LCA

ICT SOFTWARE PACKAGES

Spreadsheets
Student Worksheets

SAMPLE!

Contents

SALES TREND
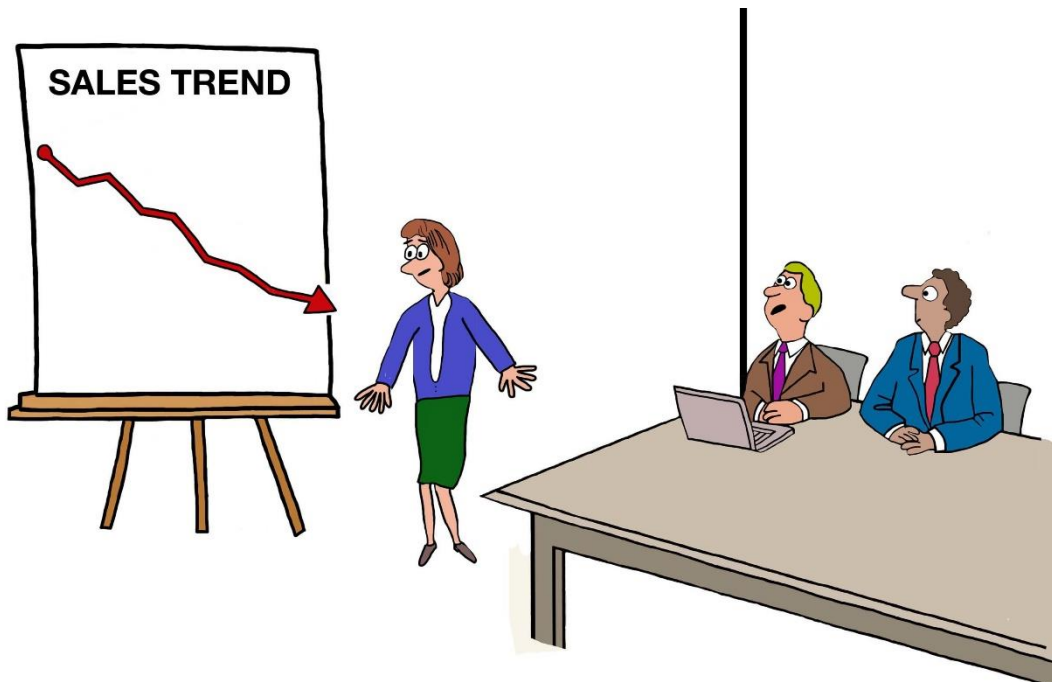
"I wouldn't stand there, if I were you."

Project B

1. Entering numeric and character data

a) Open Microsoft Excel.
 b) Change page orientation to Landscape. Enter the following data.

	A	B	C	D
1	ITEM	NET COST	VAT	TOTAL COST
2	Bread	€1.58		
3	Milk	€1.09		
4	Sugar	€2.55		
5	Tea	€3.58		
6	Coffee	€4.78		
7	Marmalade	€2.31		
8	Shampoo	€5.21		
9	Biscuits	€3.84		

c) Save the spreadsheet as **Grocery**.
d) Centre and embolden the column headings.
e) Change the font of the column headings to red.
f) Give your spreadsheet an overall heading: **Grocery Costs**. (You will need to insert a row)
g) Merge and centre your heading.
h) Make your heading bold and 18 pt.
i) Add a row heading under Biscuits and name it TOTAL.
j) Change your page orientation to Landscape.
k) Save all changes.
l) Turn on gridlines for printing. Print your spreadsheet.
m) Close the application.

2. Using formulas

a) Open the file **Grocery**.

b) Work out the VAT totals for each item using the rate 23%.
(Example: In C3 use the formula =B3*23%. Copy the formula down to C10)

c) Create a formula to add the Net Cost + VAT to get the Total costs. (Example: In D3 use the formula =SUM(B3:C3))

d)   Use the SUM function to add up: the net costs, the VAT costs and the total costs.

e)   Embolden all these totals.

f)   Save your spreadsheet as **Grocery_2.**

g)   Print your spreadsheet.

h)   Exit from the application.

1. Adding (+), subtracting (–), multiplying (*)
a) Open Microsoft Excel
b) Open the file **Grocery_2**.
c) Add 2 extra column headings. Make sure these new headings are also red, bold and centred.
d) Merge and centre the overall heading **Grocery Costs**.

	A	B	C	D	E	F
1			Grocery Costs			
2	ITEM	NET COST	VAT	TOTAL COST	DISCOUNT 10%	NEW PRICE
3	Bread	€1.58	€0.36	€1.94		
4	Milk	€1.09	€0.25	€1.34		
5	Sugar	€2.55	€0.59	€3.14		
6	Tea	€3.58	€0.82	€4.40		
7	Coffee	€4.78	€1.10	€5.88		
8	Marmalade	€2.31	€0.53	€2.84		
9	Shampoo	€5.21	€1.20	€6.41		
10	Biscuits	€3.84	€0.88	€4.72		
11	TOTAL	€24.94	€5.74	€30.68		

e) Work out the 10% discount of each Total cost. (Example: In E3, use the formula D3*10%. Copy the formula down to E10)

f) Work out the **New price** by subtracting the discount from the Total cost. (Example: In F3, use the formula =D3 − E3)

g) Use the SUM function to add the totals for the Discount and New price columns.

h) Ensure all totals are bold. (from B11 to F11)

i) Save as **Grocery_3**.

j) Print one copy of the spreadsheet.

k) Close the application.

2. Erasing data

a) Open Microsoft Excel

b) Open the file **Grocery_3**.

c) Delete Row 7. (Coffee)

d) Delete Column C (VAT)

e) Undo this last delete. (deleting the column) To undo your last action, click on Undo or press Ctrl + Z.

f) Save as **Grocery_4**.

g) Print one copy of the spreadsheet.

h) Exit from the application.

Project E

1. Setting up a spreadsheet

The management of **The Hardware Shop** has decided to produce sales reports for various departments. This will allow them to have immediate access to accurate and up-to-date information on sales trends and to adjust their stock in line with these trends.

a) Open the spreadsheet software.

b) Set up the spreadsheet with the headings shown, and input the data as shown below.

c) Column widths should be adjusted to fit the data.

d) Main and column headings should be centrally aligned and bold.

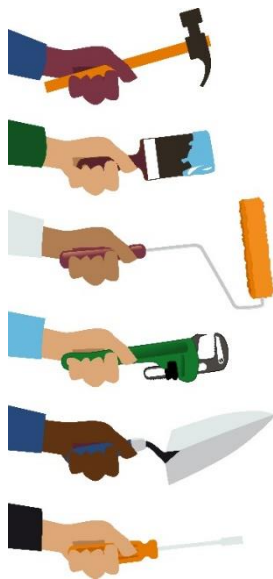| Sales Report for Present Stock Items						
Prod Code	Description	Production cost	Sales price	Profit	Quantity	Total profit
234	Pack of nails	€1.39			273	
344	Adhesive tape	€4.99			89	
423	Masking tape	€2.99			352	
212	Super glue	€2.58			271	
233	Hammer	€9.55			158	
132	Paint brush set	€11.49			274	
323	Thinners	€1.79			362	
421	Hinge set	€6.95			102	
456	Screwdrivers	€8.69			73	
562	Pack of bolts	€3.35			52	
					Total:	
					Average:	

e) Change the **Production cost** for Screwdrivers to **€9.25**
f) Change the **Description** for **Product Code 234** to **Box of nails.**
g) Save the spreadsheet as **Hardware_Shop**.
h) Print the spreadsheet, using landscape orientation and gridlines.
i) Exit the application.
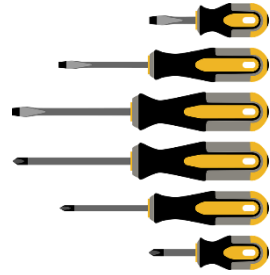
2. Using formulas

Open the file **Hardware_Shop**.

a) Use a formula to calculate the **Sales Price**, for each item, as 1.55 times the **Production Cost** and display in currency format with two decimal places.
b) Use a formula to calculate the **Profit**, for each item, as the **Sales Price** minus the **Production Cost.**
c) Work out the **Total Profit** for each item by multiplying the profit by the quantity sold.
d) Use the SUM function to calculate the **Total** for the **Total Profit** column and display in currency format, in the appropriate position, with two decimal places.
e) Use the Average function to calculate the **Average** for the **Total Profit** column and display in currency format, in the appropriate position, with two decimal places.
f) Format the columns **Production cost, Sales price, Profit and Total profit** to currency.
g) Enhance the document, using colour, shading, borders, etc.
h) Save the spreadsheet as **Hardware_Shop_2.**
i) Print one copy of the spreadsheet, ensuring orientation is landscape and gridlines are on.
j) Exit the application.

Project 1

1. Setting up the spreadsheet

a) Set up the spreadsheet with the headings shown, and input the data as shown below.
b) Column widths should be adjusted to fit the data.
c) Main and column headings should be centrally aligned and bold.
d) Numeric and currency data should be right aligned.
e) Save as **Sales**.
f) Exit the application.

SALES						
Prod Code	Description	Production cost	Sales price	Profit	Quantity	Total profit
15674	A4 notepads	€0.99			3421	
15934	Glue	€1.19			2738	
15231	Large files	€1.10			1093	
15900	Ruler	€0.32			3782	
15233	Envelopes	€1.03			4832	
14896	Stapler	€4.50			854	
14893	Paper ream	€1.12			4790	
15673	Highlighters	€1.35			1743	
15022	Pens – Box (25)	€14.99			2067	
16129	Pencils (25)	€12.16			2786	
					Total:	
					Average:	

2. Using formulas

Open the file **Sales.**

a) Use formula to calculate the **Sales Price**, for each item, as 1.95 times the **Production Cost** and display in currency format with two decimal places.

b) Use formula to calculate the **Profit**, for each item, as the **Sales Price** minus the **Production Cost.**

c) Work out the Total Profit by multiplying the profit by the quantity sold. Copy the formula down.

d) Use the SUM function to calculate the **Total** for the **Total Profit** column and display in currency format, in the appropriate position, with two decimal places.

e) Use the Average function to calculate the **Average** for the **Total Profit** column and display in currency format, in the appropriate position, with two decimal places.

f) Save the spreadsheet as **Sales_1.**

g) Print one copy of the spreadsheet.

h) Exit the application.

3. Amending the spreadsheet

Open the file **Sales_1.**

a) Delete the rows with **Prod Codes** 16129 and 15934.

b) Insert two extra rows at the bottom of the list of products.

c) Add the following products to the spreadsheet:

| 16321 | Erasers | €0.99 | | | 2543 | |
| 15552 | Folders | €1.29 | | | 1922 | |

Project N

1. Setting up the spreadsheet

a)   Set up the spreadsheet with the headings shown, and input the data as shown below.
b)   Column widths should be adjusted to fit the data.
c)   Main and column headings should be centrally aligned and bold.
d)   Numeric and currency data should be right aligned.
e)   Type your name in the footer.
f)   Save as **Menu_Profits.**
g)   Print one copy of the spreadsheet and exit the application.

Menu Profits					
Prod Code	Description	Production Cost/item	Sales Price	Quantity	Profit
854	Vegetable soup	€0.85		155	
765	Roast veg panini	€2.35		96	
877	Green salad	€1.95		139	
879	Health pizza	€3.30		177	
565	Salad bagel	€2.14		53	
786	Chicken sandwich	€3.23		120	
987	Thai curry	€3.89		62	
468	Beef stir fry	€4.10		48	
479	Fish pie	€4.02		26	
965	Mushroom pasta	€2.56		138	
				Total:	
				Average:	

2. Using formulas

Open the file **Menu_Profits**.

a) Use a formula to calculate the **Sales Price**, for each item, as 2.65 times the **Production Cost / item** and display in currency format with two decimal places.

b) Use a formula to calculate the **Profit**, for each item, as the **Sales Price** minus the **Production Cost** multiplied by the **Quantity**. Example: =(Sales price− Production cost)*Quantity.

c) Use the SUM function to calculate the **Total** for the **Profit** column and display in currency format, in the appropriate position, with two decimal places.

d) Use the AVG (AVERAGE) function to calculate the **Average** for the **Profit** column and display in currency format, in the appropriate position, with two decimal places.

e) Save the spreadsheet as **Menu_Profits_2**.

f) Exit the application.

3. Inserting and deleting

Open the file **Menu_Profits_2**.

a) Delete the row with **Prod Code** 479.

b) Insert two extra rows at the bottom of the list of products.

c) Add the following products to the spreadsheet:

| 552 | Prawn salad | €4.67 | ------- 73 ------- |
| 921 | Risotto | €3.50 | ------- 51 ------- |

d) Calculate the **Sales Price** and **Profit** for these items on the same basis as for the other items.

e) Recalculate the **Total:** and **Average:** values to take account of these deletions and insertions.

f) Sort the spreadsheet so that all the products are in ascending order by **Prod Code**, without disturbing the layout of the spreadsheet.

g) Save the spreadsheet as **Menu_Profits_3**.

h) Ensure all headings (column and row) are centred and emboldened.
i) Ensure all currency is in currency format, with 2 decimal places.
j) Ensure the spreadsheet is LANDSCAPE and gridlines are on for printing.
k) Enhance the document and proofread.
l) Save all changes.
m) Print one copy of the spreadsheet, ensuring it fits on one page.
n) Exit the application.

4. Inserting a graph

Open the file **Menu_Profits_3**.
a) Under the heading **Average**, insert the heading **Count**.
b) Use the COUNT function to count items from F4: F14.
c) Ensure the format of the newly-entered data matches the rest of the spreadsheet.
d) Using the data **Description** and **Profit**, insert a bar graph. Make sure that your graph has colour, a chart title, a legend and data displayed on the graph.
e) Ensure that all data can be read.
f) Insert a new worksheet.
g) Move the graph to **Sheet 2**.
h) Save the file as **Menu_Profits_4**.
i) Print the worksheet **Sheet 1** only.
j) Exit the application.

Project R

This section is on the theory you need to know. Learn the information!

EXERCISE 1

a) Identify eight possible uses for spreadsheets.

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b) Name 2 spreadsheet functions. Show how one of them could be used in a formula.

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c) Write the steps you take to create a spreadsheet document.

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EXERCISE 6

a) Explain the following terms:

• Chart

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• Current cell

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• Formula bar

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• Operation symbols

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• Cell reference error

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b) Explain a quick way to sort your spreadsheet.

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b) Give an example of a cell range.

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c) Label this chart using these labels:

- chart title

- x-axis

- y-axis

- legend

- type of chart

Rep Wages
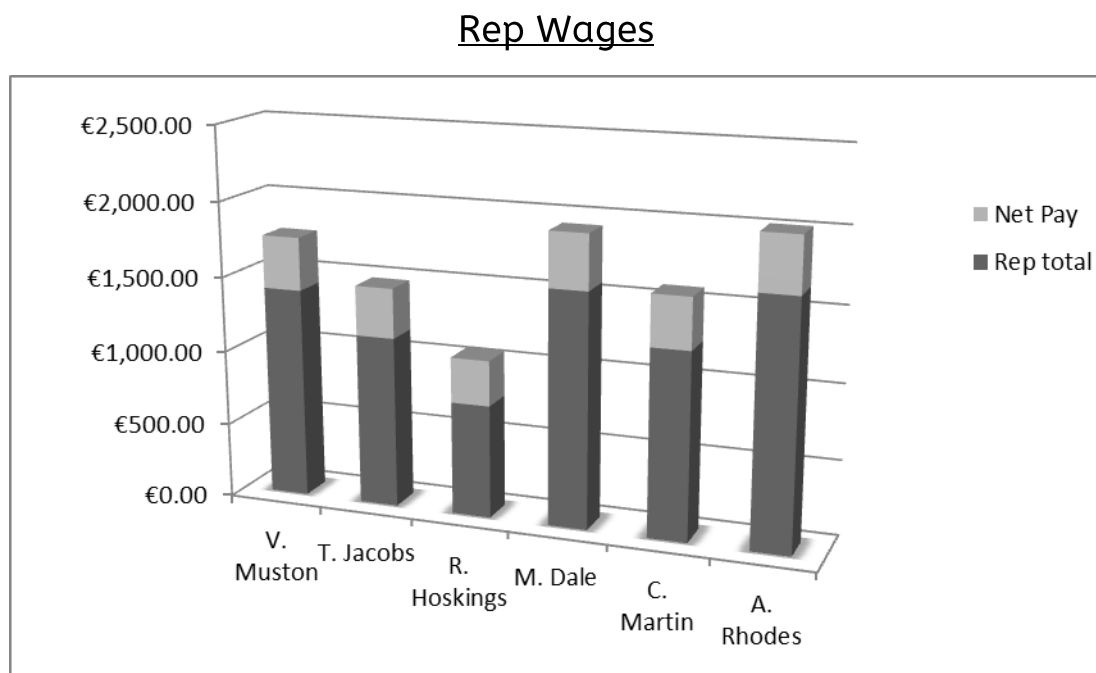
d) What should you do if you see this ##### in a cell?

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