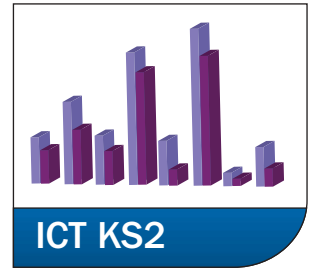


LESSON PLAN



LEARNING TARGET: WALT or L.O. Insert data into a table and write a formula to find totals.

LEARNING OUTCOMES: How to:

- Complete a table in Excel
- Review a classmate's work and suggest improvements

GLOBAL DIMENSION CONCEPT/S INCLUDED: CONFLICT RESOLUTION / SOCIAL JUSTICE / VALUES & PERCEPTIONS / SUSTAINABLE DEVELOPMENT / INTERDEPENDENCE / HUMAN RIGHTS / DIVERSITY / GLOBAL CITIZENSHIP

CURRICULUM

Developing ideas and making things happen

2 a) how to develop and refine ideas by bringing together, organising and reorganising text, tables, images and sound as appropriate

Reviewing, modifying and evaluating work as it progresses

4 a) review what they and others have done to help them develop their ideas

RESOURCES

The supporting PowerPoint for this lesson can be downloaded from our website at www.worldleprosyweek.org under Free lessons Key Stage Two

KEY WORDS

Excel
Table
Graph
Review
Sum
Total
Grid
Cell
Row
Column
Range
Formula

LESSON ACTIVITIES

Teacher's Notes

You may wish to use an alternative spreadsheet programme depending on what software you have available.

This lesson can link to the Numeracy lesson where children put together a budget for Chanchaga in Nigeria. Children can either use the budgets they have created or the complete budget which can be downloaded from www.worldleprosyweek.org/lessons/ICT/Chanchagabudget_no_numbers_KS2.xls You will also need a hard copy of the complete budget for each workstation called Chanchaga_budget_KS2.xls.

Introduction

Share with the children that it is World Leprosy Week (26 – 30 January). This year The Leprosy Mission is focusing on a project in Chanchaga, a rural village in Nigeria. During this lesson we will be learning how to enter data into Excel and use formulas to find totals.

Explain that there are three important software programmes that most people use. These are Word (for letters, reports etc), PowerPoint (for presentations, like the one for this lesson) and Excel (spreadsheets – which are used for numbers and graphs).

Today we want to have a look at the Chanchaga budget that you reviewed in Numeracy. Which programme do you think we need to use today – Word, PowerPoint or Excel? Excel.

Show children how to open a file in Excel (open Chanchaga_budget_KS2.xls).

Excel holds data in 'cells'.

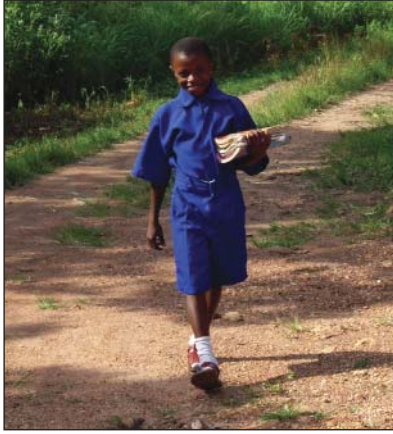
It can hold words alongside numbers (the words are used to label the numbers/data it is referring to).

To identify a particular cell it uses a grid reference (like Battleships). (If needed, explain rows and columns.)

So looking at the screen, what item is in A5? Books.

What about cell C9? 10.

Turn to a partner and ask them a couple of questions using grid references.



Entering data

Now we are going to have a go at entering some information into a cell. Show the children the budget that has the items included but no numbers (Chanchagabudget_no_numbers.xls).

Use the mouse to select the cell you want. We are going to select B5 and enter 4 under quantity.

We can also use the arrows on the keyboard to move the highlighted cell up, down, left or right.

We are going to use the right arrow key to select B6 and enter 20 under the column 'pounds.'

Now we are going to fill in the final cell D5 with 3,600.

Activity One

Ask the children to open Chanchagabudget_no_numbers.xls Excel sheet on their workstation and fill in the missing numbers using the numbers on the worksheet below. Tell them to leave the total for the moment.

Once completed review a fellow classmate's data to ensure accuracy.

Creating sums

Now that we have completed the cost of each item we need to find the total.

Create a new Excel sheet and insert 20 in cell A1, 25 in cell B1 and 31 in cell C1.

Explain that we want to find out what the total is and put the total in D1. There are two ways we can do this.

1) We can highlight all the cells we want to add up (select data with mouse) and press 'autosum' Σ

The total is then inserted at the bottom of the column.

2) We can write a formula to add the data.

Whenever we write a formula we start with the = sign and then write 'sum'.

Now let's look at the sum to add the data.

=sum(A1:A3)

Notice that the range of cells we want to add up have a : inserted. So this formula will add up all the numbers from A1 to A3.

Activity Two

Now try writing a sum to add up all the pounds. Remember to select B17 first and then type in the formula =sum(??)

(Answer is: =sum(C5:C15) and they should get a total of 1,175)

Check that everyone completed the sum correctly then have a go at adding up all the Naira.

(Answer is: =sum(D5:D15) and they should get a total of 315,000)

Plenary

Explain that you can carry out all the mathematical operations in a spreadsheet.

Multiplication (*) Division (/) Addition (+) and Subtraction (-)

You can also carry out these operations with specific cells.

For example you could find out the total of 'Build a new house' and a 'Seed packet.'

=sum(C7+C14) (Answer is 505)

Children could come up with other questions / sums.

Conclude by using a big number to show one of the many advantages of using a computer (we can add and review very complicated data).

CHANCHAGA VILLAGE BUDGET

ITEM	QUANTITY	PRICE <i>Pounds</i>	PRICE <i>Naira</i>
Books	4	20	3,600
Build classroom	1	250	45,000
Build new house	1	500	90,000
Child's education for one year	1	145	26,100
Complete uniform	1	10	1,800
Crutches	10	70	12,600
Medicine for the clinic for one month	1	100	18,000
Repair road to village from highway	1	300	54,000
Tractor running costs for one month	1	50	9,000
Seed packet	1	5	900
Small business loan	1	300	54,000
TOTAL	23	1,750	315,000

Exchange Rate

1 GBP = 180 NGN (Naira)

EXTENSION WORK:

- Look at how colours can be adjusted to help present the data
- Explore how graphs can be created to analyse data