LEVEL 4

EDUCOOT

Spreadsheet Methods

Student Worksheets

Project A

1. Setting up a spreadsheet

a) Type in the following spreadsheet, and format it to look like the sample below.

b) Adjust the columns so that all text can be read.

	A	B	C	D
1	Mike's Lunch Bar			
2	Lunch items	Units sold	Unit price	Sales
3	Sandwiches			
4	Paninis			
5	Salads			
6	Wraps			
7	Soup			
8	Tea			
9	Coffee			
10	Fruit juice			
11	Total sales			
12	Averages			

c) Save the spreadsheet as **Lunch_Bar**.

d) Change the page orientation to Landscape.

e) Centre the spreadsheet heading **Mike's Lunch Bar** across the spreadsheet. (Merge and centre)

f) Embolden the heading **Mike's Lunch Bar** and make the font 16 pt.

g) Embolden and centre the column headings:

1	**Mike's Lunch Bar**			
2	**Lunch items**	**Units sold**	**Unit price**	**Sales**

h) Switch on the gridlines for printing.

i) Save the changes.

j) Print one copy of the spreadsheet.

2. Using formulas

a) Open the file **Lunch_Bar.**
b) Type in all numbers shown in the spreadsheet below. (Don't type in the euro symbol – format the cells to currency with 2 decimal places)

	A	B	C	D
1	Mike's Lunch Bar			
2	Lunch items	Units sold	Unit price	Sales
3	Sandwiches	2300	€5.50	
4	Paninis	1100	€6.30	
5	Salads	3650	€6.10	
6	Wraps	630	€6.30	
7	Soup	1043	€4.50	
8	Tea	3000	€3.10	
9	Coffee	2460	€3.60	
10	Fruit juice	2438	€4.60	
11	Total sales			
12	Averages			

c) Format all numbers with appropriate formats.
d) Create a formula (or use the SUM function) to add up all the units sold.
e) Create a formula to work out the average of units sold.
f) Create a formula to work out the Sales prices. (e.g. Create a formula in D3 to multiply the Units sold by the Unit price: =C3*B3)
g) Copy the formula down to D10.
h) Work out the Total sales for the Sales column.
i) Apply borders and add some colour shading.
j) Using the data **Lunch Items** and **Units Sold** only, create a suitable graph that clearly displays all information.
k) Give the graph a chart title **Units Sold.**
l) Move the graph to the right-hand side of the spreadsheet.
m) Save as **Lunch_Bar.**
n) Print your document.
o) 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.

Prod Code	Description	Production cost	Sales price	Profit	Quantity	Total profit
		Sales Report for Present Stock Items				
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.
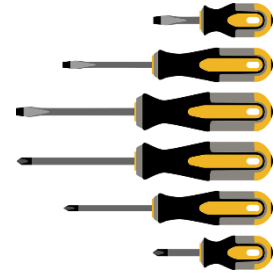
2. Using formulas

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.

3. Amending an existing spreadsheet

a) Open the spreadsheet **Monthly_Wages.** (the teacher will give you this file)
b) Save the spreadsheet as **Monthly_Wages.**
c) Delete the row with sales rep C. Martin.
d) Insert a row under the Sales Rep **T. Jacobs.**
e) Insert the following information:

Sales Rep	Number	Product 1	Product 2	Product 3
K. McDonald	8	€265	€245	€469

f) Calculate the **Rep totals, Commission, Salary, Tax and Net Pay** on the same basis as for the other reps.
g) Delete the column **Number.**
h) Change the **Minimum** to **Maximum** and recalculate for Product 1 and 2.
i) **Add** the **3 products** for **Outside reps.**
j) Divide this new total by 9 to get the average totals for the Outside reps.
k) Save the spreadsheet as **Monthly_Wages.**
l) Print one copy of the spreadsheet, ensuring orientation is landscape and gridlines are on.

m) Exit the application.

4. Completing the spreadsheet

Open the file **Monthly_Wages.**

a) Adjust the row height for **Product Totals** to **17.**

b) Adjust the column width for **Net Pay** to **9.**

c) Right align all items in the **Sales rep** column.

d) Ensure all labels are bold and centred.

e) Ensure the overall heading **Sales for the Month** is bold and centred across the spreadsheet.

f) Above the graph, insert a heading **Reps**.

g) Change the style and colour of the graph.

h) Insert a legend on the right-hand side of the graph.

i) Change all the font in the graph to Century Gothic.

j) Make the graph bigger so that all information can be clearly read.

k) Rename the tab **Sheet 1** and name it **Reps**.

l) Save all changes.

m) Print one copy of the spreadsheet, ensuring it fits on one page.

n) Exit the application.

Project J

This exercise is a little different, but it requires the same skills!
There are lot of instructions, keep focused!

Type in the following spreadsheet.

Sales Rep	Employer Number	Week 1	Week 2	Week 3
O'Sullivan, Kevin	342	365	259	0
Tierney, Sinead	765	521	345	0
O'Keefe, Patrick	108	409	378	0
Boylan, Trevor	449	378	299	0
Kenny, Pat	287	499	315	0
Fitzpatrick, Ann	1023	276	432	0
Byrne, Edward	453	590	420	0
Cullen, Mark	195	362	264	0
Rourke, Michael	639	419	391	0
Product Totals				

1. Adjust columns so that all text can be read.
2. Insert your name in the footer, on the right hand side. Include the current date and the time.
3. Save the spreadsheet as **Salary.**
4. Sort the spreadsheet so that the sales rep names are in alphabetical

order going from **A to Z.** (remember to keep all information attached to each rep, the same, don't mix it all up!)

5. **Right-align** the names of the sales reps.

6. Insert a column before the Sales Rep column and give it the heading **Number.**

7. Use numbers 1 to 9 in **A2:A10.**

8. Create a formula in **D11** to calculate the totals for Week 1.

9. Copy the formula to **E11.**

10. Type the heading **Totals** in **G1.**

11. Create a formula in **G2** to work out each rep's total by adding Week 1 and Week 2.

12. Copy this formula from **G3:G10.**

13. Delete column F.

14. Add a column heading **Commission** in **G1.**

15. Create a formula in **G2** to work out 10% of the total in **F2.**

16. Copy the formula from **G3:G10.**

17. Add a column heading **Salary** in **H1.**

18. Create a formula in **H2** to work out the basic pay (€500) added to the commission.

19. Copy this formula from **H3:H10.**

20. Add a heading total **Tax** in **I1.**

21. Create a formula in **I2** to work out 20% tax on the salary.

22. Copy this formula from **I3:I10.**

23.   Delete Row 10.

24.   In **J1**, type in the heading **Net Pay.**

25.   In **J2** create a formula to work out the **Net Pay** by subtracting the tax from the salary.

26.   Copy this formula from **J3:J9.**

27.   Change the formula in **G2** to work out **9%** commission on the reps total sales.

28.   Copy this formula from **G3:G9.**

29.   In **B12** type in a heading **Average Sales.**

30.   In **D12** create a formula to work out the average Week cost from **D2** to **D9.**

31.   Copy this formula to **E12.**

32.   In **B13** type in the heading **Minimum.**

33.   In **D13** create a formula to work out the minimum amount for **D2:D9.**

34.   Copy this formula to **E13.**

35.   Format all numbers from **D2:J13** as currency, correct to two decimal places.

36.   Insert a row at the top of the spreadsheet and give it the heading **Wages.**

37.   Ensure that these columns all have totals: **Week 1, Week 2, Totals, Commission, Salary, Tax** and **Net Pay.**

38.   Centre and merge the spreadsheet heading 'Wages' across the spreadsheet.

39. Change the heading to size 14 and make it bold.

40. Embolden and centre all headings in **Row 2**.

41. Change the page orientation to **LANDSCAPE**.

42. Save the document as **Salary_2**.

43. Print the document.

44. Change **C5** to **426**.

45. Change **E8** to **216**.

46. Change **B13** to **Maximum**.

47. Change the formula in **D14** to work out the maximum amount for **D3:D10**.

48. Copy the formula across to **E13**.

49. Rename Sheet 1 and call it **Wages**.

50. Using the data **Sales Reps** and **Week 1, Week 2,** insert a line graph.

51. Add colour and design to your graph. Match the colours to those of your spreadsheet.

52. Ensure the legend is below the graph.

53. Turn on gridlines and headings for printing purposes.(for both worksheets)

54. Do a spell check on the document.

55. Enhance the document with colour, shading, etc.

56. Proofread the document.

57. Save the document as **Salary_3**.

58. Print the spreadsheet only, not the graph, ensuring it fits on one page.

59. Exit the application.

Project P

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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d) Describe what a formula is and write down 3 different examples of formulas.

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e) Name 4 spreadsheet features.

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f) Define these spreadsheet terms:

formula bar

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sort, .e.g. A to Z

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_____

value

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g) Name four data formatting types.

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h) How can you ensure that your worksheets/workbooks are sufficiently backed up and easy to locate?

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