

## Introduction to Spreadsheets

|   | A               | B        | C           | D   | E |
|---|-----------------|----------|-------------|-----|---|
| 1 | This is cell A1 | Quantity | Cost        |     |   |
| 2 | Pencils         | 5        | 12p         | 60p |   |
| 3 | Rulers          | 1        |             | 25p |   |
| 4 | Sharpener       |          | 15p         | 30p |   |
| 5 | Erasers         | 3        | 10p         |     |   |
| 6 |                 |          | Grand Total |     |   |

Grid lines divide the area inside a spreadsheet to form individual spaces called cells. Each cell has its own unique grid reference that is worked out by using the letters and numbers along the top and left-hand side.

Put your finger on cell "A1". Now write the word "Total" in cell D1. The word "Total" you have written is the label for the column D. What is the label for row 3?

This spreadsheet is for calculating the cost of buying stationery for the beginning of term. Column A lists the things that were bought. These are nearly always labels for the rows. Row 1 gives the labels for the data that you will need to calculate the total costs. In this spreadsheet the data is the Quantity bought and Cost of each item. Each cell in column D under the label "Total" is the result of multiplying the data in column B by column C.

This can be expressed  $B \times C = D$  or using the labels  $\text{Quantity} \times \text{Cost} = \text{Total}$

For example for "Pencils" we have  $\text{Quantity } 5 \times \text{Cost } 12\text{p} = \text{Total } 60\text{p}$

Some of the data for the spreadsheet is missing. Try and complete it now.

There is a label in cell C6 "Grand Total". This label is for cell D6 that is empty. The data that should go into this cell is the result of adding up all the Totals in column D.

This can be expressed  $D2 + D3 + D4 + D5 = D6$

Add up the Totals now to give a Grand Total and put your answer in cell D6.

Well done but what would happen if the cost of pencils went up to 15p? You would have to change the value in C2 then multiply again before adding up all those totals. Sounds like a lot of work but if a spreadsheet was a computer program you could calculate the Totals and Grand Totals automatically using formulae. Then if you needed to change a Cost or Quantity all your totals would correct themselves without you lifting a finger. Sound good, well we will have a look at spreadsheet software next week. But first try and complete the spreadsheet on the next page.

1.

|          | <b>A</b> | <b>B</b> | <b>C</b>    | <b>D</b> | <b>E</b> |
|----------|----------|----------|-------------|----------|----------|
| <b>1</b> | Kit      | Quantity | Cost        | Total    |          |
| <b>2</b> |          |          |             |          |          |
| <b>3</b> |          |          |             |          |          |
| <b>4</b> |          |          |             |          |          |
| <b>5</b> |          |          |             |          |          |
| <b>6</b> |          |          |             |          |          |
| <b>7</b> |          |          | Grand Total |          |          |

Complete the spreadsheet above to give the total cost of a new PE kit. You need a separate indoor PE kit and outdoors games kit.

Tee shirt      £4.25  
Shorts          £5.50  
Trainers       £22  
Socks          £1.50  
Plimsolls      £9

2.

|          | <b>A</b> | <b>B</b> | <b>C</b>    | <b>D</b> | <b>E</b> |
|----------|----------|----------|-------------|----------|----------|
| <b>1</b> |          | Quantity | Cost        | Total    |          |
| <b>2</b> |          | 5        | £50         |          |          |
| <b>3</b> |          | 7        | £10         |          |          |
| <b>4</b> |          | 10       | £34         |          |          |
| <b>5</b> |          | 2        | £63         |          |          |
| <b>6</b> |          | 6        | £15         |          |          |
| <b>7</b> |          |          | Grand Total |          |          |

Make up your own labels for the spreadsheet above and then calculate the rest.