.
Talk about how time consuming this is.
Introduce =SUM (C1:C2).
Discuss how it's easier to add columns rather than rows

Pupil Task

Open own database of party food and use 'SUM' to calculate total costs.
Save onto floppy disc.

Learning Outcome

Children learn to use SUM.

Lesson 6

Teacher Task

Tell class that they have a strict budget for their party. (Make sure it is fair but quite low).
Tell them that they will have to open their spreadsheet and alter qualities to get within (or below) their budget.
Checking to see that they still have enough food and drink for everyone.

Pupil Task

Complete task. Print Spreadsheet. Check results are within the   parameters.

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Learning Outcome

Children can create and use a spreadsheet to produce costings which are within budget.