Ethiopian TVET-System

BASIC CLERICAL WORKS

LEVEL-I

Based on August 2012GC Occupational standard

Module Title: creating and using spreadsheet

TTLM Code: EIS BCW1 TTLM 0919 V1

This module includes the following Learning Guides

LG33: Select and prepare resources

LG Code: EIS BCW1 M010 LO1-LG-33

LG34: Create simple spread sheets

LG Code: EIS BCW1 M010 LO2-LG-34

LG35: Produce simple charts

LG Code: EIS BCW1 M010 LO3-LG-35

LG36: Finalize spread sheets

LG Code: EIS BCW1 M010 LO4-LG-36

Instruction Sheet	LG33: Select and prepare resources

This learning guide is developed to provide you the necessary information regarding the following **content coverage** and topics:

- 1.1 Adjusting workspace, furniture and equipments
    - 1.1.1 Ergonomic Requirements
    - 1.1.2. Work organization requirement
- 1.2 Using energy and resource conservation techniques
- 1.3 Identifying and clarifying spread sheet task requirements

This guide will also assist you to attain the learning outcome stated in the cover page. Specifically, **upon completion of this Learning Guide, you will be able to**:

- Adjust workspace, furniture and equipments
    - 1.1.2. Ergonomic Requirements
    - 1.1.2. Work organization requirement
- Use energy and resource conservation techniques
- Identify and clarify spread sheet task requirements

Learning Instructions:

1. Read the specific objectives of this Learning Guide.
2. Follow the instructions described below 3 to 6.
3. Read the information written in the information "Sheet 1, Sheet 2 and sheet 3".
4. Accomplish the "Self-check 1 Self-check t 2, and self check 3" **in page -6, 9, 12 and 14** respectively.
5. If you earned a satisfactory evaluation from the "Self-check" proceed to "Operation Sheet 1," **in page -15.**
6. Do the "LAP test" **in page – 16** (if you are ready).

Information Sheet-1	Adjusting workspace, furniture and equipment based on Ergonomic requirements

1.1. Adjusting work place to suit work place ergonomic requirement

Ergonomic requirement may include but not limited to:
* avoiding radiation from computer screens
* chair height, seat and back adjustment
* document holder
* footrest
* keyboard and mouse position
* lighting
* noise minimisation
* posture
* screen position
* workstation height and layout

The goal of ergonomics is to make work more comfortable and to improve both health and productivity. Many ergonomic problems can be fixed by rearranging, adjusting or modifying existing furniture and tools, so don't be in too much of a rush to go out and purchase the next great ergonomic "THING".

One of the easiest to follow guidelines for any office set up is Office wise - A guide to health and safety in the office Developed by the Ergonomics Unit Victorian Work Cover Authority.

TIP SHEET: Back care and Chair setup

We know that sitting for long periods can have negative consequences for our health, and that regular breaks along with standing for part of your day can help to prevent and relieve aches and pains when they occur. However, often sitting cannot be avoided, at which times it is important to ensure that your office chair is set-up to provide optimal support for your back.

To set-up your office chair correctly, follow these simple steps:

Adjusting the Chair Height
Sit up straight on your chair, roll your shoulders up and back and allow your arms to hang loosely by your sides. Make a right angle at your elbow and keep your wrist straight. The underside of your hand should now sit naturally on top of your keyboard. If it is not then adjust your chair up or down to enable your hand to rest on the keyboard. (do not adjust your arms or hands!)

Other Chair Adjustments
Adjust the back in or out, up or down, or if the seat has a sliding seat mechanism slide it in or out so that you can feel the lumbar support in the lower curve of your back. It should be both firm and comfortable, while providing support for the natural curve of your back. Ensure the angle of base of the seat is either neutral or tilting slightly forward so as to make sure the front of the chair is not pushing into your thighs.

And remember, no chair, no matter how well it's set-up can prevent you from slouching unless you proactively sit with correct posture. The key is to be mindful of your posture at all times, making sure that your spine remains lifted, with your shoulders rounded back.

Steps for setting up your workspace

Adjust the chair height so that your elbows are at desktop level (roll your shoulders back and relax them first). Sit fully back into your chair, adjust the seat back for good lower back support, use a lumbar roll if the back of the chair does not support your lower back. If your chair seat has a tilt feature, set it so that you are comfortably supported.

If your feet don't comfortably reach the floor or there is pressure on the backs of your legs, use a footrest. Locate your monitor so the top third of the viewing area is at or below eye level. Use monitor stand if required. As long as you can clearly view the screen contents there is no specific distance that you need to be from the monitor.

With elbows at the desk level, ensure that your wrists are straight. Use wrist rest if required, and if you have armrests try to adjust them so they support your arms without beings too high or too low.

Position the mouse as close as is practical to the keyboard, so that both elbows are directly under the shoulders while working. If this is not possible you may need to consider purchasing a mini keyboard.

To reduce stress on the neck when working from paper documents, a document holder can be placed between the keyboard and monitor.

Always either put the phone on loudspeaker (depending on your office environment) or use a phone headset if you need to use the computer while talking on the phone, this will help avoid neck and shoulder strain.

Use your mouse pad or another soft surface to pad the edge of your desk. Avoid pressing your hands or forearms against any desk edge.

Adjust screen brightness and contrast for clear comfortable viewing, and clean the screen regularly. Also remember the 20-20-20 rule: look away from the monitor every 20 minutes to a distance of 20 meters for 20 seconds. This helps avoid eye strain.

Finally and very importantly remember to take breaks regularly preferably every 45 minutes to an hour for 1 or 2minutes. Go get a glass of water talk to a colleague etc.

Self-Check -1	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. What does ergonomic requirement of arranging work place include**?(3 points)**
2. Write and explain the steps to be followed to set-up your office chair correctly (5 points)
3. Discuss the steps for setting up your work space(2 points)

Note: **Satisfactory rating – 5 and above points Unsatisfactory - below 5 points**

Information Sheet-2	Using energy and resource conservation techniques

Energy and resource Conservation techniques

❖ This section explains how you can work in an office setting in an environmentally friendly way.

We all need to care for our environment, and there are many ways you can help, including the following.

• Switch off lights in storerooms, stationery rooms and toilets when they're not in use.

• Make sure your computer switches to standby when not in use.

• Make sure the photocopier switches to standby when not in use.

• Re label cardboard files and folders so you can use them again.

• Organize your desk so you can find pens and stationery easily and don't have to keep getting replacements. Saving paper is one of the most effective ways to conserve resources. You should:

• reduce paper use by using alternative ways to communicate (such as email)

• reuse paper (such as by turning it over and printing on the other side)

• recycle used paper so it can be turned into new products

Here are 10 tips that don't take much effort to follow but can make a big difference.

1. Only print a document when it's really necessary.

2. Only use good quality paper when it's really necessary.

3. Reuse paper that has only been used once (unless it contains confidential information).

4. Put paper that can be used again ready for use by the printer, or save it for rough notes.

5. Print on recycled paper whenever possible.

6. Where possible, print two pages side by side.

7. Use a circulation slip and send a single document around to everyone, rather than printing one copy each.

8. Use the Print Preview function to avoid making printing mistakes.

9. Carefully proofread your work, correcting it and only reprinting the page(s) necessary.

10. Put waste paper in a separate bin or bag so that it can be collected by a recycling company.

Self-Check -1	**Written Test**

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. _____explains how you can work in an office setting in an environmentally friendly way.(2 points)

2. There are different ways by which we can take care of our environment write 6 of them. (6points)

Note: Satisfactory rating – 4and above points Unsatisfactory - below 4 points

Answer Sheet

Score = _____

Rating: _____

Name: _____   Date: _____

Information Sheet-3	Identifying and clarifying spread sheet task requirements

Microsoft Office Excel is a powerful tool used to create and format spreadsheets. Spreadsheets allow information to be organized in rows and tables and analyzed with automatic mathematics. Spreadsheets are commonly used to perform many different types of calculations.

Workbook vs. Worksheet – when you open Excel, a new file is created called *Book 1* (until you name it differently). It is called "Book" because it is a Workbook that is initially made up of three Worksheets (accessible from the tabs in the lower left corner of your excel window - see Fig. 1). Think of a three ring binder with three sheets of paper in it. As with a binder, you can:

- Add sheets to your Workbook
- Delete worksheets
- Re-arrange them
- Rename worksheets

What is Excel?

Excel is all about numbers! There's almost no limit to what you can do with numbers in Excel, including sorting, advanced calculations, and graphing. In addition, Excel's formatting options mean that whatever you do with your numbers, the result will always look professional! Data files created with Excel are called workbooks (in the same way as Word files are called documents). But where Word starts up with a single blank page, Excel files by default contain three blank worksheets. This gives you the flexibility to store related data in different locations within the same file. More worksheets can be added, and others deleted, as required. You'll often hear Excel files referred to as spreadsheets. This is a generic term, which sometimes means a workbook (file) and sometimes means a worksheet (a page within the file). For the sake of clarity, I'll be using the terms workbook and worksheet in this manual.
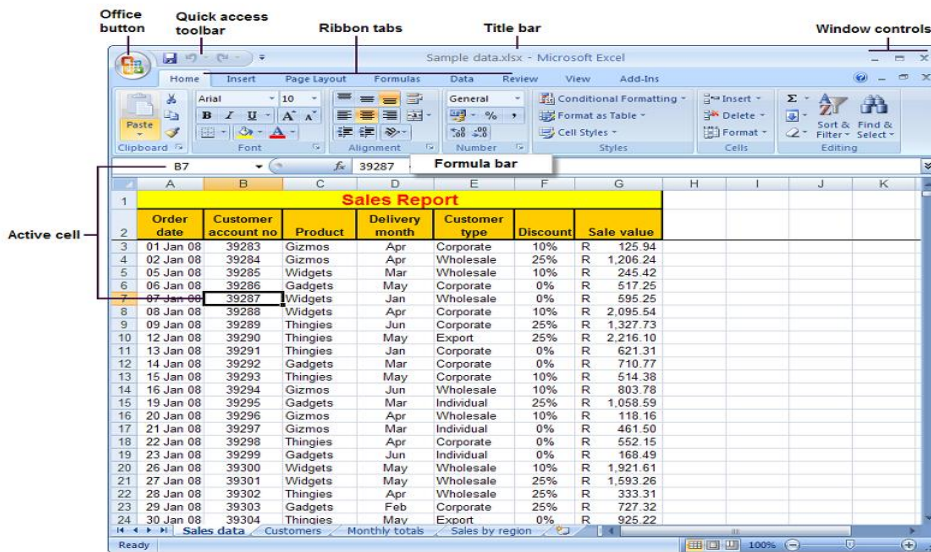
The Excel 2007 window

As in Word 2007, the old menu system has been replaced by the Ribbon and the Office button. The title bar displays the name of your current workbook. Tabs at the bottom of the screen identify the different worksheets available to you – I'll show you a little later how to give them meaningful names.

Fig. 1: Worksheet tabs

Cell: - cells are the basic rectangular building blocks of a spreadsheet. They are assigned an address, generally referred to as a cell reference, according to their column and row (e.g. the cell in column B at row 3 is referenced as cell B3). **Row**: - rows travel horizontally and are numbered.

Column: - columns travel vertically and are assigned letters.

Formula :- a mathematical formula used to calculate a result based on data from one or more other cells Often they consist of some combination of the standard mathematical operators (+, -, *, /) (e.g.: =(A1+A5)/B13), but they may also include functions (see below). When you type a formula into a cell, that cell will generally display the result obtained by the formula, rather than the formula itself.

Functions– pre-written formulae that perform common (and not so common) calculations, such as summation and averaging. You can combine many functions and operators in a single formula to obtain more complex results (e.g.: =SUM (A1:A13)

Ribbon

The Ribbon, a panel that houses the command buttons and icons, organizes commands as a set of Tabs, each grouping relevant commands (see Fig. 2 below). Each application has a different set of tabs which expose the functionality that application offers. For example, while Excel has a tab for the Graphing capabilities, Word does not feature the same; instead it has tabs to control the formatting of a text document. Within each tab, various related options may be grouped together. The Ribbon is designed to make the features of the application more discoverable and accessible with fewer mouse clicks as com-pared to the menu-based UI used until Office 2007. It is not possible to remove the Ribbon or replace it with menus with the normal Office 2007 functions. However, the Ribbon can be hidden.

Additionally, the file button has been replaced by the Microsoft Office sign in the upper left corner and is called the "*Office Button*."
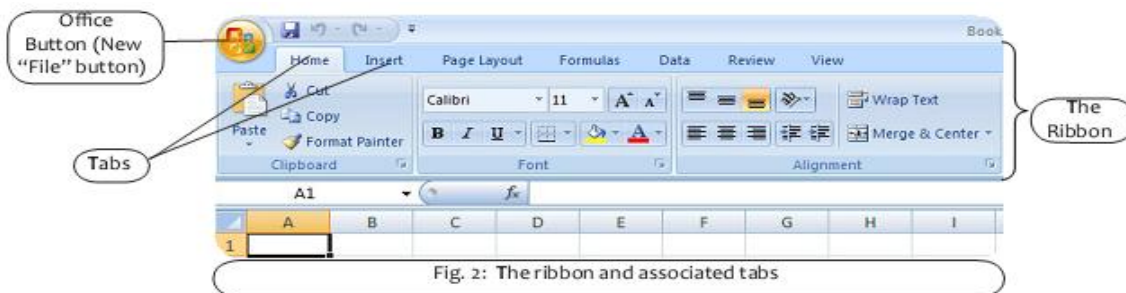

Fig. 2: The ribbon and associated tabs

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

Match column A with column B

A	B
_____1. used to perform many different types of calculations	a. Title bar
_____2. a panel that houses the command buttons and icons, organizes commands as a set of Tabs, each grouping relevant commands	b. Columns
_____3. Travel vertically and are assigned letters.	c. Ms office excel
_____4. are the basic rectangular building blocks of a spreadsheet	d. Ms office access
_____5. Displays the name of your current workbook.	e. Spreadsheet
_____6. Also called Work books/work sheets	f. Rows
_____7. a powerful tool used to create and format spreadsheets	g. Ribbon
_____8.	h. Cells
_____9.	i. Spread sheet

Note: **Satisfactory rating – 5 and above points Unsatisfactory - below 5 points**

Answer Sheet

Score = _____

Rating: _____

Name: _____   Date: _____

Operation Sheet 1-	Procedures to Adjust your workstation to suit OHS requirements and according to energy and resource conservation techniques.

Steps for setting up your workspace

Adjust the chair height so that your elbows are at desktop level (roll your shoulders back and relax them first). Sit fully back into your chair, adjust the seat back for good lower back support, use a lumbar roll if the back of the chair does not support your lower back. If your chair seat has a tilt feature, set it so that you are comfortably supported.

If your feet don't comfortably reach the floor or there is pressure on the backs of your legs, use a footrest. Locate your monitor so the top third of the viewing area is at or below eye level. Use monitor stand if required. As long as you can clearly view the screen contents there is no specific distance that you need to be from the monitor.

With elbows at the desk level, ensure that your wrists are straight. Use wrist rest if required, and if you have armrests try to adjust them so they support your arms without beings too high or too low.

Position the mouse as close as is practical to the keyboard, so that both elbows are directly under the shoulders while working. If this is not possible you may need to consider purchasing a mini keyboard.

To reduce stress on the neck when working from paper documents, a document holder can be placed between the keyboard and monitor.

Always either put the phone on loudspeaker (depending on your office environment) or use a phone headset if you need to use the computer while talking on the phone, this will help avoid neck and shoulder strain.

Use your mouse pad or another soft surface to pad the edge of your desk. Avoid pressing your hands or forearms against any desk edge.

Adjust screen brightness and contrast for clear comfortable viewing, and clean the screen regularly. Also remember the 20-20-20 rule: look away from the monitor every 20 minutes to a distance of 20 metres for 20 seconds. This helps avoid eye strain.

Finally and very importantly remember to take breaks regularly preferably every 45 minutes to an hour for 1 or 2minutes. Go get a glass of water talk to a colleague etc.

Energy and resource Conservation techniques

❖ This section explains how you can work in an office setting in an environmentally friendly way.

We all need to care for our environment, and there are many ways you can help, including the following.

• Switch off lights in storerooms, stationery rooms and toilets when they're not in use.

• Make sure your computer switches to standby when not in use.

• Make sure the photocopier switches to standby when not in use.

• Re label cardboard files and folders so you can use them again.

• Organize your desk so you can find pens and stationery easily and don't have to keep getting replacements. Saving paper is one of the most effective ways to conserve resources. You should:

• reduce paper use by using alternative ways to communicate (such as email)

• reuse paper (such as by turning it over and printing on the other side)

• recycle used paper so it can be turned into new products

Lap test 1	Adjusting your workstation to suit OHS requirements and according to energy and resource conservation techniques.

Name: _____   Date: _____

Time started: _____   Time finished: _____

Instructions: Given Necessary Information/Instruction, Equipment and Materials

you are required to do the following tasks.

Task one: Adjust your workstation to suit OHS requirements

Task two: use appropriate resource and energy and resource conservation techniques.

Instruction Sheet	LG34-Creating simple spreadsheets

This learning guide is developed to provide you the necessary information regarding the following content coverage and topics:

1.1. Checking and amending to Ensure data is entered

1.2. Format*ting spread sheet using* software functions

1.3. using and testing formulae to confirm output meets task requirements

1.4. Using manuals, user documentation and online help

This guide will also assist you to attain the learning outcome stated in the cover page.

Specifically, upon completion of this Learning Guide, you will be able to:

- Check and amending to Ensure data is entered

- Format spread sheet using software functions

- use and testing formulae to confirm output meets task requirements

- Use manuals, user documentation and online help

Learning Instructions:

1. Read the specific objectives of this Learning Guide.

2. Follow the instructions described below 3 to 6.

3. Read the information written in the information "Sheet 1, Sheet 2, and Sheet 3".

4. Accomplish the "Self-check 1, Self-check 2, Self-check 3 and self check 4" **in page -22, 25, 27, 29 and 32** respectively.

5. If you earned a satisfactory evaluation from the "Self-check" proceed to "Operation Sheet 1" **in page -33.**

6. Do the "LAP test" **in page – 34** (if you are ready).

Entering data

First you need a workbook

Before you start entering data, you need to decide whether this is a completely new project deserving a workbook of its own, or whether the data you are going to enter relates to an existing workbook. Remember that you can always add a new works heat to an existing workbook, and you'll find it much easier to do with related data if it's all stored in the same file.

Overview of data types

Excel allows you to enter different sorts of data into the cells on a worksheet, such as **dates**, **text**, and **numbers**. If you understand how Excel treats the different types of data, you'll be able to structure your worksheet as efficiently as possible.

- *Numbers lie* at the heart of Excel's functionality. They can be formatted in a variety of different ways – we'll get to that later. You should generally avoid mixing text and numbers.

- in a single cell, since Excel will regard the cell contents as text, and won't include the embedded number in calculations. If you type any spaces within a number, it will also be regarded as text.

2	✗	VAT @ 14%		text and numbers mixed
3	✓	VAT @	14%	text and numbers in separate cells

Note that dates and times are stored as numbers in Excel, so that you can calculate the difference between two dates. However, they are usually displayed as if they are text.

If a number is too large to be displayed in the current cell, it will be displayed as "#####". The formatting section of this manual explains how to widen a column.

- **Texts consist** mainly of alphabetic characters, but can also include numbers, punctuation marks and special characters (like the check mark in the example above). Text fields are not included in numeric calculations. If you want Excel to treat an apparent number as text, then you should precede the number with a single quotation mark ('). This can be useful when entering for example a phone number that starts with 0, since leading zeros are not usually displayed for Excel numbers. If a text field is too long to be displayed in the current cell, it will spill over into the next cell if that cell is empty, otherwise it will be truncated at the cell border. The formatting section of this manual explains how to wrap text within a cell.

- **Formulas** are the most powerful elements of an Excel spreadsheet. Every formula starts with an "=" sign, and contains at least one logical or mathematical operation (or special function), combined with numbers and/or cell references. We'll discuss formulas and functions in more detail later in the manual.

Using Auto fill

This is one of Excel's ingenious features! It takes no effort at all to repeat a data series (such as the days of the week, months of the year, or a numbers series such as odd numbers) over a range of cells.

Editing data

In data entry mode, when you move the cursor to a new cell, anything you type replaces the previous cell contents. Edit mode allow you to amend existing cell contents without having to retype the entire entry. Note that while you are in edit mode, many of the Ribbon commands are disabled.

Editing cell contents

There are two different ways to enter edit mode: either double-click on the cell whose contents you want to edit, or else click to select the cell you want to edit, and then click anywhere in the formula bar.

Your cell contents look correct in the formula bar, but don't display correctly in the worksheet?

Check whether either of these common problems is the wrong doer:

If a cell contains a number but displays #####, then the column is not wide enough to show the full data value. You need to make the column wider (see formatting).

If a cell contains text but chops off the display at the edge of the column, then you need to either widen the column or wrap the text within the column (see formatting).

Inserting or deleting cells

You can insert a new cell above the current active cell, in which case the active cell and those below it will each move down one row. You can also insert a new cell to the left of the current active cell, in which case the active cell and those on its right will each move one column to the right.

Navigating within a worksheet

Using the mouse:

✓ Use the vertical and horizontal scroll bars if you want to move to an area of the screen that is not currently visible.

✓ To move to a different worksheet, just click on the tab below the worksheet.

Using the keyboard:

✓ Use the arrow keys, or [PAGE UP] and [PAGE DOWN], to move to a different area of the screen.

✓ [CTRL] + [HOME} will take you to cell A1.

✓ [CTRL] + [PAGE DOWN] will take you to the next worksheet, or use [CTRL] + [PAGE UP] for the preceding worksheet.

You can jump quickly to a specific cell by pressing [F5] and typing in the cell address. You can also type the cell address in the name box abo**ve column A, and press [ENTER].**

Selecting cells

Using the mouse:

✓ Click on a cell to select it.

✓ You can select a range of adjacent cells by clicking on the first one, and then dragging the mouse over the others.

✓ You can select a set of non-adjacent cells by clicking on the first one, and then holding down the [CTRL] key as you click on the others.

Using the keyboard:

• Use the arrow keys to move to the desired cell, which is automatically selected.

• To select multiple cells, hold down the [SHIFT] key while the first cell is active, and then use the arrow keys to select the rest of the range.

Selecting rows or columns

To select all the cells in a particular row:

• click on the row number (1, 2, 3, etc) at the left edge of the worksheet

• Hold down the mouse button and drag across row numbers to select multiple adjacent rows.

• Hold down [CTRL] if you want to select a set of non-adjacent rows.

Similarly,

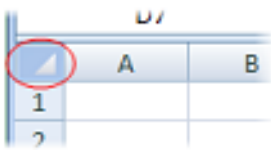*To select all the cells in column:*

• Click on the column heading (A, B, C, etc) at the top edge of the worksheet.

• Holddown the mouse button and drag across column headings to select multiple adjacent columns.

• Holddown [CTRL] if you want to select a set of non-adjacent columns.

To select all the cells in a worksheet

✓ clicking the square to the immediate left of the Column A heading (just above the label for Row 1)

Self-Check -1	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Write the three types of data (3 points)
2. Every formula starts with the _____ sign.(1points)
3. ---------contains mainly of alphabetic characters, but can also include numbers, punctuation marks and special characters.(1point)
4. If a __ is too large to be displayed in the current cell, it will be displayed as "*#####*".(1 point)

Note: Satisfactory rating – 3 and above points Unsatisfactory - below 3 points

Answer Sheet

Score = _____

Rating: _____

Name: _____   Date: _____

Information Sheet-2	*Format*ting spread sheet using *software functions*

.

Formatting data

Cell formatting

The icons on the Home ribbon provide you with a variety of formatting options. To apply any of these, just select the cell or cells that you want to format, and then click the desired icon. Commonly used formatting attributes include:

Font and size

Bold, Italic, Underline

Cell borders

Background and Font color

Alignment: Left, Centre or Right

Merge text across multiple cells

Wrap text within a cell

Rotate angle of text

Format number as Currency, Percentage or Decimal

Increase or Decrease number of decimal places

The Format Painter allows you to copy formatting attributes from one cell to a range of cells.

Formatting rows and columns

Any of the cell formatting options above can easily be applied to all the cells contained in one or more rows or columns. Simply select the rows or columns by clicking on the row or column labels, and then click on the formatting icons that you want to apply.

Hiding rows and columns

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If your spreadsheet contains sensitive data that you don't want displayed on the screen or included in printouts, then you can hide the corresponding rows or columns. The cell values can still be used for calculations, but will be hidden from view.

Keeping row and column headings in view

If you scroll through a lot of data in a worksheet, you'll probably lose sight of the column headings as they disappear off the top of your "page". This can make life really difficult – imagine trying to check a student's result for tutorial 8 in row 183 of the worksheet! And it's even more difficult if the student's name in column A has scrolled off the left edge of the window.

The Freeze Panes feature allows you to specify particular rows and columns that will always remain visible as you scroll through the worksheet. And it's easy to do!

Select a cell immediately below the rows that you want to remain visible, and immediately to the right of the columns that you want to remain visible. For example, if you want to be able to see Rows 1 and 2, and column A, then you would click on cell B3.


Inserting or deleting rows

When you insert a row, the new row will be positioned **above** the row containing the active cell.

Inserting or deleting columns

When you insert a column, the new column will be positioned on the **left** of the column containing the active cell.

Inserting or deleting a worksheet

To insert a new worksheet at the end of the existing worksheets, just click the Insert Work sheet tab at the bottom of the screen.
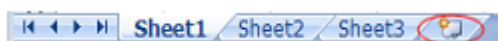
The simplest ways to insert, delete, rename, move or copy a worksheet is to right-click on the worksheet tab, and then select the desired option from the pop-up menu.

Self-Check -1	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page

1. The icons on the _____ ribbon provide you with a variety of formatting options. (1 point)
2. Common formatting attribute in excel inc_____(10 points)
3. When you insert a row, the new row will be positioned _____ the row containing the active cell.(1 point)

4. When you insert a column, the new column will be positioned on the _____ of the column containing the active cell.(1 point)

Note: **Satisfactory rating – 7 and above points Unsatisfactory - below 7 points**

You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score = _____

Rating: _____

Name: _____   Date: _____

Formulas

Formulas are the key to Excel's amazing power and versatility! By using a formula, you can find the answer to virtually any calculation you can think of! In this section I'm going to explain how to construct a formula, and give you some guidelines to ensure that your formulas work correctly.

Creating a formula

Rule number one: a formula always starts with an equals sign ("="). This lets Excel know that it's going to have to work something out.

In the body of the formula, you're going to tell Excel what you want it to calculate. You can use all the standard math's operations, like addition and multiplication, and you can include numbers, cell references, or built in functions (which are covered in the next section of this manual).

For example, suppose you have retail business. You buy stock at cost price, and add a 25% markup to calculate your selling price. VAT must be added to that at 14%. You give a 5% discount to long-standing customers who pay their accounts promptly. Let's look at how formulas can make the calculations simple for you:

G5			f_x	=F5*95%			
	A	B	C	D	E	F	G
							Discounted
1	**Stock item**	**Cost price**	**Markup**	**Retail price**	**VAT**	**Selling price**	**price**
2	Desk	R 1,500.00	R 375.00	R 1,875.00	R 262.50	R 2,137.50	R 2,030.63
3	Chair	R 600.00	R 150.00	R 750.00	R 105.00	R 855.00	R 812.25
4	Filing cabinet	R 1,000.00	R 250.00	R 1,250.00	R 175.00	R 1,425.00	R 1,353.75
5	Bookcase	R 800.00	R 200.00	R 1,000.00	R 140.00	R 1,140.00	R 1,083.00

- In column A, the Stock Item labels have just been typed in.
- In column B, the Cost Price values have just been typed in.
- In column C, I've used a formula. Cell C2contains "=B2 * 25%". This works out 25% of the value in cell B2 (cost price), and displays the result in cell C2 (markup).

- In column D, I've used a formula. Cell D2 contains "=B2 + C2". This adds the values in cells B2 (cost price) and C2 (markup), and displays the result in cell D2 (retail price).
- In column E, I've used a formula. Cell E2contains "=D2 * 14%". This works out 14% of the value in cell D2 (retail price), and displays the result in cell E2 (VAT).
- In column F, I've used a formula. Perhaps by now you can work it out for yourself? Cell F2 contains "=D2 + E2". This adds the values in cells D2 (retail price) and E2 (VAT), and displays the result in cell F2 (selling price).

- In column G, I've used a formula. Cell G2contains "=F2 * 95%". This works out 95% of the value in cell F2 (selling price), and displays the result in cell G2 (discounted price).

And the great thing about using formulas in Excel is that you can copy them just as you do values. So once you've entered all the formulas in row 2 and checked that they are correct, you just need to

1. Select the cells in row 2 that contain your formulas (cells C2 to G2).

2. Move the cursor over the fill handle in the bottom right corner of the selected cells. It will change shape to a black cross.

3. Hold down the mouse button and drag the selected cells over rows 3 to 5. The values in cells
   C3 to G5 are automatically calculated for you! How cool is that?

How formulas are evaluated

Now let's look at some of the rules for creating formulas:

The operators that you need to know are

+ Addition

- Subtraction

* Multiplication

/ Division

^ Exponentiation ("to the power of") & to join two text strings together

These operations are evaluated in a particular order of precedence by Excel:

- Operations inside brackets are calculated first
- Exponentiation is calculated second.
- Multiplication and division are calculated third.
- Addition and subtraction are calculated fourth.
- When you have several items at the same level of precedence, they are calculated from left to right.

Let's look at some examples:

= 10 + 5 * 3 – 7 (result: 10 + 15 – 7 = 18)

= (10 + 5) * 3 – 7 (result: 15 * 3 – 7 = 38)

= (10 + 5) * (3 – 7) (result: 15 * -4 = -60)

If you're not sure how a formula will be evaluated - use brackets!

Relative cell referencing

Remember in the pricing example above, how you just had to copy the formulas in row 2 and the remaining values were automatically calculated?

Look again in the formula bar of that screenshot. Although the formula that you copied from cell G2 was "=F2 * 95%", the formula in cell G5 reads "=F5 * 95%". The original reference to row 2 in the formula has changed to a reference to row 5. This is called relative addressing, and it's an important concept.

Relative addressing is what Excel uses by default. This means that when you copy or move a formula to a new location in a worksheet (or even to another workbook), Excel automatically adjusts the cell references in the copied formula to be consistent with the original formula. If the original formula referenced a value five columns to the left and two rows down, then the copied formula will do the same.

Does this concept make sense? If not, then give it some careful thought, because it's important that you understand it.

Absolute cell referencing

Now we're going to improve the structure and usability of our pricing model. After all, there's no guarantee that your markup will always be 25%- in these tough economic times you may need to reduce it to remain competitive. And what if the VAT rate changes? Or maybe you decide to increase the discount to encourage customers to pay promptly?

The following example shows you how to construct the worksheet so that it allows for future changes in the business.

The following example shows you how to construct the worksheet so that it allows for future changes in the business.

	C5		f_x =B5*B1				
	A	B	C	D	E	F	G
1	Markup rate:	25%					
2	VAT rate:	14%					
3	Discount rate:	5%					
4	Stock item	Cost price	Markup	Retail price	VAT	Selling price	Discounted price
5	Desk	R 1,500.00	R 375.00	R 1,875.00	R 262.50	R 2,137.50	R 2,030.63

Here I've made life a lot easier for myself by showing the markup, the VAT rate, and the customer discount, in cells A1 to B3. I no longer have to remember what values I used in my formulas – I can just look at the top of the worksheet.

Now my formulas need to change, so that they refer to the values in cells B1 to B3 instead of physically typing the actual percentages in each formula.

- The formula in cell C5 will become "=B5 * B1", instead of the previous "=B5 * 25%". This multiplies the value in cell B5(cost price) by the value in cell B1 (markup rate), and displays the result in cell C5 (markup).
- The formula in cell E5 will become contains"=D5 * B2", instead of the previous "=D5 * 14%". This multiplies the value in cell D5 (retail price) by the value in cell B2 (VAT rate), and displays the result in cell E5 (selling price).

Check that you follow the logic so far. If not, please go through it again. BUT... Stop right here! Do you see the problem ahead?

When I copy my new formulas from row 5 into rows 6 to 8, Excel is going to use relative addressing. The formula in cell C5 refers to cell B1 (the markup rate). When I copy the formula to the next row, it will want to refer to cell B2 (the VAT rate), instead of cell B1 (the markup rate). By the time I've finished copying; my spreadsheet will look like this:

	C5		f_x	=B5*B1			
	A	B	C	D	E	F	G
1	Markup rate:	25%					
2	VAT rate:	14%					
3	Discount rate:	5%					
4	Stock item	Cost price	Markup	Retail price	VAT	Selling price	Discounted price
5	Desk	R 1,500.00	R 375.00	R 1,875.00	R 262.50	R 2,137.50	R 2,030.63
6	Chair	R 600.00	R 84.00	R 684.00	R 34.20	R 718.20	#VALUE!
7	Filing cabinet	R 1,000.00	R 50.00	R 1,050.00	#VALUE!	#VALUE!	#VALUE!
8	Bookcase	R 800.00	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!

Clearly something is very wrong!

Relative addressing makes working with formulas really easy, but sometimes you don't want the referencing in the formula to change as the formula is copied. Then you need to use absolute addressing. Absolute addressing fixes a cell reference so that regardless of where the formula is copied to, it will always reference the same original cell. This feature takes the versatility of formulas to the next level!

To use absolute addressing in a formula, all you need do is to click on the cell reference that you want to remain fixed, and then press the [F4] key. Take for example the formula in cell C5:

Using relative addressing, the formula looked like this: = B5 * B1

1. Double click on cell C5 to enter edit mode.

2. In the formula bar, click on the cell reference "B1" and press [F4] on the keyboard.

3. The formula changes to: =B5 * B1. Note that cell reference B5 must retain its relative addressing, since you want to multiply each different cost price by the same fixed markup rate.

4. Press [ENTER] to accept the change.

Instead of using the [F4] key to make a cell reference absolute, you can simply type the dollar signs if you prefer to do so. Once all the formulas in row 5 have been corrected to use absolute referencing, you can copy them into rows 6 to 8. The following screenshot shows the result – now it all works perfectly!

	C5			f_x =B5*B1			
	A	B	C	D	E	F	G
1	Markup :	25%					
2	VAT:	14%					
3	Discount:	5%					
4	Stock item	Cost price	Markup	Retail price	VAT	Selling price	Discounted price
5	Desk	R 1,500.00	R 375.00	R 1,875.00	R 262.50	R 2,137.50	R 2,030.63
6	Chair	R 600.00	R 150.00	R 750.00	R 105.00	R 855.00	R 812.25
7	Filing cabinet	R 1,000.00	R 250.00	R 1,250.00	R 175.00	R 1,425.00	R 1,353.75
8	Bookcase	R 800.00	R 200.00	R 1,000.00	R 140.00	R 1,140.00	R 1,083.00

Any future changes to the markup rate, VAT rate or discount rate need only be entered once in cells B1 to B3 (where they are clearly visible), and the calculated values from row 5 downwards will automatically be updated!

Functions

Excel provides a wide range of built-in functions that can be included in your formulas to save you the effort of having to specify detailed calculations step-by-step. Each function is referred to by a specific name, which acts as a kind of short hand for the underlying calculation.

Because a function is used inside a formula, you'll still need to start off with an equals sign to show Excel that a calculation is required.

Using AutoSum

Because addition is the most frequently used Excel function, a shortcut has been provided to quickly add a set of numbers:

Basic functions

Some of the most commonly used functions include:

SUM () to calculate the total of a set of numbers

AVERAGE () to calculate the average of a set of numbers

MAX () to calculate the maximum value within a set of numbers

MIN () to calculate the minimum value within a set of numbers

ROUND () to round a set a values to a specified number of decimal places

TODAY () to show the current date

IF () to calculate a result depending on one or more conditions

So how do you use a function?

A function makes use of values or cell references, just like a simple formula does. The numbers or cell references that it needs for its calculations are placed in brackets after the name of the function.

To give a simple illustration:

The formula: is equivalent to the function:

= 12 + 195 + 67 – 43 = SUM (12, 195, 67, -43)

= (B3 + B4 + B5 + B6) =SUM (B3:B6)

= (B3 + B4 + B5 + B6)/4 = AVERAGE (B3:B6)

Several popular functions are available to you directly from the Home ribbon. If you want to use a function that isn't directly available from the drop-down list, then you can click on More Functions to open the Insert Function dialog box. Another way to open this dialog box is to click the Insert Function icon on the immediate left of the formula bar.

The Insert Function dialog box displays a list of functions within a selected function category. If you select a function it will briefly describe the purpose and structure of the function.

The IF () function

The IF () function is getting a section all of its own, because for many people it's not as intuitive to understand as the common math's and stats functions.

The IF () function checks for a specific condition. If the condition is met, then one action is taken; if the condition is not met, then a different action is taken. For example, you may be reviewing a set of tutorial marks. If a student's average mark is below 50, then the cell value

should be FAIL; so the condition you are checking is whether or not the average result is below 50. If this condition is not met (that is, the average result is 50 or more), then the cell value should be PASS.

Let's see this in action:

The structure of an IF () function is:

=IF (condition, result if true, result if false)

Using English to describe our example as an IF statement: IF the average mark is less than 50, then display the word "FAIL", else display the word "PASS".

Data manipulation

The features mentioned in this section are most relevant when you're working with a large data set – perhaps several hundred, or even thousand records – and it isn't practical to scroll through the entire worksheet each time you want to find a particular record.

To use data functions effectively, each column of your worksheet should contain the same data type, apart from the column heading. Ideally, row 1 should contain the column headings, with the data rows immediately below; this structure is referred to as a *data table*. If you have blank rows in your data set, then you'll need to manually select the data to be manipulated, which you don't really want to do.

Sort

The sort function does exactly what it says: it sorts your data records based on the criteria hat you specify. You can sort numbers, text or dates, in either ascending (default) or descending order. Blank cells are always placed last in a sort.

If you want to sort an *entire data table*:

Click anywhere in the column that you want to sort by.

On the Home ribbon, select *Sort & Filter*.

Choose either Ascending (Sort A to Z) or Descending (Sort Z to A) order.

Your data will be sorted based on the value in the column that you initially clicked on.

If you want to sort on two or more criteria (columns), or if you want to sort a range of cells, then you need to do a *custom sort*:

1. Click in the data table, or select the cells to be sorted.

2. On the Home ribbon, select **Sort & Filter**, and choose **Custom Sort**. The Sort

Window will open.

3. In the **Sort By** field, use the drop-down arrows to select the column that you want to sort by and the order (ascending or descending) to be used.

4. If you want to add another sort criterion, then click the **Add Level** button, and a second details row will appear in the window. Again, choose the sort column and sort order.

5 Add more levels (or delete levels) as required.

6. When you click the **OK** button at the bottom of the window, your data will be sorted.

Note that the Sort function is also available from the Data ribbon.

Remember that you can rely on the **Undo** button if you don't like the result that you get!

Filter

The filter function lets you view just the records that you want to see! The other records in

your data table will still be there, but hidden. To use this amazing function:

1. On the Home ribbon, select **Sort & Filter**, and select the **Filter** option

in the first row of your data table, a drop-down arrow will appear on the right of each column heading. When you click on a drop-down arrow, you'll see a list of all the values occurring in that column. Press [ESC] to close the filter list.

If you want to view records with a particular value only, click to uncheck the Select All option, and then check one or more values that you want to view. Click the *OK* button. (The example above has already been filtered on Product, Delivery month and Customer Type, and is about to be filtered on Discount as well.)

All rows that do not contain the value(s) you checked will be hidden from view. A column that has been filtered will show a funnel icon next to the drop-down arrow on the heading.

Repeat the filtering process for as many columns as you need. You can remove a *Select All* option

To clear your previous filter settings, select *Sort & Filter*, and then *clear*.

To turn off filtering, select *Sort & Filter*, and then *Filter* (the same option that you originally used to turn it on).

1. _____sorts your data records based on the criteria hat you specify.(1 point)
2. _____is what Excel uses by default. .(1 point)
3. _____is the most frequently used Excel function. .(1 point)
4. _____displays a list of functions within a selected function category.(1 point)
5. _____function checks for a specific condition. .(1 point)

Note: **Satisfactory rating – above 3 points**   **Unsatisfactory - below 3 points**

You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score = _____

Rating: _____

Name: _____   Date: _____

Short Answer Questions

How to get help there are several ways to get help with a computer program you're using.
Manuals In the past, all computer programs were supplied with an operator's manual. This was usually a fairly thick book with step-by-step instructions and an index at the back. Manuals are less common now, because the complexity of modern programs means they would have to be very thick, and software companies are rightly conscious of conserving the resources needed to print such thick books. Also, the speed at which new versions of programs are released means that a manual is likely to become out of date in a very short time.

The Help function: All computer programs have a Help function. There is usually a help button on the menu bar at the top of the screen. The F1 key is assigned by nearly all software programs as the shortcut way to get help. Depending on the program, its age and whether the computer has access to the internet, the help screen may be supplied by the program on the hard drive or by connecting to the software supplier's website. Most programs' help screens have a choice of an index, a table of contents and a search function.

Other ways of getting help if you can't find the answer to your problem using the Help function, try asking a question in your favorite search engine. Try something like 'How do I do such and such in [insert your program]?' You may be surprised at the results!

1. _____is the short cut key to get help.(1 point)
2. All computer programs have a Help function. A. true b false .(1 point)

Note: **Satisfactory rating – above 1 points**   **Unsatisfactory - below 1 point**

You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score = _____

Rating: _____

Name: _____   Date: _____

Short Answer Questions

Techniques to create simple spreadsheet

1. Checking and amending to Ensure data is entered
2. Formatting spread sheet using software functions
3. using and testing formulae to confirm output meets task requirements
4. Using manuals, user documentation and online help

.

| Lap taste | create simple spreadsheet |

Name: _____   Date: _____

Time started: _____   Time finished: _____

Instructions: Given Necessary Information/Instruction, Equipment and Materials you are required to create a simple spreadsheet document.

Task one: Open a new workbook, and create a spreadsheet that will calculate the weekly wages for A1 Constructions.

Task two: use manuals and get online help when you are in need

Task three: calculate over time for the employees (The overtime (OT) rate is 1.5 times the ordinary rate.)

Task four: calculate tax (Tax is calculated at 32 cents in the dollar, after the $104 tax-free deduction.)

Task five: calculate the minimum, maximum and average from each column

Task six : Finally, give your spreadsheet a heading, and apply some formatting to enhance the appearance of your worksheet, such as bold, text colour, text size, borders, etc – **be imaginative**!

Your spreadsheet should have nine columns, and formulas should calculate amounts for the **Pay hours**, **Gross pay**, **Tax** and **Net pay** columns.

NAME	Normal hours	OT HRS	PAY OURS	HOURLY RATE	GROSS PAY	TAX	DEDUCTIONS	NET PAY

Below is the information for their six employees for the week ending 19 April.

No	Name	Ordinary hours	Overtime (OT) hours	Hourly rate ($)	Miscellaneous deductions ($)
1	Andrews	38	10	25.36	38
2	Brown	38	10	28.50	-
3	Carter	38	8	18.75	26
4	Davis	30	-	22.90	-
5	Edwards	38	-	28.5	20
6	Fletcher	38	4	24.	10
Minimum					
Maximum					
Average					

This learning guide is developed to provide you the necessary information regarding the following content coverage and topics:

3.1 Selecting chart type and design that enables valid representation of numerical data

3.2 Creating chart using appropriate data range

3.3 Modifying chart type and layout

This guide will also assist you to attain the learning outcome stated in the cover page.

Specifically, upon completion of this Learning Guide, you will be able to:

- Select chart type and design that enables valid representation of numerical data

- Create chart using appropriate data range

- Modify chart type and layout

Read the specific objectives of this Learning Guide.

1. Follow the instructions described below 3 to 6.

2. Read the information written in the information "Sheet 1, Sheet 2, and Sheet 3,".

3. Accomplish the "Self-check 1, Self-check 2 and Self-check 3" **in page -39, 42, 44 and 47 respectively.**

4. If you earned a satisfactory evaluation from the "Self-check" proceed to "Operation Sheet 1" **in page -48.**

5. Do the "LAP test" **in page – 49** (if you are ready).

Information Sheet-1	Selecting chart type and design that enables valid representation of numerical data

Charts

Charts are used to summarize data, and to show proportions, trends, exceptions and so on. Most spreadsheet programs have a Chart Wizard that will guide you through the steps of choosing and setting up a chart. When you click on a chart, a Chart Tools section appears on your Ribbon, with Design, Layout and Format tabs. Use the Design tab to quickly select and change the chart type, or to swap data rows and columns.

Self-Check -1	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. ___are used to summarize data, and to show proportions, trends, exceptions and so on.**(1 point**)
2. ___guide you through the steps of choosing and setting up a chart. **.(1 point**)

Note: **Satisfactory rating – more than 1point**   **Unsatisfactory - below 1 point**

You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score = _____

Rating: _____

Name: _____   Date: _____

Short Answer Questions

Charts

A picture is worth a thousand words! Often it's much easier to understand data when it's presented graphically, and Excel provides the perfect tools to do this!

It's worth starting with a quick outline of different data types and charts:

Categorical data items belong to separate conceptual categories such as knives, forks and spoons; or males and females. They don't have inherent numerical values and it doesn't make sense to do calculations such as finding an average category. A pie chart or column chart is most suitable for categorical data.

Discrete data items have numerical values associated with them, but only whole values; for example, the number of TV sets in a household. Again, average values don't make much sense. Discrete data is often grouped in categories ("less than three", "four or more") and treated as categorical data.

Continuous data refers to numerical values that have an infinite number of possible values, limited only by the form of measurement used. Examples are rainfall, temperature, time.

Where discrete data has a very large number of possible values, it may also be treated as continuous. Continuous data is well suited to line graphs, which are very useful for illustrating trends.

Of course, Excel offers you many more chart types than just these three. Do remember that it's best to select a chart type based on what you're trying to communicate.
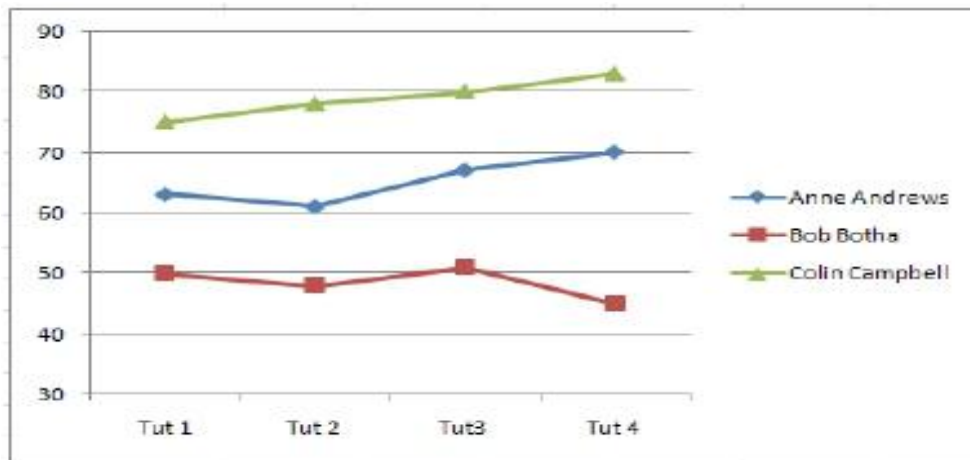
Creating a chart

It's very easy to create a basic chart in Excel:

1. Select the data that you want to include in the chart (together with column headings if you have them).

2. Find the Charts category on the Insert ribbon, and select your preferred chart type.
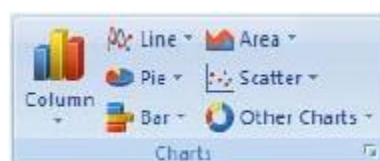
3. That's it! The chart appears in the current window. Move the cursor over the Chart

Area to drag it to a new position

When you click on a chart, a Chart Tools section appears on your Ribbon, with Design, Layout and Format tabs. Use the **Design** tab to quickly change the chart type, or to swap data rows and columns.

In this example, I've changed the previous chart type to Column, and swapped rows and columns. All it took was two mouse clicks!
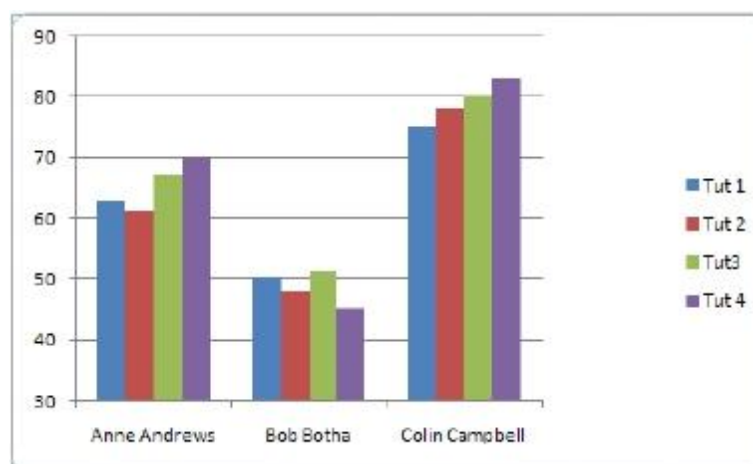
Use the **Layout** tab to add a Chart title, and to provide axis and data labels. Use the **Format**
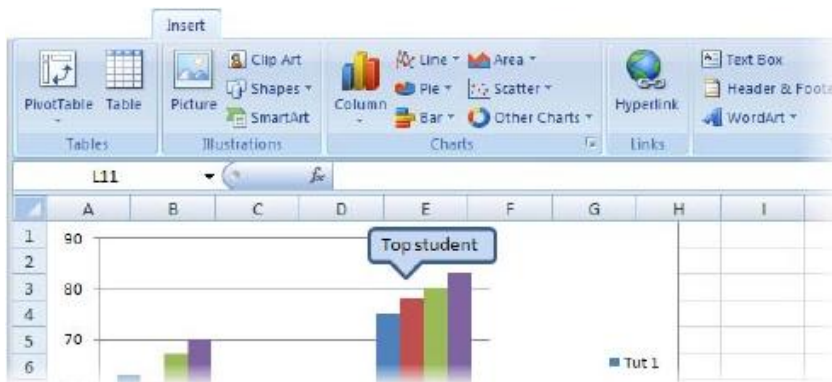
tab to add border and fill effects.

Inserting graphics in a worksheet

Sometimes you may want to add graphics, for example a corporate logo, to a worksheet. The good news is that images, ClipArt and WordArt are available in Excel, along with a host of call-out shapes that you can use to label your charts. You'll find them all on the *Insert* ribbon.

Self-Check -2	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. _____ is most suitable for categorical data. (1 point)

2. _____data items have numerical values associated with them, but only whole value(1 point)

3. _____refers to numerical values that have an infinite number of possible values, limited only by the form of measurement used. (1 point)

Note: **Satisfactory rating – 2 and above points   Unsatisfactory - below 2 points**

You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score = _____
Rating: _____

Name: _____   Date: _____

Short Answer Questions

Information Sheet-3	Modifying chart type and layout

Modifying a chart

When you click on a chart, a Chart Tools section appears on your Ribbon, with Design, Layout and Format tabs. Use the **Design** tab to quickly change the chart type, or to swap data rows and Columns. In this example, I've changed the previous chart type to Column, and swapped rows and columns. All it took was two mouse clicks!   Use the **Layout** tab to add a title, and to provide axis and data labels. Use the **Format** tab to add border and fill effects.

Self-Check -3	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Write the functions of copy, cut and paste? (3 points)
2. write the steps to rename files/folders .(4 points)
3. What do you do to Select and open more than one file at the same time? (2 points)

Note: **Satisfactory rating – 5 and above points   Unsatisfactory - below 5 points**

You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score = _____

Rating: _____

Name: _____   Date: _____

General Procedures to produce simple charts:

1. Selecting chart type and design that enables valid representation of numerical data
2. Creating chart using appropriate data range
3. Modifying chart type and layout

Lap taste	Preparing a simple worksheet

Name: _____   Date: _____

Time started: _____   Time finished: _____

Instructions: Given Necessary Information/Instruction, Equipment and Materials you are required to produce a chart from the following spreadsheet document.

Use the following information to calculate students' grade out of 100, their achievements and grade:

- Result of the students out of 100 is the sum of their 40% and the 60 %

- Average and rank is calculated from their total result

- Achievement is equal to 9% of the total result

- Grade based on : Total Result as >=90 A, <= 80 B,<>=70 C, <=60 D, <50 F

- sort the data in an ascending order using the total of the students

- filter students who score >=50

- show the students with their final grade on the appropriate chart

N0	Name of the student	40%	60%	100%	total	achievements	grade
1	Hiwot	40	54				
2	Biniam	32	32				
3	Hanna	24	30				
4	Senait	15	60				
5	Yeshimebet	37	55				
6	Kidist	12	19				
7	Edlawit	21	47				
8	Zemzem	29	57				
9	Frehiwot	30	50				
10	Mesfin	39	20				

This learning guide is developed to provide you the necessary information regarding the following content coverage and topics:

4.1 Previewing, adjusting and printing spread sheet and any accompanying charts

4.2 Ensuring data input to meet design at timelines

4.3 Naming and storing spread sheet

This guide will also assist you to attain the learning outcome stated in the cover page.

Specifically, upon completion of this Learning Guide, you will be able to:

- Previewing, adjusting and printing spread sheet and any accompanying charts

- Ensuring data input to meet design at timelines

- Naming and storing spread sheet

Learning Instructions:

1. Read the specific objectives of this Learning Guide.

2. Follow the instructions described below 3 to 6.

3. Read the information written in the information "Sheet 1, Sheet 2, and Sheet 3".

4. Accomplish the "Self-check 1, Self-check t 2, and Self-check3" **in page -55, 57, 60 and 62** respectively.

5. If you earned a satisfactory evaluation from the "Self-check" proceed to "Operation Sheet 1" **in page -63.**

6. Do the "LAP test" **in page – 64** (if you are ready).

PRINT

To print the worksheet, select Print from Office Button.

1. **Print Range** - Select either all pages or a range of pages to print.

2. **Print** What - Select selection of cells highlighted on the worksheet, the active worksheet, or all the worksheets in the entire workbook.

3**. Copies** - Choose the number of copies that should be printed. Check the Collate box if the pages should remain in order.

4. Click **OK** to print.

By default, Excel prints all the data on the current worksheet. If your worksheet extends over several pages, it's worth making sure that the printed copy will be easily readable. Here are a few tips.

Print preview

Start by using Print Preview to see what your data will look like when it's printed. Print preview helps to view the worksheet before the final printout is taken. It helps to edit the worksheet if required as per the need.

Preparing to print

Your best option is to use the Page Layout ribbon for this. (Some of the same options are available from inside Print Preview, but many of them aren't.)

- Use the Orientation button to swap between portrait and landscape mode.
- Use the Print Area button to select a subset of your data for printing. (The data that you want included in the print area should be selected before you click this icon.)
- Use the Breaks button to insert a page break immediately above the currently active cell, or to remove previously specified page breaks.

The Print Titles button takes you to the Page Setup dialogue box, which has four tabs that allow you to do a whole lot more than printing titles.

The Page tab is used to set orientation and scaling.

The Margins tab is used to adjust page margins.

The Header/Footer tab allows you to enter a header or footer to be repeated on every page.

This is where you would include page numbers.

The Sheet tab lets you specify rows that are to be repeated at the top of each sheet (such as column headings), and columns to be repeated at the left of each sheet (such as student names).

You can also adjust the print area under this tab. If you don't know the cell ranges to be included in the print area, or to be repeated on each page, then you can either drag the dialog box to a different area of the screen, or else click the collapse dialog button on the right of the data entry field to allow you to navigate within the worksheet.

Self-Check -3	**Written Test**

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. ____ is used to see what your data will look like when it's printed? (1 points)
2. ____allows you to enter a header or footer to be repeated on every page. .(1 point)

Note: **Satisfactory rating – 5 and above points   Unsatisfactory - below 5 points**

You can ask you teacher for the copy of the correct answers.

<div align="center">**Answer Sheet**</div>

Score = _____

Rating: _____

Name: _____   Date: _____

14 Essential Tips for Meeting a Deadline

Your reputation as a freelancer is pretty much the only thing you have to go on -- your bread and butter.

And your reputation is generally based on two things: the quality of your work, and how well you meet deadlines.

Today, we'll focus on meeting deadlines, as that's the area that many freelancers have problems with. Sure, you can do great work, but if you don't turn your projects in on time, you won't get many repeat customers.

1. Care about deadlines. This is the first step, as many people are very lax about deadlines. You have to be very serious about meeting them, and make them a priority. And make breaking a deadline a cardinal sin in your freelance book. Once you've done this step, the rest is just logistics.

2. Keep a list of projects & deadlines. If you care about deadlines, you'll write them down, and have one place that you check often to make sure you know what's due and when. I use a simple online list, but you could use paper. Which tool you use doesn't matter, as long as you use it.

3. Communicate a clear deadline. Be sure that you and the client are in agreement with a specific deadline, including time of day (and factor in time zone differences as well). If the deadline is fuzzy, you will have trouble meeting it. If the client doesn't give you a deadline, you need to ask for one.

4. Work in a cushion. It's wise to build in a cushion for your deadline. To get a clear idea of how long a project will take, break it down into smaller pieces (see below for more). If you aren't sure exactly how long each of those pieces takes, break them down into even smaller pieces. And for each piece, add a small cushion to your time estimate. Then add up the time estimates of all the pieces and you'll have a cushion built in. This will allow for delays, and if you finish early, the client will be pleased.

5. Have a clear outcome. You and the client should both agree on a clearly defined outcome. Don't skip this step, or you could be sorry later. If you turn in a project that's not what the client wanted, you'll have to do extra work, meaning that you'll miss the deadline. If you're not absolutely clear what the outcome should look like, ask some questions of the client until you are clear.

6. Break down the project. This is standard advice for any project, of course, but that's because it works. Don't try to tackle an entire project. Tackle one step at a time. Again, you'll want to break it down into smaller steps, give a time estimate for each step. Each step should be small enough that it takes an hour or less, so it's not too intimidating.

7. Focus on the first step. Now that you've broken the project down into smaller steps, just focus on the first one. Don't worry about the rest for now. Give the first step your full attention, and get going. You'll feel satisfied when you complete it, and can check it off your list. Then focus on the next step.

8. Block off adequate time. When you're going to work on a step, be sure to have it blocked off on your day's schedule. If you're not blocking off time for your most important tasks, you're probably not getting the important stuff done. However else you work during the rest of the day, for your freelance projects, block off a good amount of time for each step, and treat it like a doctor's appointment -- you can't miss it.

9. Have a start and complete date for each step. When breaking down a project, give a start and complete date for each step, so you can get a good feel for the timeline of the project, and whether you're on schedule or behind. It also keeps you on track if you know when each step should be started and completed.

10. Communicate with each step. Once you've completed a step, send the completed step to your client if possible. Sure, it won't look like a completed project, but you can show that you're making progress, you keep yourself on track, and you can get feedback communicated from the client. Better to know early on that you're headed in the wrong direction than at the end of the project.

11. Don't over commit. One of the biggest causes of missed deadline is that a freelancer commits to more than he can handle. Learn to say no if you cannot commit to finishing a project on time.

12. Learn from mistakes. If you bust a deadline, take a few minutes to analyze what went wrong and how you can avoid that in the future.

13. Stay up late. If you planned badly, or just procrastinated, and you're up against a tight deadline, do whatever it takes to meet it. That means staying up late and working long hours if possible.

14. Negotiate and meet a second deadline. If you absolutely cannot make deadline (you probably overcommitted), you should contact your client and negotiate a second deadline. It's much better to do this than to let the deadline go by without any communication. Whatever you do, be sure to meet this second deadline. Two missed deadlines in a row is bad news for a freelancer's reputation.

Self-Check -2	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Reputation at a work place is mainly based on two important things: _____ and _____ (**points**)

2. What are the first six important points that are suggested to meet deadlines? (6 **points**)

Note: **Satisfactory rating – above 4 points   Unsatisfactory - below 4 points**

You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score = _____

Rating: _____

Name: _____   Date: _____

Short Answer Questions

Information Sheet-3	Naming and storing spread sheet

Saving a workbook

So now it's time to save your work. As usual, you need to specify the file name, and its location (drive and folder). Every time you save or Save As in Excel, the entire workbook is saved. This is another good reason for keeping related data on different worksheets in the same workbook! When you're working in the UCT computer labs, remember to save to the F: drive, so that you'll be able to access your work again later.

To save a workbook

1. Click the Office button and select Save, or click the Save icon on the Quick Access toolbar. If this workbook has been saved before, then that's it – your workbook will be saved again with the same name and location.
2. If it's the first time of saving this workbook, then the Save As dialogue box will open.

3. Click the drop-down arrow next to save into select the desired drive and folder.

4. Type the new file name in the File Name field.

5. Click the Save button.

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Write the procedures to be followed to save your work book (**2 points**)

Note: **Satisfactory rating – above 4 points**   **Unsatisfactory - below 4 points**

You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score = _____

Rating: _____

Name: _____   Date: _____

Short Answer Questions

Operation Sheet 1-

Procedures to Finalize the spreadsheet

Procedures to finalize a spreadsheet document

1. Previewing, adjusting and printing spread sheet and any accompanying charts
2. Ensuring data input to meet designated timelines
3. Naming and storing spread sheet

Lap taste 1

Finalizing the spreadsheet

Name: _____   Date: _____

Time started: _____   Time finished: _____

Instructions: Given Necessary Information/Instruction, Equipment and Materials

you are required to prepare and finalize the following document on a spreadsheet.

Task one: Open a new workbook, and create a spreadsheet that will calculate the following students' data

Task two: save the spreadsheet as "final data "on my document

Task three: preview and print the document

Students Data					
Name	**Sex**	**Age**	**Course start Date**	**Course end Date**	**Fee(birr)**
Seblewongel	F	21	03/08/11	07/25/11	580
Shewit	F	24	04/08/11	08/20/11	970
Elsabet	F	20	12/28/11	03/17/11	1200
Abel	M	19	09/20/11	12/20/11	850
Helen	F	22	05/29/11	08/10/11	1600
Eyob	M	23	01/01/11	04/25/11	950
Daniel	M	20	08/08/11	11/07/11	1100
Betty	F	x19	07/12/11	11/29/11	1500