

Level 3



EDUCOOT



SAMPLE!

SPREADSHEETS

Student Worksheets



www.educoot.org

CONTENTS

Student details	Page 3
Note to Students	Page 3
Note to the Tutor & Students	Page 4
Course Overview	Page 5

Assessment Brief 1

Health, Safety and Hygiene	Page 7
Spreadsheet Uses and Features	Page 18
Spreadsheet Terminology	Page 25

Assessment Brief 2

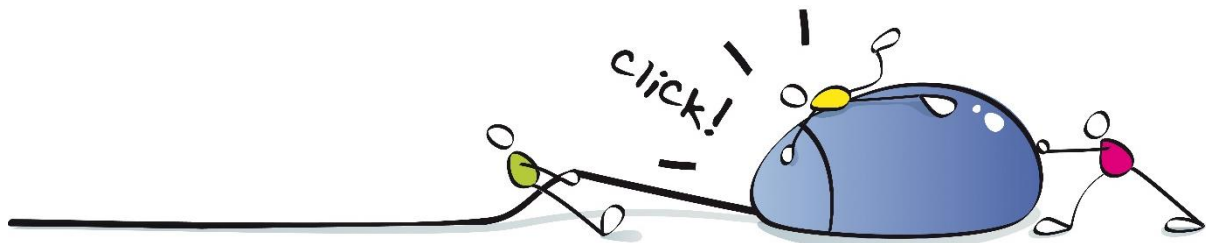
Using the Spreadsheet	Page 34
-----------------------	---------

Assessment Brief 3

Creating a Worksheet & Workbook	Page 41
---------------------------------	---------

Checklist	Page 48
-----------	---------

Mapping of Learning Outcomes	Page 49
------------------------------	---------



HEALTH, SAFETY AND HYGIENE

1. What helps create a healthy, safe and hygienic working environment when using computers? Complete the sentences.

chair, bags, breaks, lighting, power, posture, adequate, hazard, heights, visible

- a) Make sure the monitor, keyboard and mouse are at the right
_____.
- b) Make sure that what you are working from is clearly _____.
- c) Make sure your _____ is correct when sitting in front of a computer.
- d) Use an adjustable _____.
- e) Make sure there is adequate _____ where work is being undertaken.
- f) Make sure there is _____ ventilation.
- g) Take frequent _____ away from the computer.
- h) Make sure that power cables are carefully placed so as not to be a tripping _____.
- i) Make sure that _____ points are not overloaded.
- j) Place personal belongings, such as _____, out of the way of others when using the computer.



2. Look at the diagram below. Write the ideal measurements for practising safety at the computer:

- a) The distance between your eyes and the screen _____
- b) The distance between the desk and the floor. _____
- c) The distance between the chair seat and floor. _____
- d) The angle of your forearm to your chest. _____
- e) The angle of the screen centre to your eyes. _____



3. Practise sitting at the computer, using the above measurements.



1. Here are some examples of injuries. In each case, state how the injury could have been prevented.

a) Ben suffered burns from a fire caused by spilling a drink on a computer.

b) Kyle suffered a head injury after a computer stored on top of a wardrobe fell on him.

c) Dave suffered the effects of an electric shock whilst setting up his computer.

d) Rosie, who worked at her computer for seven hours every day, was off work for two weeks after suffering severe back pain.

e) Matt suffered a sprained wrist after playing computer games for five hours.

f) Sinead tripped over trailing cords in the office and she sprained her ankle.

g) Stephen had to seek medical advice for neck pain after using an uncomfortable computer chair.



SPREADSHEET USES AND FEATURES

I. Read the text and answer the questions:



The three most common general uses for spreadsheet software are to create budgets, produce graphs and charts, and for storing and sorting data.

A helpful feature of spreadsheets is using basic formulas to work out various sums.

One of the main uses for spreadsheets is in business. Spreadsheets can be used to forecast sales and show graphically how

sales will rise or drop based on past events. Spreadsheets can also be used to work out interest rates and monthly payments based on variables such as time or amount borrowed.

Another use for spreadsheets is in education where they can be used to store students' personal data along with marks. This data can then be used to predict a student's overall or average grade or forecast how they will do at higher levels. Charts can be created, e.g. displaying the pass percentages for the school or centre. The spreadsheets can also be used to record pay records for staff of the school and when they get paid and how much they get paid.

Spreadsheets can be used in health care to record patients' details for easy access by doctors and other staff. These records can contain all vital information about patients to save time in treating them. Spreadsheets can help with current trends and will aid health care services to plan accordingly for the future.

Spreadsheets can be used by shopkeepers to keep detailed lists of their stock, how much the item costs and the bar code number of the item. Spreadsheets can be used to record sales of each item in stock and then use graphs to see which items are selling well, and also what items are not selling so that stock can be amended accordingly. VAT and Tax returns can also be calculated with spreadsheets.

These are just some uses of spreadsheets. Other uses include: planning, lists, budgeting, data analysis, accounting, time sheets, business predictions, wages, invoices, checklists, record-keeping and flow charts.

a) Name one way in which spreadsheets can be used in health care.

b) Name one way in which spreadsheets can be used in business.

c) What are the three most common uses of spreadsheets?

d) Name one way in which spreadsheets could help a shopkeeper.

e) In which sector can spreadsheets be used to store students' personal details and exam results?

f) How could you use spreadsheets in your everyday life?

2. Tick the types of spreadsheets that are available:

- Purchased spreadsheets, e.g.
Microsoft Excel
- Free open source spreadsheets
- Microsoft Word spreadsheets
- Online spreadsheets, e.g. Google
Docs
- Commercial spreadsheets



2. What are the features of a spreadsheet? Complete the sentences.

alphabetical, fill, Bar, right, columns, dragging, Functions, multiplication, seconds, cells, data, printing

- a) A spreadsheet is a large sheet having data and information arranged in rows and _____.
- b) Spreadsheets are useful in entering, editing, analysing and storing _____.
- c) Mathematical operations can be used such as addition, subtraction, _____ and division.
- d) You can sort numbers/characters according to some given criteria, e.g. _____ order, ascending, descending etc.



Some of the main features:

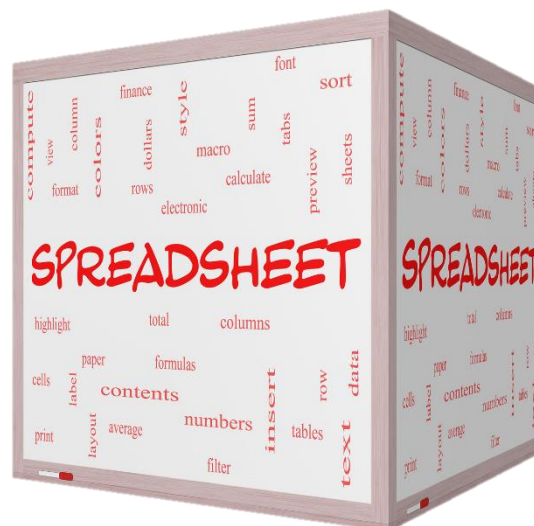
- e) AutoSum helps you to add the contents of a cluster of adjacent _____.
- f) AutoFill allows you to quickly _____ cells with repetitive or sequential data such as chronological dates or numbers, and repeated text.
- g) _____ are used to evaluate values and perform different operations.
- h) The _____ feature is used to obtain a hard-copy of prepared spreadsheets.
- i) Drag and Drop will help you to reposition the data and text by simply _____ the data with the help of mouse.
- j) Charts will help you to present a graphical representation of your data in the form of Pie, _____, Line charts and more.
- k) The PivotTable flips and sums data in _____ and allows you to perform data analysis and generation of reports.
- l) Shortcut Menus that are appropriate to the task that you are doing will appear by clicking the _____ mouse button.

SPREADSHEET TERMINOLOGY

1. Complete the sentences:

numbers, easily, tab, addition, worksheets, cells,
workbooks, formula, rows

- a) Spreadsheets files are called _____.
- b) Each workbook is organised into _____.
- c) Spreadsheets are organised in a grid structure consisting of columns and _____.
- d) Columns are denoted by letters, rows are denoted by _____.
- e) A1, C20, D12, etc. are examples of _____.
- f) To move from one cell to another, you can use the _____ key instead of using the mouse.
- g) =C3*D3 This is an example of a _____.
- h) Spreadsheets can be filtered and sorted so that data can be more _____ found.
- i) The SUM function will use _____ in the formula.



2. Choose the correct answers about filtering and sorting.

a) When spreadsheets become large, it may be difficult to see all the _____ on the screen at the same time.

- worksheets
- data

b) Spreadsheets can be _____ to limit the display of data on the screen.

- filtered
- deleted

c) Spreadsheets can be filtered to limit the display of data to be _____

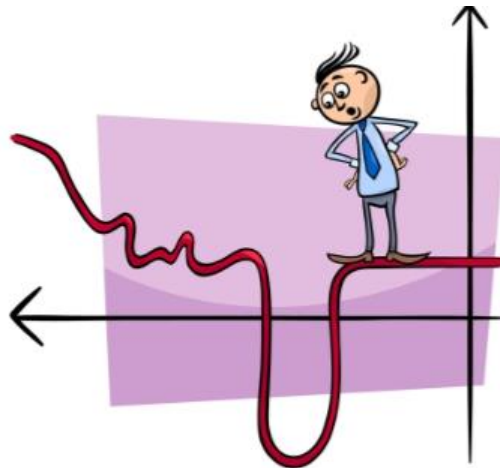
- printed
- typed

d) When you want data to be organised alphabetically, you use the _____ icon.

- Find and select
- Sort and filter

e) If you sort data, for example, from 1 to 100, you are sorting the data in _____ order.

- ascending
- descending



Assessment Brief 2



Course:	Spreadsheets
Course Code:	3N0542
Assessment:	Skills Demonstration / Collection of Work
Title:	<u>USING SPREADSHEETS</u>
Weighting:	Skills Demonstration 60%, Collection of Work 40%

Guidelines

You will be expected to:

1. Use a spreadsheet application to open an existing workbook, access a worksheet, print a hardcopy of the worksheet and exit the application.
2. Enter data into a spreadsheet.
3. Use formulae to perform simple calculations including addition, subtraction, multiplication and division.
4. Produce a hardcopy printout from a spreadsheet taking all required steps.
5. Apply appropriate health, safety and personal hygiene procedures when working in an ICT environment.

Assessment criteria

- Exercises and tasks must be complete and correct.
- Open existing spreadsheet files and edit and amend according to instructions.
- Enter data to include formatting rows and columns, applying data formats, inserting and deleting rows, columns and worksheets, using formulae and moving information within the worksheet
- Produce a hard copy of a spreadsheet to include creating a workbook, entering data into a worksheet, applying suitable formatting, previewing and printing the cell range, saving the workbook, and closing the spreadsheet application
- Follow all health, safety and hygiene procedures.

Submission date:

Declaration of Authenticity: I confirm that this is my own original work.

Signed:

Date:

Exercise 2

- a) Open the spreadsheet **Stock**.
- b) Save the spreadsheet as **Stock**.
- c) In the worksheet **Report**, merge and centre the heading **Sales Report**.
- d) Embolden the heading **Sales Report**.
- e) Embolden and centre the column labels from **Prod Code** to **Profit**.
- f) Left align the items in the **Description** column from **Cup** to **Plate**
300mm.
- g) Insert a row above the product **Plate 300 mm** and insert the following information: Prod Code: **20522**, Description: **Sugar bowl**, Production cost: **2.50**, Sales Price - use the same formula, Quantity: **1409**. For the profit for this new item, copy the formula.
- h) Change the page orientation to Landscape.
- i) Ensure the spreadsheet fits on one page. Do a print preview.
- j) Spell check and proofread the spreadsheet.
- k) Turn on gridlines for printing.
- l) Save all changes.
- m) Print the spreadsheet.
- n) Exit from the application and shut down the computer.



CREATING A WORKSHEET AND WORKBOOK



Exercise 1

- a) Open the spreadsheet application you are using.
 b) Enter the following data into a spreadsheet.

Sales Rep	Employer Number	Product 1	Product 2
Maguire, Anthony	74	312	103
Martin, Philip	26	231	83
Jacobs, Peter	51	467	97

- c) Save the spreadsheet as **Reps**.
 d) Make sure that all text is visible – widen columns as necessary.
 e) Embolden and centre the column labels.
 f) Copy the row with **Peter Jacobs** and paste it below the row you copied.
 g) Swap the rows with **Philip Martin** and **Anthony Maguire** so that Philip Martin appears first. Use cut and paste.
 h) Use AutoSum to add up the totals for Products 1 and 2.
 i) Shade the cells with these totals in blue.
 j) Name the worksheet **Sales**. Add another worksheet and call it **Profits**.
 k) Spell check and proofread the spreadsheet.
 l) Ensure the page layout is landscape.
 m) Turn on gridlines for printing.
 n) Save changes.
 o) Do a print preview to check that the spreadsheet will fit on one page.
 p) Print the worksheet **Reps**.
 q) Close the application and shut down the computer.



Exercise 4

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

Sales Report				
Prod Code	Description	Production cost	Sales price	Profit
15674	A4 notepads	0.99		
15934	Glue	1.19		
15231	Large files	1.10		
15900	Ruler	0.32		
15233	Envelopes	1.03		
14896	Stapler	4.50		
14893	Paper ream	1.12		

- b) Save the spreadsheet as **Report**.
- c) Adjust columns so that all data is visible.
- d) Merge and centre the overall heading **Sales Report**.
- e) Shade the overall heading in light green.
- f) Embolden and centre the column labels.
- g) Use a formula in D3 to calculate the **Sales Price** as **1.95 times** the **Production Cost**.
- h) Copy the formula down for each item.
- i) Use a formula to calculate the **Profit**, for each item, as the Sales Price minus the Production Cost.
- j) Copy the formula down for each item.
- k) In A10, type the word **TOTALS**.

- l) Use the SUM function to calculate the Total for the **Production cost**, the **Sales price** and the **Profit**.
- m) Display the data in columns C, D and E in currency format (euro), with two decimal places.
- n) Delete the rows with **Prod Code 15934**.
- o) Insert a row under Product Code 14893 Paper ream and add this product:

15552	Folders	€1.29			1922	
-------	---------	-------	--	--	------	--

(formulae and totals should change automatically; if they don't, copy the formulae down)

- p) Rename Sheet 1 to **Stock**.
- q) Copy all the data and paste it into a new worksheet.
- r) Name this new worksheet **Copy**.
- s) Proofread and check the document.
- t) Turn on gridlines for printing.
- u) Change the page orientation to landscape.
- v) Save all changes.
- w) Print the worksheet **Stock**.



LEARNING OUTCOMES OF LEVEL 3 SPREADSHEETS

The learner will be able to:

1. Outline the significance of using spreadsheet applications in terms of their common uses and features **Pages 18 to 24 (spreadsheet uses and features)**

2. Explain rudimentary terminology associated with spreadsheets including workbook, worksheet, cell, tab, formula, filtering, sorting, function, and chart **Pages 25 to 32 (terminology)**

3. Use a spreadsheet application to open an existing workbook, access a worksheet, print a hardcopy of the worksheet and exit the application **Pages 35 to 39 (using a spreadsheet application)**

4. Enter data to a spreadsheet to include formatting rows and columns, applying data formats, inserting and deleting rows, columns and worksheets, and moving information within the worksheet **Pages 35 to 39 (using a spreadsheet application), Pages 41 to 47 (creating worksheet / workbook)**



5. Use formulae to perform simple calculations including addition, subtraction, multiplication and division **Pages 38, 41, 42, 43, 44, 47 (using formulae)**

6. Produce a hardcopy printout from a spreadsheet taking all required steps including creating a workbook, entering data into a worksheet, applying suitable formatting, previewing and printing the cell range, saving the workbook, and closing the spreadsheet application **Pages 41 to 47 (creating worksheet / workbook)**

7. Apply appropriate health, safety and personal hygiene procedures when working in an ICT environment. **Pages 7 to 17 (health, safety and hygiene in an ICT environment), throughout the course**