ICT
Module

SKILLS FOR A CHANGING WORLD

Workshop Series 2010

SFCW

Skills for a Changing World Programme

LET YOUR FUTURE TAKE FLIGHT
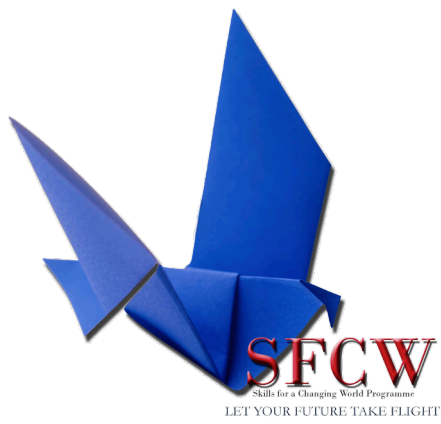
Module Development Team

**Module
Co-ordinator:**   Andrew Moore

Authors: Andrew Moore
                       Donna Preston
                       Derek Moore

Co-writers: Catherine MacDonald

Acknowledgements

Module Coordinators can add additional acknowledgements as needed

Introduction

Programme Map

Skills for a changing world programme overview of modules

NQF level 5

Core Modules

English LANGUAGE	Mathematical LITERACY	ICT	YGPS (life-long learning skills)

Integrated Assessment Project

Critical,

developmental

competencies

integrated in

the programme

* Compulsory Supplementary modules

ECONOMICS

HUMANITIES

MEDICAL

SCIENCE

ENGINEERING

AGRICULTURE
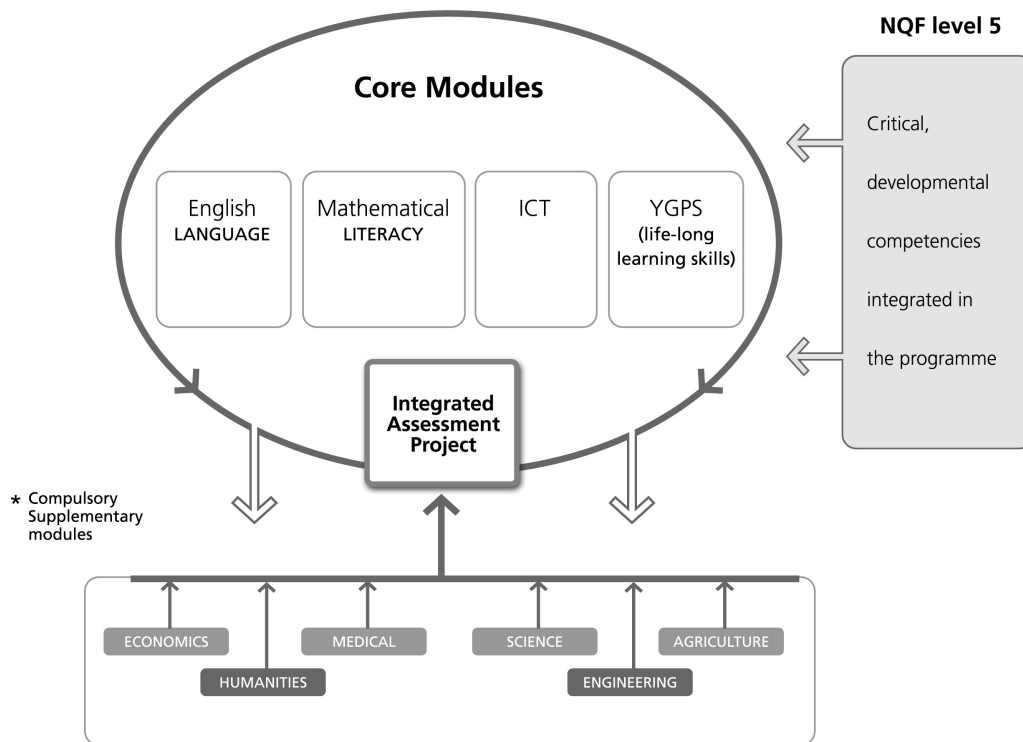
* The modules introduce students to key fields of study.

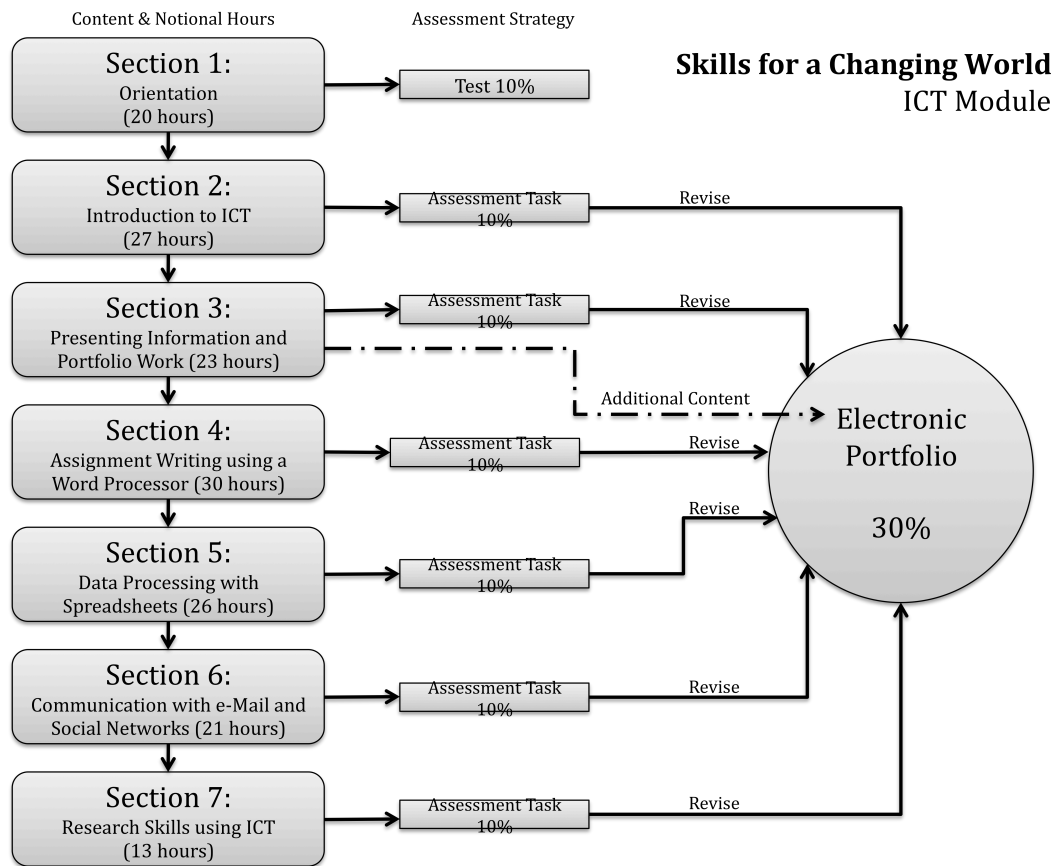English Language, Mathematics and ICT competencies are applied and strengthened in the supplementary modules

In the Pilot Phase we will concentrate on four of the six modules

ICT Module Map

Content & Notional Hours   Assessment Strategy

Section 1:
Orientation
(20 hours)

Test 10%

Skills for a Changing World
ICT Module

Section 2:
Introduction to ICT
(27 hours)

Assessment Task 10%   Revise

Section 3:
Presenting Information and
Portfolio Work (23 hours)

Assessment Task 10%   Revise

Additional Content

Section 4:
Assignment Writing using a
Word Processor (30 hours)

Assessment Task 10%   Revise

Electronic
Portfolio

30%

Section 5:
Data Processing with
Spreadsheets (26 hours)

Assessment Task 10%   Revise

Section 6:
Communication with e-Mail and
Social Networks (21 hours)

Assessment Task 10%   Revise

Section 7:
Research Skills using ICT
(13 hours)

Assessment Task 10%   Revise

Information about the module

This module will provide you with a solid grounding on how best to use technology in the world of work and tertiary education. While the skills and knowledge you will learn here can be applied broadly to all avenues of life we have fashioned them specifically to support you complete the Skills for a Changing World programme. Consequently the word processing skills you will learn in this course will be used later in the language course, spreadsheets will come in handy during some of the Maths exercises while your presentation skills will be needed in the YGPS module. We have ordered the lessons in an attempt to provide you with the right skill at the right time so follow the ICT Module section order to stay in 'synch' with what is happening elsewhere in the programme.

As an additional outcome our module you will enable you to construct your own electronic portfolio on CD-ROM. This electronic document will contain your best work from each ICT module sections as well as reflect your taste and interests. This document also contains a short CV so it can be used to persuade prospective employers when you are looking for a job or wanting to start a career.

What is this module about?

This module will introduce computers and other ICTs (Information and Communication Technologies). While you will have a little theory to familiarise yourself with, most of the course is practical and will require you to practice various computer skills. We will use mostly practical sessions in the computer room rather than lectures or tutorials. There will also be a healthy dose of self directed study when you will be required to practice your new skills or

use the programs to find out additional information. For this you will need to be able to access the institutional computer room after the allotted time allocated to official practicals and tutorials. Access to a computer at home would also be beneficial although is not a compulsory requirement.

What will you learn?

Each section part has its own outcomes which are stipulated at the beginning of each lesson. However, at the end of this module you are expected to show evidence that you have achieved the following main learning outcomes:

My learning journey		
What I am expected to know and do	✓ I FEEL CONFIDENT	✓ I STILL NEED PRACTICE
Demonstrate a basic knowledge of how the computer system works,		
Describe the parts of a PC using the correct terminology.		
Log into the institutional network		
Demonstrate competency at creating and presenting a PowerPoint presentation.		
Demonstrate competency at writing and editing a word processor document.		
Demonstrate competency at creating a spreadsheet document		
Demonstrate competency at receiving, writing, sending and storing e-mail correspondence.		
Demonstrate competency at interacting with members and extracting information from Social Networking Sites		
Demonstrate an ability to search competently for information on the Internet		
Demonstrate an ability to search competently for information using online and multimedia encyclopedias		
Demonstrate an ability to correctly reference sources extracted from ICT sources using online citation tools.		

How much learning time do you need?

This module carries 16 credits. It should take approximately 160 hours to successfully complete the module. This includes contact session time with your facilitators and tutors, reading time, your own research time and time spent on doing the assessment activities.

A **Time Check** is included at the beginning of each module. It is a useful time management tool as it shows how much time you are expected to spend on each of the sections and it allows you to record how much time you actually spent.

TIME CHECK		
Sections	Suggested time input	Actual time spent
1. Orientation	20 hours	
2. Introduction to ICTs	27 hours	
3. Presenting Information and Portfolio Work	23 hours	
4. Assignment Writing using a Word Processor	30 hours	
5. Data Processing with Spreadsheets	26 hours	
6. Communication with e-Mail and Social Networks	21 hours	
7. Researching Skills using ICTs.	13 hours	
Total	**160 hours**	

How will you learn?

This module, like the whole of the Skills for a Changing World Programme uses different ways of learning. Experienced facilitators will guide and support you throughout the programme. They will plan and organize suitable contact sessions during which you will use the student guide and various other learning materials.

Trained tutors will further help you with individual and group learning activities. By working with your fellow students on group activities you can give each other support and learn important teamwork and communication skills.

Much of what you will achieve depends on your own effort and commitment. The most successful students are not necessarily the cleverest or the most experienced, but rather those who are most disciplined, most organised, most willing to reflect critically on their own learning, most able to practice what they are learning, and most successful in managing their time.

To support you in your learning in the ICT module, there are two kinds of learning resources that you can use – a **Student Guide**, and a **Resource CD**. Each of these learning resources has a specific purpose:

The **Student Guide** outlines the learning path for the ICT module and provides you with basic information, guides you through activities and stimulates you to ask questions, find answers and share what you learn with your fellow students. The information in the Student Guide is not a sufficient source of learning in itself. You, the learner, have to complement the information contained in the Student Guide by reading, researching, discussing/debating and reflecting. Only then will your learning be an enriching experience.

The **Resource/CD** contains a number of electronic materials that are part of your learning path outlined in the Student Guide These materials include multimedia tutorials, word processor templates and exercise files, presentation templates and spreadsheet activity files. You will be required to access these documents from the CD at the appropriate time as stipulated in the guide.

How will you be assessed?

In the ICT module you will be assessed in two ways: individual assessment tasks after each section and also through the submission of a completed electronic portfolio for an overall semester mark:

All section assessment tasks and tests (7 in total) will be marked individually after the completion of each section. These tasks are worth 10% of the final module mark. The student then has the prerogative of revising these documents before storing them on an electronic portfolio prepared by themselves and the focus of Section 3 activities. The portfolio will also store any additional work generated by each student in the other modules where there is an overlap. Besides a repository of work the portfolio also contains a student journal for self reflective activities, a student CV, personal profile that includes collected media etc. The portfolio will be taken in for marking and will be allocated 30% of the students ICT Module semester mark.

How to find your way in the student guide

This guide is prepared especially for you. It contains all kinds of activities that invite you to take an active part in learning important skills and behaviours that will help you to be successful not only in this programme but that will also prepare you for your future role in the world of study and work. Learning can be an exciting adventure when you start doing things for yourself.

Icons

Icons are visual 'signposts' that give clear signals of what is expected of you. The following icons are used in the Student Guides for all the modules. You will soon become used to recognising each icon and the message it conveys.

LEARNING ACTIVITY

When you see this icon, you will know that you have to do an activity to show how well you understand what you have read and learned. For some of the learning activities the writer will include some comments or advice. These comments should never be read before you have completed the preceding activity. These comments are also not intended to provide the final 'answer', since your opinion may be completely different from the writer's and still be acceptable. The writer is simply providing you with an informed opinion.

GROUP ACTIVITY

Whenever you see this icon you will know that you will work with some of your fellow learners on a team activity.

ASSESSMENT ACTIVITY

This is the sign for assessment activities that you will complete and include in your portfolio. All these activities are marked by the facilitator and they will contribute to your total mark for the programme.

RESOURCE FILE

When you see this sign you will know that you need to refer to the resource file/CD. It contains additional readings and articles that you may be asked to use to complete an activity.

Module Sections

Section 1: *Orientation*
- Computer Room Usage
- Basic Operations
- Terminology
- Electronic Portfolio
- Assessment Task

Section 2: *Introduction to ICTs*
- Hardware I
- Hardware II
- Software I
- Software II
- Networks
- Assessment Task

Section 3: *Presenting Information & Portfolio Work*
- Structuring Your Presentation
- Inserting Media and Graphics
- Presentation Interactivity
- Assessment Task

Section 4: *Assignment Writing with a Word Processor*
- Writing and Typing Skills
- Formatting your Assignment
- Inserting appropriate Media and Graphics
- Using Tables
- Reviewing, Proofing and Printing
- Assessment Task

Section 5: *Data Processing with Spreadsheets*
- Spreadsheet Orientation
- Formulas and Functions
- Graphing a Trend
- Assessment Task

Section 6: *Communication with e-Mail and Social Networks*
- Setting up a Webmail Account
- Organising your e-Mail Program
- Forming or Joining an Online Group
- Assessment Task

Section 7: *Research Skills using ICT*
- Finding Information Online
- Online and Multimedia Encyclopaedias
- Referencing Sources and Copyright
- Assessment Task

Glossary

Special terms and phrases used in this learning guide are explained here.

WORD	EXPLANATION
Input	The action of inserting data into a computer system
Output	The action of extraction information out of a computer system
Processing	The action of manipulating data to be able to turn it into something of meaning. This is normally done by a computers Central Processing Unit or processor.
Portfolio	A collection of work presented as evidence of the students proficiencies.
Mainframes	Very large computers used by companies such as banks to process the thousands of transactions that take place daily
Hardware	Components of a computer system you can touch
Software	Components of a computer system made up of machine code for example programs
Microcomputers	Very small computers such as cell-phones or watches that have a specific function
Peripherals	Devices that are attached to a computer system
Ports	Openings on a computer system that allows a peripheral to be attached to the computer and by which communication between the peripheral and the computers takes place
Operating System	System software essential to the running of a computer system as it coordinates the interaction between hardware and software
Byte	A measurement of binary code. 1 byte is made up of 8 bits.
Megabyte	A measurement of binary code. 1024 kilobytes is 1 Megabyte. The abbreviation MB is used to denote a Megabyte
Application Software	Software that is customised for a user to employ. Software like a word processor or spreadsheet is an example of application software
System Software	Software or utilities that are used to coordinate the operations of the computer seamlessly behind the scenes. A virus checker is and example of system software
Proprietary Software	Software that requires uses to aquire a license to use the code. Microsoft is an example of a software manufacturer who distributes proprietary software
Open Source	Software whose kernel or core functions does not require the user or programmer to purchase the software
Username	A term by which a user is known on a network or social network site. It does not have to relate to areal name.
Password	A word, phrase or combination of letters and/or numerals that is used to access closed or protected areas of a network or Internet.
Word Art	A graphic option in MS Word to customise the look or your writing. Used mostly for titles.
AutoShapes	A graphic option in MS Word that allows the user to insert objects that are non alphabetic nor numeral. Squares, Circles and arrows are popular

Digital	Denotes technology that uses binary manipulation of data as opposed to analogue. (Computer vs. landline telephones)
Ribbon	The dashboard devise in many Office 2007 applications that graphically represents the most common actions.

Part 1:

Introduction to ICT

ICT Module, Workshop Series 2010

Unit 1: Introduction to ICT. What are ICTs?

1. Introduction

These should all look familiar to you. Fill in the table by completing the names of these various devices and what they are used for.

	NAME	USES

The devices in the table are examples of ICTs. ICT stands for **Information and Communication Technologies**, and these ICTs are all around us. We use them every day and for so many tasks they are unavoidable. They are often great time savers, although sometimes they can also help us waste time. Many people enjoy them because they are seen as excellent productivity tools.

Learning outcomes

Learners will be able to:

- Identify examples of ICTs that exist in their environment
- List possible uses for specific ICTs
- Transfer digital images from a cell phone/digital camera to a computer
- Identify benefits and problems regarding the use of ICTs

START UP ACTIVITY 1.1

In groups, make a list of as many ICT devices as you can.

1 Use your past experiences to identify as many **information** and **communication** technologies that you can think of as a group. Use a *brainstorm* technique where the group lists everything that is mentionedby the members of the group.
2 Use the block below for your list of ICT examples. Your facilitator will then lead a discussion where the group needs to refine your list, removing items from the list that do **not** qualify as examples of Information and Communication Technology.
3 Now that the group has generated an 'approved' list of items, see if you can write a **definition** for the term "Information and Communication
4 Technologies" in the space provided, which could be included in a technical dictionary.

Our list of ICTs

_____

_____

_____

_____

_____

_____

Our definition of ICT (Information and Communication Technologies)

_____

_____

_____

_____

What are ICTs[1]?

Compare your group's list of ICTs and definition with the following and see how accurate you were.

> **DEFINITION:**
> *"ICTs are the technologies used in the **conveying**, **manipulation** and **storage** of **data** by **electronic** means."*[2]

ICTs should not be considered fixed or static. New ICT devises are being developed and being sold daily. If you were to try this same exercise in a year's time, the list might look very different.

Simple Definitions

Convey: to transport, to carry, to take from one place to another. To communicate; to make known.
Manipulate: To influence, manage, direct, control or tamper with something to one's own advantage.
Storage: A place for storing goods.
Data: information. A collection of object-units that are distinct from one another.

Wiktionary

GROUP WORK & PRACTICAL PORTFOLIO ACTIVITY 2.1

This activity requires you to record instances of information and communication technologies (ICTs) that are present on campus, on the route home and in and around your local community.

1 Use a digital camera or digital phone camera to photograph examples of ICT devices.
2 Bring your camera/phone, software CD that accompanies the camera/phone, as well as any cables required to class.
3 If necessary, install the software (your facilitator will assist you).
4 Download your photographs from the camera to a computer[3].
5 Print out the photographs.
6 Glue the pictures onto a large sheet of paper leaving enough space to write in a description and add labels.
7 Next to each picture write out the following details:
   a Name of ICT device;
   b Location where device was seen;
   c Reason why you consider it to be an example of ICT. Describe how you believe it specifically conveys, manipulates and stores data electronically.
8 Take a digital photograph of your poster for your electronic portfolio.

There are various ways of transferring images from a cell phone or digital camera to your PC. Once you have completed transferring your images to your computer with the help of your facilitator, document the steps taken to do so on the following page, so that you may repeat this in the future on your own.

---

[1] Skills Pack: Refer to pages 13 - 16 for information on computer hardware
[2] See OpenLearn at http://openlearn.open.ac.uk/mod/resource/view.php?id=210525
[3] Skills Pack: Transferring digital images to your PC, see page 11 and 12

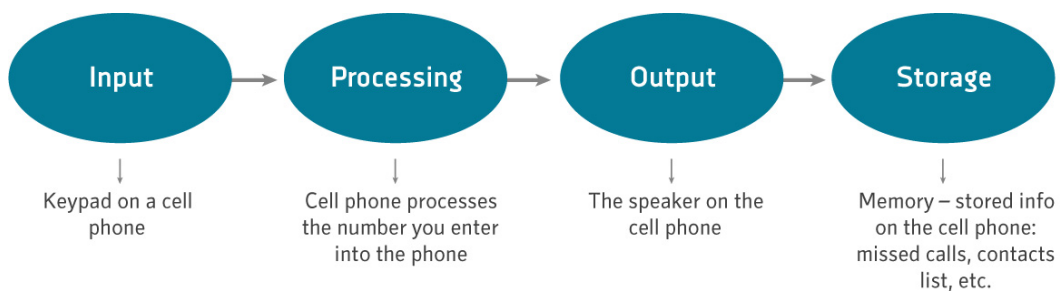**STEPS** in transferring images from my cell phone/digital camera to my computer:

STEP 1:

2.2 Examples of ICTs

ICTs *are* all around us; such as:
- using an ATM
- phoning home
- using the World Wide Web at an Internet café
- playing online games using a PS3 console
- buying groceries at a supermarket
- booking movie tickets using the 'no queue' kiosk
- using a satellite navigation system to find your way around while driving

In all these examples data is electronically put into the device, stored, manipulated and ultimately transmitted. A simpler model of how all ICTs work is the *Input – Processing – Output - Storage* model:

Input	Processing	Output	Storage
Keypad on a cell phone	Cell phone processes the number you enter into the phone	The speaker on the cell phone	Memory – stored info on the cell phone: missed calls, contacts list, etc.

Output: Speaker

Storage: Memory

Input: keypad

Processing: CPU

LEARNING ACTIVITY 2.2.1

Complete the following table by filling in the blank cells. Identify input, and output components of each device. There might be more than one possible component per device so list as many as you can think of.

ICT Device	Input component	Processor	Output component
Cell Phone	Keypad	Microprocessor	Speaker
Bank ATM		Microprocessor	
Personal Computer (PC) Computer System		Central Processing Unit	
Supermarket Checkout Scanner		Microprocessor	
Car Satellite Navigation System		Microprocessor	

See the Feedback section later in this lesson to see how well you did.

2.3 Data vs. Information

It is important that you understand the difference between data and information with regard to ICTs, as they are NOT the same thing.

Data: Is the raw material that we would input into an ICT device, such as figures, small facts and numbers that, on their own, have little value or meaning.

Information is processed data. That is data that has been reorganized so that it now contains some meaning.

DATA

INFORMATION

2.4 Benefits of ICTs

Some benefits of ICTs include:

Remember the old day when you had to stand in long queues at the cinema to purchase a movie ticket or wait for weeks for mails to arrive at the post office?

Now, you can skip the queue and buy your tickets online instead and receive instant messages via e-mail. These are some of the benefits of ICTs – how many can you think of? Consider how much time and effort ICTs save us on a daily basis and jot them down in the space provided.

_____

_____

_____

_____

_____

_____

_____

_____

GROUP LEARNING ACTIVITY 2.4.1

Think of a business that you are familiar with. Perhaps it's the shop up the road or the company where a family member is currently employed. Think of ways you could improve this business by using computers or other ICT devices.

Write a paragraph[4] in the space provided on how you think ICTs might improve the business.

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

[4] English Skills Pack: Mind-mapping, topic and supporting sentences, page 17

2.5 Problems concerning ICTs

The cautions that should accompany the use of ICTs are many and continue to grow as ICTs develop further. News articles often report on paedophiles who stalk young people in Chat Rooms and nasty viruses that can destroy your data and equipment. Consider the following examples of such problems regarding ICTs.

Virginity sales go online

May 31 2009 at 10:16AM
By Hazel Booth

Earlier this month, an 18-year-old Romanian-born student living in Germany auctioned her virginity online in an effort to raise cash for her studies. Alina Percea confirmed that an unnamed 45-year-old Italian businessman paid her £9 000 (R108 000) to sleep with her.

http://www.iol.co.za/index.php?set_id=1&click_id=3&art_id=vn20090531015723343C538583

'Beware of rising ATM fraud'

September 12 2008 at 08:29AM
By Christina Taylor and Devin Hermanus

Police are warning the public to be careful at ATMs, with cyber crimes such as bank card "skimming" on the rise.

Superintendent Jerome Hardenberg, SAPS Crime Prevention Awareness officer in the Western Cape, told a media briefing on Thursday that card "skimming and copying" devices and card-reading software were being brought into the country by organised crime syndicates which identified a market.

"It's a definite cause for concern because there has been steady flow of this kind of crime." Card skimming involves swiping a stolen card through a small hand-held device, recording the card's information.

Hardenberg said skimmers working in teams can distract ATM users with offers of assistance, then quickly take a card and pass it behind their backs. An accomplice will then skim and return it without the victim being aware the card was missing, sometimes in less than a minute.

http://www.iol.co.za/index.php?set_id=1&click_id=13&art_id=vn20080912061731575C223003

Italian cops clamp down on child porn

June 20 2009 at 04:17PM

ROME - Italian police arrested 14 people and placed more than 250 under investigation in the country's biggest sweep against Internet child pornography, authorities said in a statement.

The 14 people who were arrested were in possession of cruel and violent videos that partly originated from a porn server based in Germany, the statement said.

Authorities also conducted 300 searches and seizures in 68 towns and cities across the country in the operation codenamed Smasher.

Police confiscated 800 computers and 40,000 items of data storage, including DVDs, CDs and

memory sticks containing more than 150,000 pornographic films, the statement said. - Sapa-AFP

http://www.iol.co.za/index.php?set_id=1&click_id=3&art_id=nw20090620160543418C284067

GROUP LEARNING ACTIVITY 2.5.1

In groups, discuss what problems or cautions you feel users of ICTs should be aware of. Use the table below to list these problems or cautions. Then as a group rate these issues as either mild, serious or dangerous threats.

PROBLEM SCENARIO	Mild Threat	Serious Threat	Dangerous Treat
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

See the Feedback section later in this lesson to see how well you did.

3. Conclusion

ICTs are all around us, by now you should be able to identify them easily and also explain why a device could be categorised as ICT or not. Furthermore, you have a general idea about what benefits can be derived from using ICTs as well as what you need to be cautious of when working with ICTs.

4. Feedback

LEARNING ACTIVITY 2.2.1

Below in bold are possible answers to the task of identifying input and output devices for various ICT devices.

ICT Device	Input component	Processor	Output component
Cell Phone	Keypad	Microprocessor	Speaker
Bank ATM	**Keyboard, Surveillance Camera and card reader**	Microprocessor	**Money dispenser, ATM screen, Receipt dispenser, receipt printer**
Personal Computer (PC) Computer System	**Keyboard, mouse, digital camera or cam**	Central Processing Unit	**Monitor, speakers, printer**
Supermarket Checkout Scanner	**Scanner**	Microprocessor	**Till Price Display, Till slip printer, till receipt**
Car Satellite Navigation System	**Car positioning sensor**	Microprocessor	**Readout Screen**

GROUP LEARNING ACTIVITY 2.3.2

There are in fact numerous issues that need to consider when using ICTs. These also vary with the device. Below are just a few suggestions. It is quite possible that your group found others.

	PROBLEM SCENARIO	Mild Threat	Serious Threat	Dangerous Treat
1	**Identity theft** – Criminals using your online identity to pose as yourself and embark on illegal activities using your name.			
2	**Hackers** – Programmers who attempt to break online security features to access data or financial accounts			

3	**Viruses** – Malicious code designed to propagate itself and damage software and hardware			
4	**Spyware** – Covert code designed to collect data about yourself and inform others about your habits and preferences			
5	**Ergonomics** – Some people experience headaches, muscle strains or poor posture from spending too much time in front of computer screens			
6	**Time Wasters** – Sites like FaceBook that are superficially engaging but take up a lot of time with little benefit			

5. Tracking my progress

You have reached the end of this section. Check whether you have achieved the learning outcomes for this section.

LEARNING OUTCOMES	✓ I FEEL CONFIDENT	✓ I STILL NEED PRACTICE
Identify examples of ICTs that exist in their environment		
List possible uses for specific examples of ICTs		
Transfer digital images from a cell phone/digital camera to a computer		
Identify benefits and problems regarding the use of ICT		

What did you like best about this section?

_____

_____

_____

_____

What did you find most difficult in this section?

_____

_____

_____

_____

What do you need to improve on? How will you do this?

_____

_____

_____

_____

Part 2:

Using PowerPoint to Present

ICT Module, Workshop Series 2010

Part 2: Using PowerPoint to Present

1. Structuring Your Presentation

http://www.propointgraphics.com/samples2.php?pop=&page=2&apage=1&isalbum=album-17&gal=3&ai=5&view=

It does NOT have to be death by PowerPoint! With a bit of knowledge and a hint of creativity, you can create an impressive PowerPoint presentation, such as the one above. It is actually quite an exciting programme once you know how it works – you can insert graphics, sound, pictures, effects, etc. However, let's start with the basics first.

Outcomes

Upon the completion of this Part, learners will be able to:

- Demonstrate basic PowerPoint skills
- Present information by means of a PowerPoint presentation
- Insert media and graphics into a PowerPoint presentation

Presentations

A presentation involves you speaking to an individual or a group of other people in order to make point or share information.

What is expected of you in terms of a presentation?
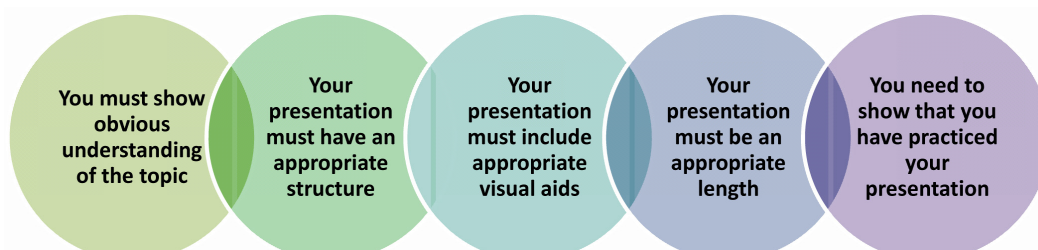
PowerPoint can be used to:
- persuade
- teach
- sell
- train
- entertain

The Basics
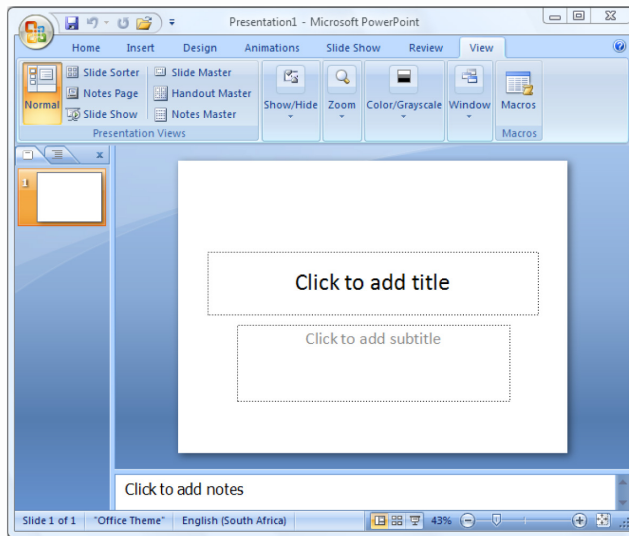
Opening PowerPoint

Click on:
Start button>> Programs>>
Microsoft Office>> PowerPoint
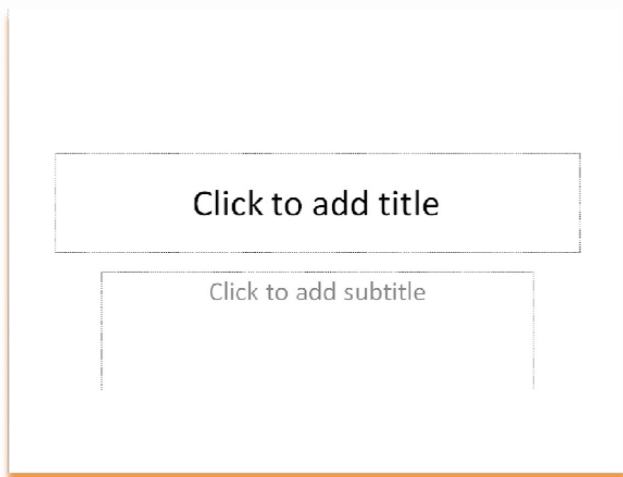
A slide

a single page within a
presentation

	A bullet a shape that appears in front of a sentence
	Layout the arrangement of text and objects
	Placeholder the place where you put content on a slide
	Sizing Handles a way of adjusting the size of your slide show
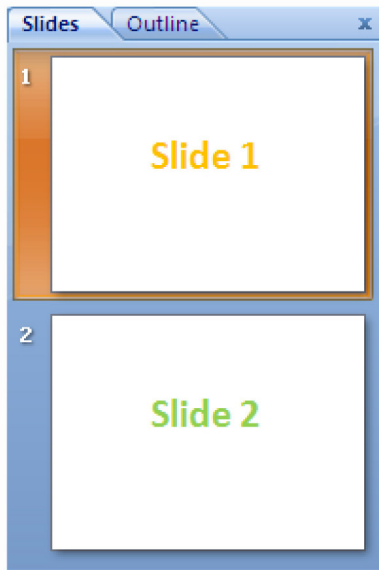
Slide Transition

the visual transformation from slide to slide.

Design Theme

file that contains the styles in a presentation

GROUP LEARNING ACTIVITY 2.1

Now it is time to experiment. In pairs, see if you can work out how to do the following. Use the space provided to write down the steps involved. Ask your facilitator for help if you really get stuck.

1 Add a Slide
2 Transform a list into bullet points
3 Modify the layouts
4 Add text to a placeholder
5 Use sizing handles to rotate and move the a place holder
6 Select a Slide Transition
7 Apply a Design Theme to the Slide Show

Step 1:

Step 2:

Step 3:

Step 4:

Step 5:

Step 6:

Step 7:

2. Inserting Media and Graphics

The following focuses on adding pictures, graphs, sound, videos, text and animation to your presentations. This is fun to do and will improve the quality of your presentation; it will also make it more interesting and enjoyable for those whom you are doing the presentation for.

The term '**multimedia**' refers to any combination of media that is delivered electronically and can be accessed interactively.

Why use multimedia in PowerPoint presentations? → **Where is multimedia used?**

· convey an idea, concept or theory
· illustrate the presentation with graphs, graphics or line drawings
· clarify a point
· summarise key concepts or ideas
· add interest and variety
· build up visulas to develop an idea
· help the audience recall a concept/idea,
· PowerPoint presentations

· advertisements
· art
· education
· infotainment
· marketing
· moble phones
· games
· digital video
· PowerPoint presentations

Pros of using multimedia in PowerPoint

Good quality graphs, charts, photos and videos can be used

A professional presentation can be produced at low cost and sent to many presenters

Cons of using multimedia in PowerPoint

Large presentations often need greater memory, processor and operating system resources

Technical errors can ruin a well-prepared message

STEPS to inserting multimedia:

Click Insert > Clip Art...

Clipart

*   Use a keyword to search for the clip art you want.
*   Scroll down through the Clip Gallery to preview the clip art selection
*   Select the Clip Art and click it
*   The Clip Art will appear on your slide
*   When you are finished using the Clip Gallery, click the Close button in the Clip Gallery title bar

Click Insert > Picture...

Photographs

*   Find the folder where the picture is stored
*   Scroll down through the folder to preview the photographs
*   Select the file and click insert
*   The photograph will appear on your slide

Click Insert > Click the arrow below the sound icon

Sounds

*   Find the file on your computer
*   Select a pre-recorded sound in the clip organiser
*   Play a CD track
*   Record your own sound.
*   Decide whether you want the sound to start automatically or when clicked.
*   The sound icon will appear in the centre of your slide

For animations …

Motion Clip

Click Insert > Click the arrow below the Movie Icon
Select a pre recorded motion clip in the clip organiser (usually an animation)

For Movies…

Motion Clip

Click Insert > the Movie Icon

*   Find the file on your computer
*   Decide whether you want the movie to start automatically or when clicked.
*   The motion clip will appear in the centre of your slide

GROUP LEARNING ACTIVITY 2.2.1

In groups, try and duplicate the following PowerPoint slide. Use the space provided to make notes.

NOTES:

5. Tracking my progress

You have reached the end of this section. Check whether you have achieved the learning outcomes for this section.

LEARNING OUTCOMES	✓ I FEEL CONFIDENT	✓ I STILL NEED PRACTICE
Demonstrate basic PowerPoint skills		
Present information by means of a PowerPoint presentation		
Insert media and graphics into a PowerPoint presentation		

What did you like best about this section?

_____

_____

_____

_____

What did you find most difficult in this section?

_____

_____

_____

_____

What do you need to improve on? How will you do this?

_____

_____

_____

_____

Part 3:

The Basics of MS Word

Part 3: The Basics of MS Word

SECTION 1:
FORMATTING TEXT & PARAGRAPHS

Microsoft Office Word is used to create and share professional-looking documents. This user-friendly programme contains tools that make it easy for you to format your documents quickly in order for them to communicate to the reader more effectively. You can **change the appearance of text, tables, and graphics throughout the entire document, as well as create your preferred style or colour scheme;** this is what is referred to as **formatting.**

In this Part of the module, you will be introduced to the basic tools you need to use MS Word effectively in your studies or in the workplace.

1. Introduction

Do not feel demotivated if you have had minimal experience with a computer; you will soon discover that they are surprisingly easy to use. This Section focuses on developing skills in terms of formatting text, paragraphs, as well as entire documents so that you can prepare documents that look professional and are impressive. Have a look at the learning outcomes below to see what formatting entails.

LEARNING OUTCOMES

On completion of this Section, learners will be able to

Demonstrate basic MS Word skills in terms of:

- Selecting texts using a variety of methods
- Cutting, copying and pasting pieces of text
- Using the undo/redo command effectively
- Identifying and using all the commands in the Font and Paragraph group
- Using styles effectively
- Inserting page breaks and section breaks
- Changing the layout of a page
- Changing page margins
- Inserting headers, footers and page numbers 26

2. Selecting Text

In order to make changes to text, you must select it first. MS Word provides many ways to do this.

To select lines, paragraphs or the entire document without scrolling, click the empty space in the left-hand margin of the text – this is called the **Selection bar**. When you are in the Selection bar, the pointer becomes a right-pointing arrow.

Further methods of selecting text include:

Action	Selects
Double-click the mouse on a word	selects only the word
Click in Selection bar beside a line	selects the whole line
Double-click in selection bar	selects a whole block of text
Click at beginning of a text block; hold down the \<Shift\>key and click at the end of text block	selects a block of text
Press Ctrl A	selects ALL the text

3. Cut, Copy, Paste and Undo/Redo

These are important functions to get to know, as they allow you to move items around in a document, get rid of them when necessary, or delete changes that you made to the document. You will make use of these often in MS Word. Study the image below of shortcut icons and refer to the table of functions.
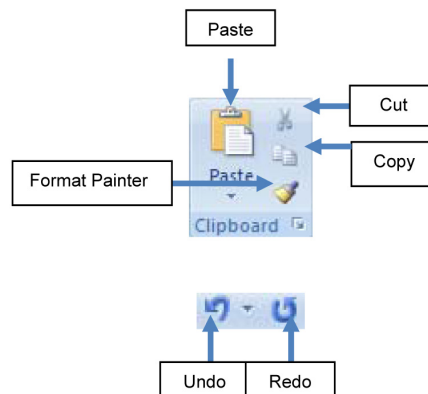
Shortcut icon	Function
	CUT removes selected text
	PASTE replaces cut text
	COPY makes a copy of selected text
	FORMAT PAINTER copies *formatting*[1] from one place and applies it to another
	UNDO deletes changes made
	REDO replaces deleted changes

---

[1] **Formatting** refers to the layout or arrangement of text in a document. If you have cut text from one place in the document and pasted it in another, this is an example of formatting. The format painter will then copy what you did and apply it to the selected text in another part of the document.

LEARNING ACTIVITY 3.1

Now you need to apply what you have learned so far. Duplicate the follow text and complete the instructions that follow. Once you have completed the activity, save the document in the location specified by your facilitator as follows (replace *Name* and *Surname* with your own name and surname):

NameSurname_Part3_Activity_3.1

AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

BBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBB
BBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBB
BBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBB
BBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBB

CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC

Instructions:

1 CUT the second paragraph of text (Bs) and PASTE it below paragraph 3 (Cs).
2 COPY the last line of Bs and PASTE it at the beginning of the Cs.
3 CUT the last 4 As from paragraph 1 and PASTE them at the end of the last row of Cs.
4 Now skip a line and create a new paragraph under the Cs of 4 rows of **small 'd's.**
5 Use the Format Painter and copy the formatting of text in the Cs and apply it to the new paragraph of Ds.
6 Save the updated document.

4. Font and Paragraph Commands

Font and paragraph commands include:

- Changing font style, size and colour
- Making text **bold**, *italicized* or underlined.
- Changing the alignment of text; and
- Creating bulleted or numbered lists.

You might not be familiar with some of the above-mentioned terms. The following are definitions and examples to help you understand what they are:

1. Fonts refer to different types of writing styles:

- Garamond font
- **Rockwell** font
- Comic sans font

2. Alignment refers to the position of text on a page:

"Align text left" looks like this:

AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAA

"Align text right" looks like this:

BBBBBBBBBBBBBBBBB
BBBBBBBBBBBBBBBBBBBBBBBBBB
BBBBBBBBB

"Centred" text looks like this:

CCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
CCCCCCCCCCCCCCCCCCC
CCCCCCCCCCCCCCCCCCCCCC

"Justified" text creates a neat block of text like this:

DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD
DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD
DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD
DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD

3. **Bulleted and numbered lists** refer to a list of text that either has bullets at the beginning of each point, or numbers at the beginning of each point.
Look at the following examples:

Bulleted text:
- AAAAAAAAAAA
- BBBBBBBBBBBBB
- CCCCCCCCCCCCCCC
- DDDDDDDD

Numbered text:
1. AAAAAAAAAAA
2. BBBBBBBBBBBBB
3. CCCCCCCCCCCCCCC
4. DDDDDDDD
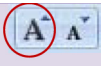
Look at some of the other options available to us from the Font and Paragraph groups of commands.
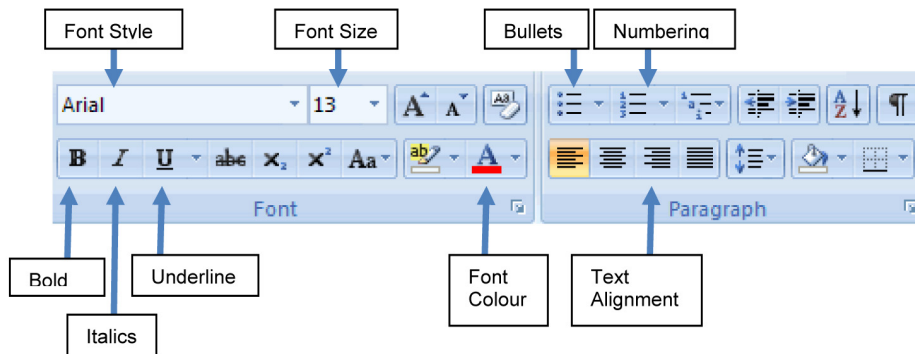
TASK: Now, experiment a little with a partner and complete the table on the following page.

		Name	What does it do?
1			
2			
3			
4			
5			
6			
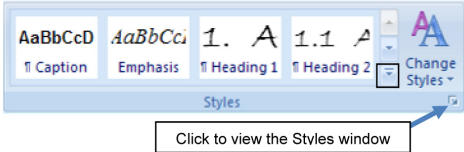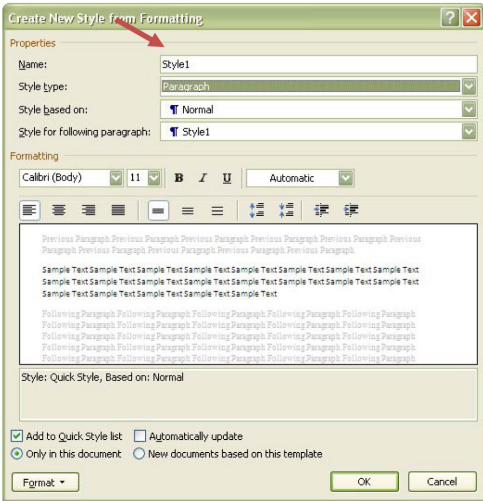
7			
8			
9			
10			
11			
12			
13			
14			

5. Working with Styles

When you use a computer, you want to be as efficient as possible. You want to be able to create and format documents with minimal effort, yet give them a professional appearance. The following table provides information on formatting and styles.

| MS Word Styles	Location – Home tab (*Styles*)
Note: the default (automatic) settings for a new document are usually as follows: 12 point Times New Roman, English, single spacing, Left alignment, and widow/orphan control.	A style is a set of formatting characteristics that you can apply to text, tables, and lists in your document to quickly change their appearance. **How to:** To apply an existing MS Word Style, all you need to do is place your cursor anywhere in the piece of text and select a style. The style will be applied to any piece of text separated by a hard return (Enter).
Paragraph Style	**Location** – Home tab (*Styles*) A paragraph style controls all aspects of a paragraph's appearance, such as text alignment, tab stops, line spacing, and borders, and it can include character formatting. **How to:** **1** Open the Styles window. **2** Click on the icon for "New Style" at the bottom of the window. **3** Give the style a name. **4** Make sure the "Style type" is Paragraph, and make sure the Based on option is Normal. **5** Select a font style; font size and font colour. **6** Select whether you want to make it Bold, italics or underlined. **7** Select a paragraph alignment. **8** Select line spacing. **9** Select option to indent text if suitable. **10** Adjust spacing before and after the paragraph. **11** Click "OK" when done.
Character Style	**Location** – Home tab (*Styles*) A character style affects selected text within a paragraph, such as the font and size of text, and bold and italic formats. **How to:** Unlike a paragraph style that can format font, border, language, line spacing, alignment and indents, a character style can format only fonts, borders and
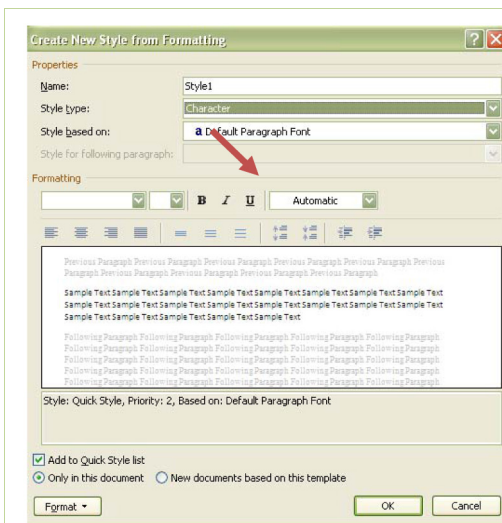
languages. To create a character style make sure the Style type selected is Character and the Based on option is Default Paragraph Font. You might use this tool if you wanted quotations to stand out, for example.

Inserting Section Breaks and Page Breaks

Select ¶ to see Section Breaks
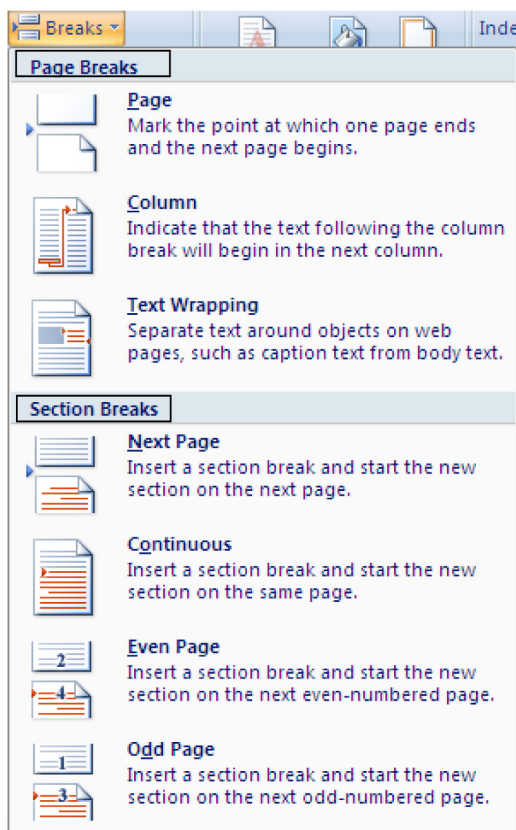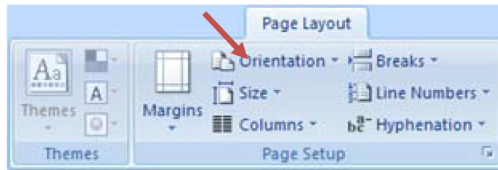

Location – Page Layout tab (*Page Setup*)

To apply different formats throughout the document, you need to add **section breaks**, which are markers that divide the document into sections enabling you to format each section separately.
In other instances you may want to use the same formatting, but start text on a new page instead of waiting for MS Word to start a new page for you, in which case you will use a **page break**.

How to:
1 Click on place on the page where you want to insert a page break or section break
2 Click on Page Layout
3 Click on the arrow next to Breaks
4 Click on **Page** to insert a **page break**
5 Click on **Next Page** to insert **section**
6 **break**
7 6. Remember to add another section break should you want to return to the original formatting

Changing Page Orientation

Location – Page Layout tab (*Page Setup*)

Landscape orientation – Page is displayed horizontally, long sides of the paper are at the top and the bottom.
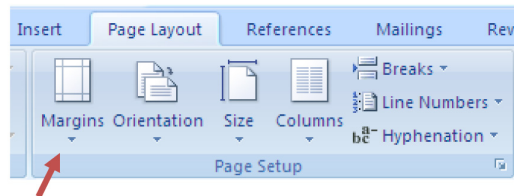**Portrait orientation** – Page is displayed vertically, short sides of the paper are at the top and the bottom.

How to:

1. Click on Page Layout
2. Select Orientation
3. Choose either Landscape or Portrait

Changing Page Margins

At top and left-hand side of page

Location – Top and left-hand side of page OR Page Layout tab (*Page Setup*)

Generally, all text and images are included between the margins.

How to:

1. Click on Page Layout
2. Click on the small arrow under Margins
3. 3. Select an option or click on Custom Margins to set your own margins

Inserting Headers, Footers and Page Numbers

Location – Insert tab (*Header & Footer*)

A header or footer contains text or graphics that are printed at the top or bottom of every page in a document. A header is printed in the top margin – footer is printed in the bottom margin. Common items placed in headers/footers are **Title of Document, Student Number, Page Numbers** and **Date**.

How to insert a Header and Footer:

1. Click on Insert
2. Click on the small arrow under Header or Footer
3. Select the layout option you prefer
4. Type in the text that you want to have appear as either a Header or Footer

How to insert Page Numbers:

1. Click on Insert
2. Click on the small arrow under Page Numbers
3. Select the layout option you prefer
4. You can click on Format Page Numbering if you want your page numbers to start at a specific number

Inserting a Drop-Cap

Location – Insert tab (*Text*)

Drop caps, or large initial letters or words at the start of a paragraph or document, can add style and focus to your documents, for example:
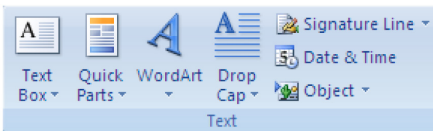
Drop cap

You can use them in letters to add your own special touch. Or you can use them at the start of sections of a newsletter or report to help your readers' eyes find their way through the page.

How to:

1 Click the paragraph that you want to begin with a drop cap.
2 Click on Insert and click Drop Cap.
3 Click Dropped.
4 Click OK.

Information and "How to" table

LEARNING ACTIVITY 3.2

Duplicate the follow text and complete the instructions that follow. Once you have completed the activity, save the document in the location specified by your facilitator as follows (replace *Name* and *Surname* with your own name and surname):

NameSurname_Part3_Activity_3.2
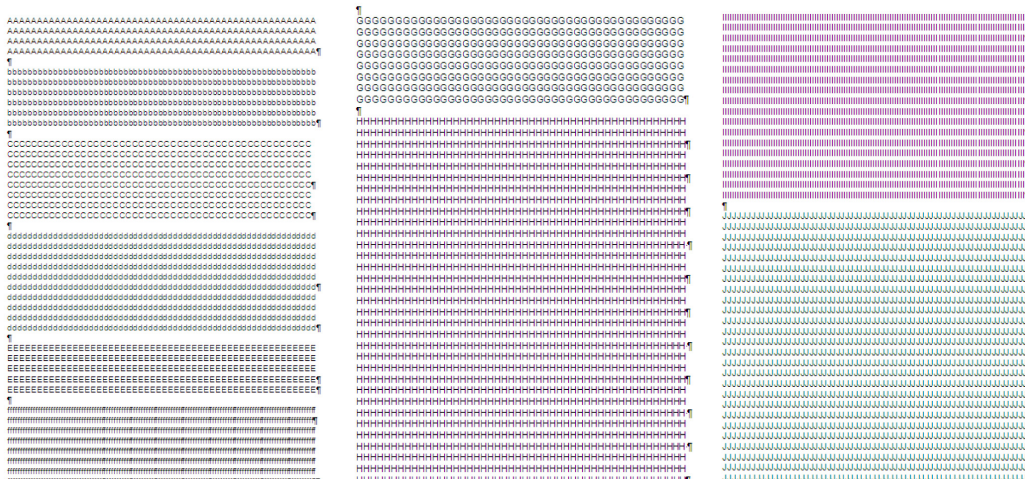
To duplicate the above text, follow the following specifications:

Use font (Arial 13); select ¶ button; leave 1 space between each paragraph

Page 1:
Paragraph 1:   4 lines of capital As
Paragraph 2:   6 lines of small 'b's

Paragraph 3:   8 lines of capital Cs
Paragraph 4:   10 lines of small 'd's
Paragraph 5:   13 lines of capital Es
Paragraph 6:   8 lines of small 'f's

Page 2:
leave 1 space at page top
Paragraph 7:   8 lines of capital Gs
Paragraph 8:   33 lines of capital Hs

Page 3:
Paragraph 9:   18 lines of capital Is
Paragraph 10:   26 lines of capital Js

NOTE:
To create capital letters, press the Caps Lock key on your keyboard that looks like this:

When you want to take it off, press it once again.

Now, you need to apply your newly acquired skills and do the following:

1   Select the first A in paragraph 1 and insert a 'dropped' **Drop Cap**

2   Select paragraph 3 and 4 (page 1) and change the Style formatting as follows:
    a   Font: Jokerman, 12 point, bold, italics, colour-blue
    b   **Paragraph Style**
       • Alignment: Justify
       • Indentation: Left: 1.27 cm
       • Line Spacing: 1.5
       • Paragraph Spacing – Before: 12 pt; After: 12 pt

3   Select paragraph 5 (page 1) and change the Style formatting as follows:
    a   Font: Lucida Sans Typewriter, 24 point, colour-orange
    b   **Character Style**
       • Alignment: Centre
       • Line Spacing: single

4   Insert a **Section Break** at the end of paragraph 5 (Es) and at the end of paragraph 7 (Hs)

5   Change the **Page Orientation** of the page with paragraph 6 and 7 to Landscape

6   Select paragraphs 8 and 9 and change the **Page Margins** as follows:
    a   Top: 1 cm
    b   Bottom: 2 cm
    c   Left: 2.5 cm
    d   Right: 2.5 cm

7   Insert **Page Numbers** and a **Header** with your name, surname and date

Remember to save your document as **NameSurname_Part3_Activity_4.1.** Save the document as soon as you have opened it and do so regularly so that you do not lose any information.

5. Tracking my progress

You have reached the end of this section. Check whether you have achieved the learning outcomes for this section.

LEARNING OUTCOMES	✓ I FEEL CONFIDENT	✓ I STILL NEED PRACTICE
Select text using a variety of methods		
Cut, copy and paste pieces of text		
Use the undo/redo command effectively		
Identify and use all the commands in the Font and Paragraph group		
Use styles effectively		
Insert page breaks and section breaks		
Change the layout of the page		
Change page margins		
Insert headers, footers and page numbers		

What did you like best about this section?

_____

_____

_____

_____

What did you find most difficult in this section?

_____

_____

_____

_____

What do you need to improve on? How will you do this?

_____

_____

_____

_____

_____

Part 3: The Basics of MS Word

SECTION 3: TABLES

1. Introduction

A table is a grid of cells consisting of rows and columns. Tables can be customized and are useful for a variety of tasks, from presenting numerical data to creating unique text layouts.

Tables can be any size and they can easily be modified. You can create a table with just one cell, with two cells, even with 100 cells or more. Table cells, rows, and columns can be added, deleted, split, and merged (joined) at any time. Once a table has been created, you can insert anything into a cell that you could in a normal document (e.g., text, images, or even another table) and then format it with any of Word's tools.

		Column		
	Cell	Cell	Cell	Cell
	Cell	Cell	Cell	Cell
Row	Cell	Cell	Cell	Cell
	Cell	Cell	Cell	Cell
	Cell	Cell	Cell	Cell
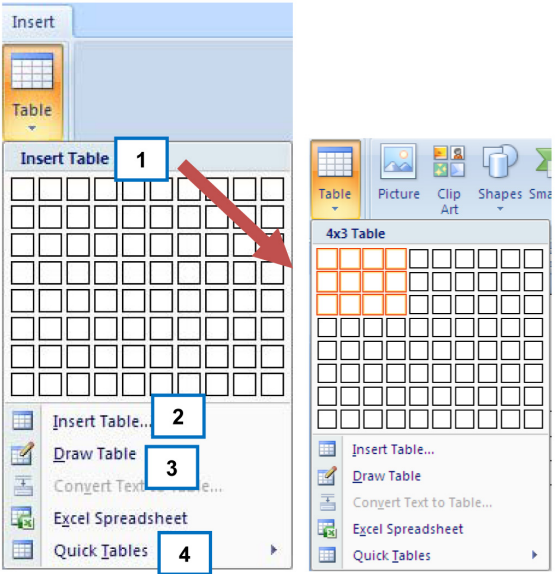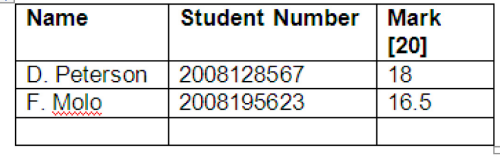
Learning outcomes

On completion of this lesson you will be able to…
- Insert, create or draw a table
- Add information to a table
- Add a new row or column to a table
- Delete a row or column from a table
- Merge and split cells
- Increasing and decreasing row or column size
- Format text within the cells
- Repeat headings in a table
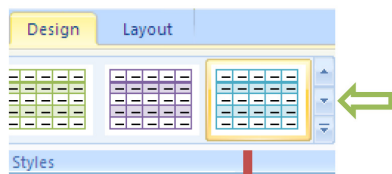- Add borders and shading
- Use table styles

2. Creating Tables and Adding Information

Information and "How to" table

Creating tables

Location – Insert tab (*Tables*)

When creating a table, it helps to try and spend a little time first planning how you would like your table to look. Even a simple paper sketch can reduce the amount of time needed later to make the table look exactly right. Once you know what you want the finished table to look like, you can use one of four ways to create it:

How to:

1   **Drag** to select the number of rows and columns that you want.
2   Click **Insert Table** and choose the table dimensions and format before you insert the table into a document.
3   Click the **Draw Table** option and draw a complex table — for example, one that contains cells of different heights or a varying number of columns per row.
4   Click **Quick Tables** and choose an option from a gallery of existing preformatted tables.

Adding Information

Name	Student Number	Mark [20]
D. Peterson	2008128567	18
F. Molo	2008195623	16.5

How to:

Adding information to a table is simple. Just click inside a cell and type. You can add anything inside a table that you could outside the table. If you want to add information in separate cells, you will need to move your cursor from cell to cell in the table. You can do this by:

- Pressing [**Tab**]
- Pressing an arrow key.
- Using the mouse and clicking in the appropriate cell

Formatting tables

When you click on any table you have created, you will notice a new set of tabs that appear under Table Tools in the Ribbon:

1. Design Ribbon
2. Layout Ribbon

Design Ribbon

Name	Student Number	Mark [20]
D. Peterson	2008128567	18
F. Molo	2008195623	16.5

Location – Design tab

The design ribbon offers a wide range of formatting flexibility. You can use any one of the predefined Table Styles listed on the Ribbon or you can create something that meets your exact needs. The best part is that Word 2007 allows you the ability to first preview these templates and themes before you commit to them.

It is also here on the Design Ribbon where you can set the type of line you would like to use, the width of that line, and the color. You can also set shading and place or remove border lines. These format settings can be applied to a specific cell, row, column, or to the entire table.

How to:

1   Select your table and then click on Design
2   Run your cursor over the Table Styles in the box. You will notice that Word gives you a preview of what your table with look like.
3   Select the arrow on the right hand side of the Design Ribbon to view more Style options
4   Click on the Style you like most
5   You can select the Shading option on the right of the Design Ribbon if you want to colour the table in a specific colour
6   The Borders option on the right of the Design Ribbon allows you to place or remove border lines.

Layout Ribbon
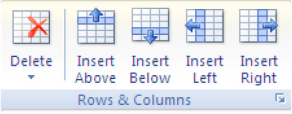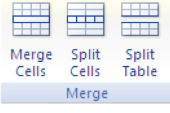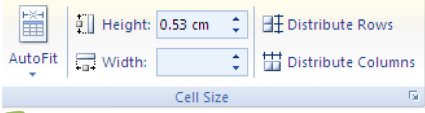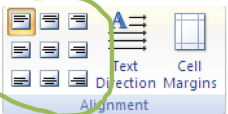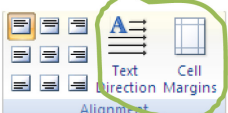
Location – Layout tab

This Ribbon allows you to:
1   insert rows and columns into your table;
2   split cells into further rows and columns or merge or join several cells together to form one;
3   size individual cells, rows, columns, and the entire table
4   align the table and text within the table
5   change text direction and cell margins

How to:

1   To insert rows and columns, look at the Rows & Columns section and select either Insert Above or Insert Below to add a row; or Insert Left or

Insert Right to add a column.
2   You can Merge, Split Cells or Split Table by selecting the Merge option on the Layout Ribbon
3   The Cell Size section allows you to align the table on the page and also make adjustment to the size of cells and the table as a whole
4   The Alignment section allows you to align the whole table (right, centre or left), as well as the text in the cells.
5   5. The Alignment section also allows you to change the direction of text within your table, as well

LEARNING ACTIVITY 3.4

Duplicate the following table in a new document and then follow the instructions.

To duplicate the table below:

1   Insert a table with 3 columns and 4 rows
2   Select Table Style "Light Grid – Accent 2"
3   Insert the text as seen below into the cells
4   Centre the text in the cells
5   Set the Cell Margins to Left: 0.6 cm and Right: 0.6 cm
6   Autofit Contents
7   Merge the cells of the last row

Monday	Tuesday	Wednesday
Swimming	Extra English classes	Hockey
Rugby	Learn for History test	Visit Granny

Now, do the following:

1   **Insert two columns** to the **right** of Wednesday
2   **Label** the columns **Thursday** and **Friday** and **Centre** the **Text**
3   **Autofit Contents**
4   **Insert** another **row** below row 4
5   **Split** the first 3 **cells** of the new row (row 5) into **3 columns and 1 row**
6   **Delete row** 4
7   Shade the entire table Red, Accent 2, Lighter 60%
8   Save your document as **NameSurname_Part3_Section3_Activity_2.1**

5. Tracking my progress

You have reached the end of this section. Check whether you have achieved the learning outcomes for this section.

LEARNING OUTCOMES	✓ I FEEL CONFIDENT	✓ I STILL NEED PRACTICE
Insert, create or draw a table		
Add information to a table		
Add a new row or column to a table		
Delete a row or column from a table		
Merge and split cells		
Increasing and decreasing row or column size		
Format text within the cells		
Add borders and shading		
Use table styles		

What did you like best about this section?

_____

_____

_____

_____

What did you find most difficult in this section?

_____

_____

_____

_____

What do you need to improve on? How will you do this?

_____

_____

_____

_____

_____

Part 4:

MS Excel Spreadsheets

Part 4: MS Excel Spreadsheets

1. Introduction

Spreadsheet programs are used in the workplace to arrange data, make calculations, create graphs and charts and more. The following table gives a few examples of who and why people use spreadsheets:

Accountants	to keep track of the money coming into and out of the business.
Sports Broadcaster	to note, comment and present important sports statistics to their audience in a match
Civil Engineers	to assist with the calculations required to construct roads, bridges and buildings
Advertising executives	to collect, compile and analyse answers to market research questions
Teachers	to record and calculate students attendance and results over a semester or a year
Sales People	to determine the volume and profit of items sold

According to Microsoft, more than 40 million people worldwide now use Excel.
This makes it the most popular spreadsheet of all time.

You can use Excel for the following (just to mention a few):

- To keep to a budget
- To process and manipulate data for your studies
- To provide sorted lists of results for your sports committee
- If you want to keep track of your marks

Learning outcomes

After completing this Part, learners will be able to demonstrate their understanding of Excel in terms of:
- Renaming, inserting and deleting a worksheet
- Inserting, deleting columns and rows and navigating cells
- Using Fill Handles, AutoFill, AutoComplete and inserting formulas
- Formatting Cells
- Saving Excel workbooks
- Create graphs and charts in MS Excel
- Format and label charts and graphs

2. Terminology

In order to learn to operate Excel, you should familiarise yourself with the following terminology.
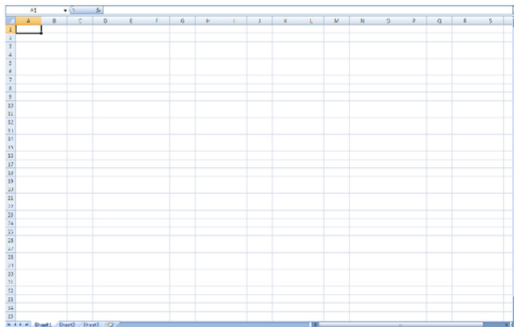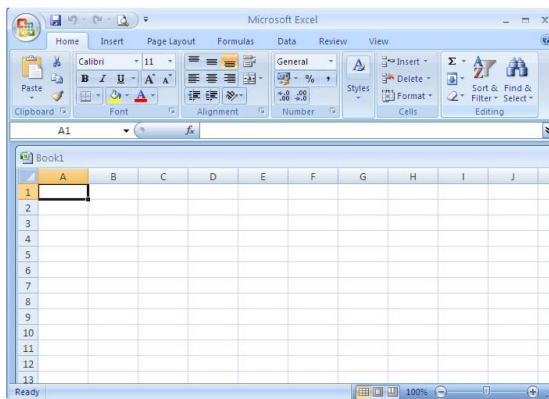
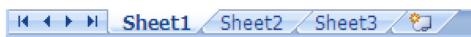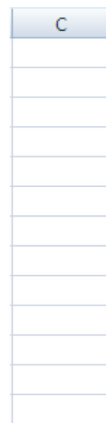|	
Spreadsheets 	A spreadsheet is a large grid of cells arranged in rows and columns. Data (text, numbers and formula) are then entered into the cells and restructured for a person to examine. Excel is the digital version of an accountant's worksheet. This application does much more than offering accountants neat rows and columns. It helps makes the repetitive tasks quicker and easier. It can automatically do most of the calculating (and recalculating) for you. And it can allow you create a variety of charts and graphs to visually represent your data.
Workbook 	A complete Excel file is referred to as a Workbook.
Work sheets 	A Worksheet is a separate page within a Workbook. A Workbook could contain a number of separate Worksheets. To view a worksheet, take a look at the sheet tab at the bottom left of the workbook window. When you click each sheet, you'll be able to view another worksheet. You can rename these sheets and create additional sheets
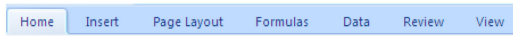
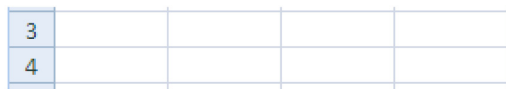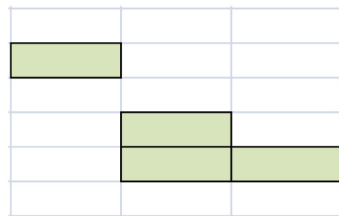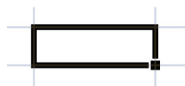| The Ribbon	At the top of the page is a feature called the Ribbon. The Ribbon consists of a number of tabs. Each tab contains specific commands.
Home Insert Page Layout Formulas Data Review View	The Ribbon is a new feature in Excel 2007. It replaces the toolbar.
Columns	Much like pillars or posts, columns are the vertical cells. Letters, called Column Headers, identify these cells.
Rows	Rows are the cells that go from left to right horizontally on the worksheet. Numbers, called Rows Headers, identify these cells.
Cells	Each small box within the grid on your page is known as a *cell. Cells* are identified by their column and row. E.g. cell C2 is in Column C and Row 2
Active cells	The cell that has a heavy outline is known as the active cell. It is highlighted in black, to indicate that any data you enter will go in that cell. You can make a cell active by clicking on it, pressing tab, enter or the arrow keys. You will notice that the Columns and Rows of the active cell are highlighted.
Fill Handles	The small squares that appear at the corners of the active cell are known as the fill handles
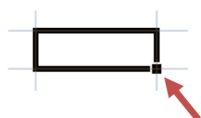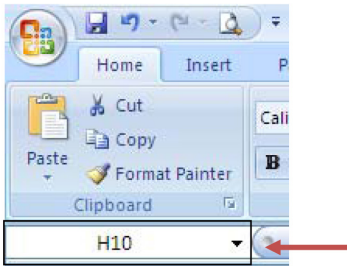
Name box	Just below the ribbon, on the left of the page is the Name Box. The Name Box is used to show the cell reference of the active cell.
	In this example, the cell is in Column H and Row 10.
Formula bar	The formula bar is above the grid and to the right of the Name box. The formula bar displays the data or formula stored in the active cell.

3. Working with Excel

In this section you will see how to use Excel. Read through the table below to familiarise yourself with the various things can do using Excel. You will return to these steps as you work through activities 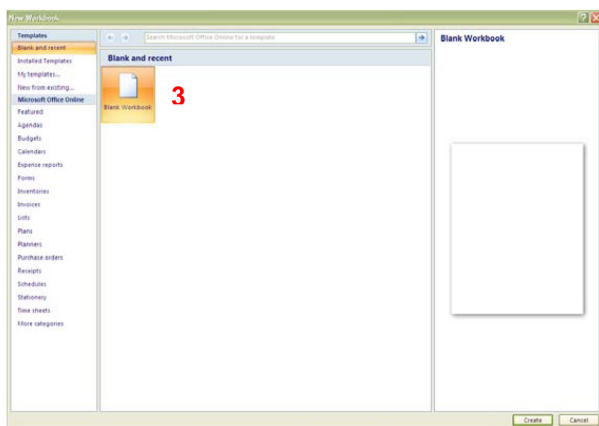3.1 and 3.2. If you are working at a computer, it would be a good idea to try out some of these processes while you read them.

Creating a new workbook	To create a new workbook:
1 **2** **3** 	1 click on the Office button on the top left 2 select New 3 click on Blank Workbook 4 a new workbook (with a different name) will open
Inserting a worksheet into a workbook 	**To insert a new worksheet:** 1. click the worksheet button on the right hand side of the sheet tabs
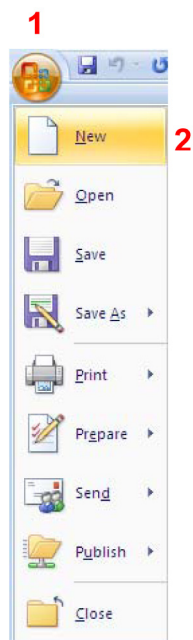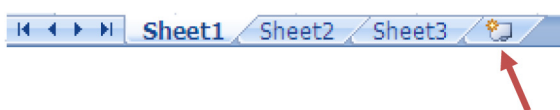
Renaming a worksheet
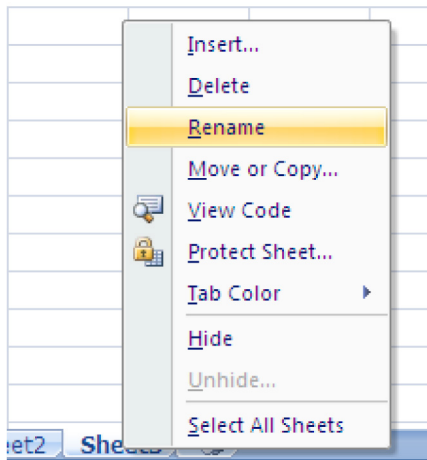
To rename a worksheet:

1 Right-click the sheet tab of the sheet you want to rename
2 select rename
3 type in the name you want to give the worksheet

Deleting a worksheet
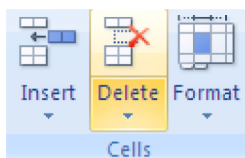
To delete a worksheet:

1 Look at the Ribbon
2 Click the Home tab
3 in the Cells group, click the arrow on Delete
4 Delete Sheet

Inserting and deleting columns
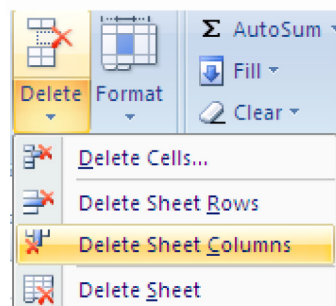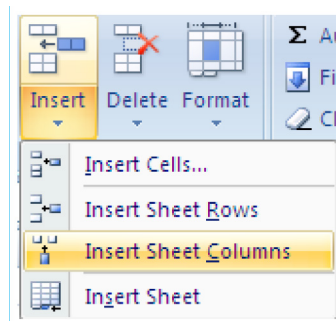
To insert a column:

1 click a cell immediately to the right of where you want to insert a new column.
2 click on the Home tab on the
3 Ribbon
4 click on the Cells group; click the arrow on Insert
5 click Insert Sheet Columns

To delete a column:

1 click a cell in the column
2 click on the Home tab
3 in the Cells group, click the arrow on Delete
4 Click Delete Sheet Columns

Inserting and deleting rows
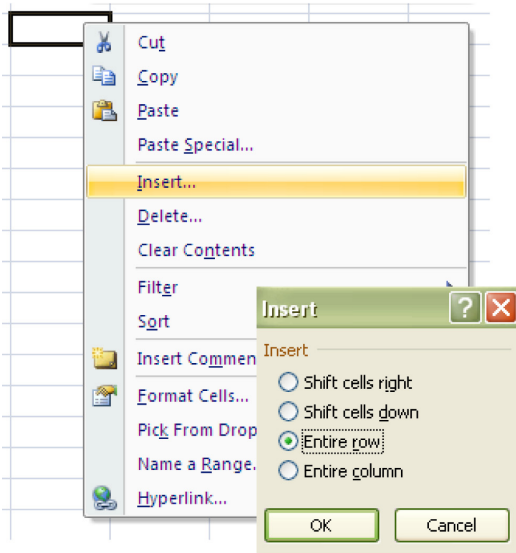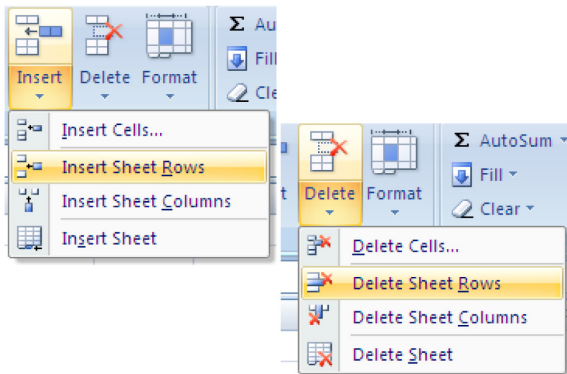
To insert a row:

1   click a cell in the row immediately below where you want the new row
2   click on the Home tab; in the Cells group, click the arrow on Insert
3   click Insert Sheet Rows

To delete a row:

1   click a cell in the row
2   click on the Home tab; in the Cells group, click the arrow on Delete.
3   click Delete Sheet Rows

Alternately you could use the right click function with your mouse.

1   select the row immediately below where you want to insert a new row Right-click your mouse and select insert
2   tick the box for the function you wish to perform

Formatting a cell
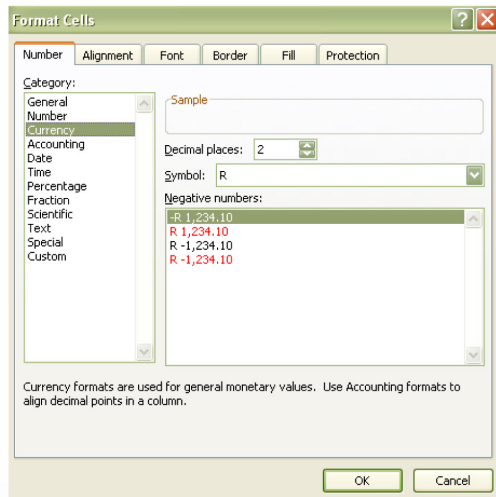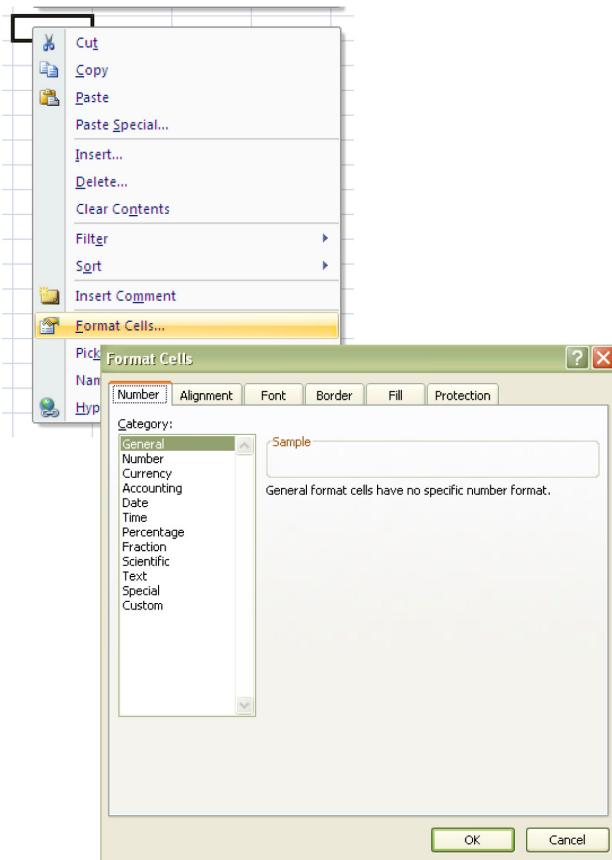
There are a wide variety of formatting options:

1. Right click a cell and select Format to see number, alignment, font, border fill and protection options.
2. To format a cell for currency, select the cell and right click. Click on the number tab, choose 2 decimals and select a country symbol. If you selected South Africa, your cell will then have an R symbol before it. If you selected USA, your cell will have a $ before it.

Saving your work
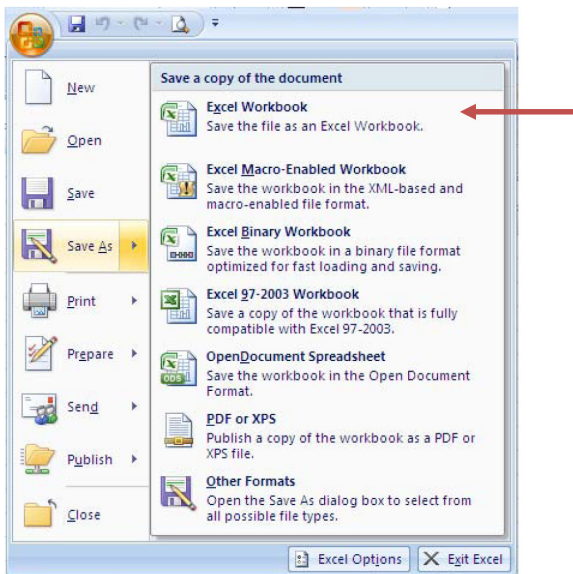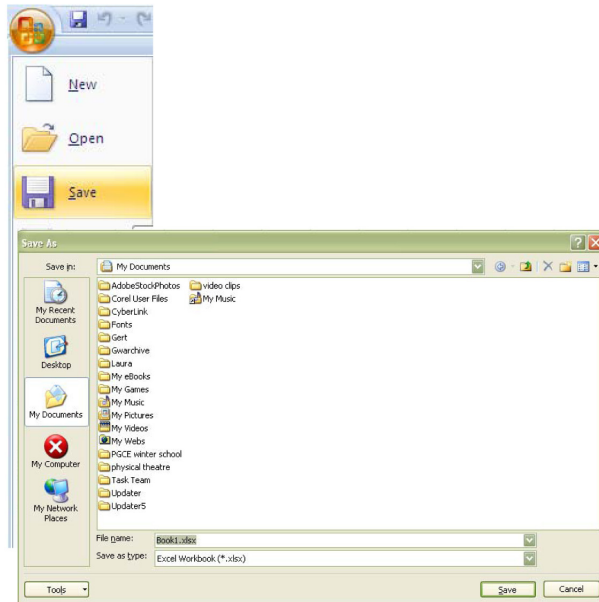
It is important to remember to save your work often.

To save:

1. click the Save icon (next to the office button) on the top left hand side of the screen
2. the first time you save a workbook, you will need to give it a name
3. if you want to change the name later, or if you want to keep the old version in the old name and create a new version with a new name, click the office button and use the Save As option
4. this will create a duplicate file and save it under a new name
5. 5. your old file with the old name will still be there, and you will now be working in the new file with the new name

Using AutoFill
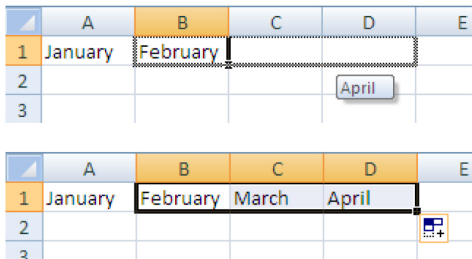
You can use the AutoFill feature to enter the months of the year, days of the week, consecutive dates, or a series of numbers.

1 type one or more of the above entries
2 2. click on the small square (bottom right of the active cell); left-click your mouse and drag it across as many cells as you want "Autofilled"

Using AutoComplete
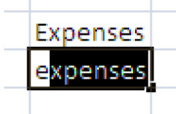
You can use the AutoComplete feature to fill in the remaining characters for you. If the first few characters you type in a cell match an entry you've already made in the same column, Excel will complete the word automatically. Just press ENTER.

Navigating cells
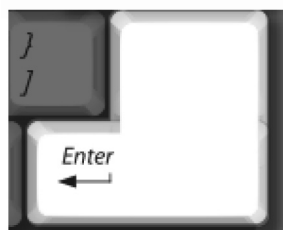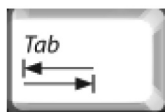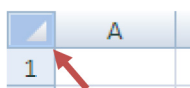
How to select cells:

A single cell:
click on the cell

A range of cells next to each other:
drag from the first cell you want to select to the last

Non adjacent cells or ranges:
hold **CTRL** (Windows) and click or drag an entire row or column OR click on the row or column heading

All cells:
click on the upper left corner

The next cell to the right :
use the **Tab** key or the arrow keys

The next cell down the column:
use the **Enter** key

Using Formulas

	A	B	C	D	E
		January	February		
1	Entertainment				
2	DSTV	500	500		
3	DVD rentals	250	180		
4	CDs	300	600		
5					
6					
7	Total	1050			
8					

Add (+)	=10+5
Subtract (-)	=10-5
Multiply (*)	=10*5
Divide (/)	=10/5

Click on C8 and type the following in the formula bar: =(C7-B7), then press Enter

*Click on D3 and type the following in the formula bar: =(C3*12), then press Enter*

Excel allows you to apply a variety of formulas to your data; worksheets are automatically recalculated based on the mathematical formulas and functions that connect your information.

How to:

To **add** up the entertainment expenses for February:
1 Click on cell C7
2 type **"=SUM(C3:C5)"** which will add up cells C3, C4 and C5
3 OR **"=(C3+C4+C5)"**
4 press Enter
5 you should get the answer **1280**
6 Look at the table on the left for other Maths operators you can use to subtract, multiply and divide.
7 You can add, subtract, multiply or divide cells however you like by applying formulas.

Examples:

Subtract the total January expenses from the total February expenses
Multiply the DSTV expense of 500 by 12 to determine the annual expense:

Working with Functions

Instead of entering lengthy formulas such as **"=C2+C3+C4+C5+C6+C7+C8+C9 + C10"** you could use the function **SUM(C2:C10),** which would save you a lot of time.
Have a look at the table on the left for time-saving functions you could use.

Useful shortcuts:

1. Highlight the values
You could highlight the values that

The function	The process
= SUM(B2, B3)	The values in the cells B2 and B3 are added together.
= SUM(B2:B6)	The values from the range of cells B2, B3, B4 B5 and B6 are added together.
= AVERAGE(B2:B6)	The values from the range of cells are added together and then divided by the number of cells to find an average.
= MAX(N12:N15)	This function identifies the largest (max) value in the selected range of cells.
= MIN(A1:A8)	This function identifies the smallest (min) value in the selected range of cells.
= COUNT(E3:E19)	This function counts the number of cells that contain numbers in the selected range of cells.
= COUNTA(D1:D13)	This function counts the number of cells that are not empty in a selected range of cells.

you want to calculate the total of and click on the AutoSum icon. Excel will assume that you wish to calculate the total of the highlighted cells.

2. Enter Equals
When you type "=" and the first letter into the function bar, Excel assumes that you want to use a function and provides a list of common functions.

3. AutoAverage
Click a cell below the numbers for which you want to find the average and then click the arrow next to AutoSum, on Average, and press ENTER.

PRACTICAL LEARNING ACTIVITY 3.1

Now you need to apply what you have learned so far. Follow the instructions below and make a note in the space provided of the steps taken to complete the activity. The image below is what your spreadsheet should look like at THE END; follow the instructions carefully.

	A	B	C	D	E
1		Product Name	January	Projected annual expense	
2					
3	1	Cheese	R 25.00		
4	2	Chicken	R 45.00		
5	3	Fruit	R 20.00		
6	4	Vegetables	R 20.00		
7	5	Handy Andy	R 16.50		
8	6	Bread	R 9.50		
9	7	Cold meats	R 24.00		
10	8	Toilet paper	R 36.00		
11					
12		**Total**	R 196.00		
13					

INSTRUCTIONS:

1   Create a new workbook and name it:
NameSurname_Part4_Section1_Activity_3.1

2 Delete worksheet 3 so that you only have 2 worksheets

3 Rename your worksheets **Grocery List** and **Monthly Expenses**

4 Type the heading **Product Name** in column A; **January** in column B and **Projected annual expense** in column C

5 Directly under Product Name, type in Cheese, Chicken, Fruit, Vegetables, Handy Andy, Bread, Cold meats, Toilet paper and Total

6 Format column C (January) as follows: Currency, Symbol R, 2 decimal places

7 Directly under January, type in 25; 45; 20; 20; 16.5; 9.5; 24; and 36

8 Insert a row between Product Name and Cheese and another row between Toilet paper and Total

9 Bold Row 12

10 Calculate the total expenses for January using a formula

11 Insert a column to the left of Product Name and type in corresponding numbers for the grocery products from 1 to 8; double-click on the column heading to auto-size it.

12 Select ALL cells and Left-align them

13 Insert a column to the right of January

14 Use the AutoFill function to give the new column a heading

15 Select Cells D3 through to D10 and use the AutoFill function to allocate the same expenses for this new column

16 Use the AutoFill function to determine the total expenses for the new column

17 Select Cell E12 and calculate the projected annual expense for groceries using a formula

18 Save your document

GROUP LEARNING ACTIVITY 3.2

Work together with a partner to complete the following quiz to see how much you understand about Formula and functions with this ten question multiple choice quiz.

	A	B	C	D	E
1	Surname	Assign 1	Assign 2	Assign 3	TOTAL
2	Bhengu	58	55	56	169
3	Chetty	62	57	63	182
4	Harvey	67	62	75	204

1	If you enter the formula = 5*3+4*5 into a cell and press enter, the cell will display the following value:	**a** **b** **c** **d**	17 35 1 The formula will not work
2	Which formula would you enter into F2 to find Bhengu's average:	**a** **b** **c** **d**	58+55+56/3= =(B2:D2)/3 =(58+55+56)3 =AVERAGE(B2:D2)
3	If you have the formula =B2+C2+D2 in cell F2 and you copy that formula to cell F3 what will the result be:	**a** **b** **c** **d**	169 182 204 None of the above
4	A quickest way to add up Bhengu's total is to click on E2 and:	**a** **b**	Click the data tab on the ribbon menu and click the subtotal button Enter = and the answer will appear in the

			formula bar
		c	Click the AutoSum button on the home menu
		d	Highlight the cell and click F11
5	Chetty's total results were 182. If you looked in the formula bar, what would the formula that added up the three assignments look like?	**a** **b** **c** **d**	=SUM(B3:D3) =ADD(B3:D3) B2+C2+D2 = =AUTOSUM(B3:D3)
6	If you wanted to quickly apply the formula used in E2 to E3 and E4, you would…	**a** **b** **c** **d**	Copy the cell with the formula, and then place the insertion point in the cell you want to copy it to and press enter and then repeat until all the cells had the formula Click the data tab on the ribbon menu and click the Auto copy and paste formula button Click on the cell, click on the fill handle at the bottom left and drag it over the selected cells Drag the Paste button on the Standard Toolbar across the cells and then click in the formula bar.
7	What function would be the best to use to calculate Bhengu, Chetty and Harvey's average total:	**a** **b** **c** **d**	RAND AVERAGE MAX COUNT
8	Look at the marksheet above. What is the correct formula to automatically determine the average marks in cells E1 to E3? Please select an answer…	**a** **b** **c** **d**	=AVERAGE(E2,E3,E4) =AVERAGE(E2:E4) =SUM(E2:E4)/COUNT(E2:E4) All are correct

Feedback [1]

---

[1] 1b, 2b, 3b, 4c, 5c, 6c, 7b, 8d

Working with Graphs and Charts

Excel's chart and graphing capacities are a good place to start when using graphs to explain complex information.

Graphs and charts allow us to visualise data and communicate information clearly and efficiently. Viewers of a chart or graph can quickly make comparisons, identify patterns and spot trends.

Sometimes the complex combinations of text and numbers in spreadsheets can be confusing. Graphs and charts attempt to assist people to view, compare and analyse data. They display the relationship between numbers and amounts visually.

Types of Graphs

Bar Graphs
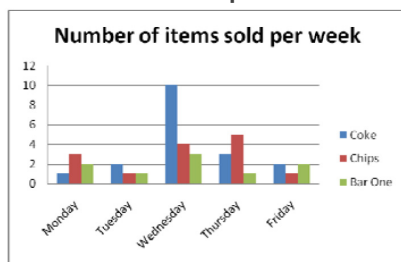
If you need to compare values side by side, then **bar graphs** are most useful for showing the contrast in item numbers. A bar graph consists of a vertical and horizontal axis and bars can run horizontally or vertically. These bars are used to show different values.

The bar graph on the left shows the sale of items on a day-to-day basis, for one week. The blue bar (on the left) represents how much Coke was sold on each day; red (the middle bar) reflects the sale of chips and the green bar (on the right) shows how many Bar Ones were sold.

Pie Charts
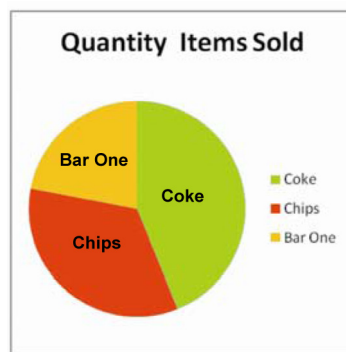
If you need to show the size of the parts that make up a whole, then **pie charts** are useful for showing the contrasting proportions. The larger the slice in the pie, the greater percentage of the information. They are useful when you want to emphasize a significant element.

The chart alongside represents the proportion of items sold as a slice of the pie. Almost half of items sold were Cokes and the least popular item was the Bar One.

Line Graphs

A **line graph** is useful for showing a pattern over time. Such a graph is usually used to display the relationships between two pieces of information and how they vary.

The line graph on the left shows which day was the post profitable day in the week. The net profit runs on the X axis (vertically), while the days of the week run along the Y axis (horizontally).

Creating a graph

To create a chart in Excel, you enter the data for the chart on a worksheet. The data can be arranged in rows or columns, Excel automatically determines the best way to plot the data in the chart.

Steps:

1

	A	B	C	D	E	F
1	Name	Test 1	Test 2	Test 3	Total	Average
2		50	50	100	200	
3	Antonio	23	16	66	105	
4	Blake	44	47	78	169	56
5	Cameron	12	25	91	128	43
6	Dale	25	40	44	109	36
7	Eric	35	37	87	159	53
8	Peter	37	39	88	164	55
9	Steven	45	44	56	145	48
10	Zonia	44	40	70	154	51

2

Column   Line   Pie   Bar   Area   Sca

2-D Column

3

Average

1. Highlight the data you would like reflected in the chart
2. Click INSERT and SELECT your chart type
3. The chart will appear below the table in the Excel spreadsheet

Now you can modify the look of your chart as well as the data that is displayed in it.
Select your chart and you will see three new ribbons in the menu bar (**Design, Layout and Format**). These ribbons allow you to customize all aspects of your chart.

Follow the steps on the following page to see how to customise your graph.

Design Ribbon

Layout Ribbon

Layout Ribbon

If you click on the **Design tab**, you'll be able to make changes to the basic options regarding the chart (change the type of chart, change the data that you want displayed in the chart, change the layout of the chart, what kind of chart is it, etc.).

If you click on the **layout tab**, then you will be able to add/edit/delete chart items like the title, legend, and so on.

Format allows you to change the appearance of the chart.

PRACTICAL LEARNING ACTIVITY 3.3

1 Use the grocery list from activity 3.1 to generate 2 types of graph (e.g. a pie and bar chart).
2 You must also specify which type of graph you think works best to represent the information and why.
3 Furthermore, play around with the Design, Layout and Format ribbons to generate original, colourful graphs.

5. Tracking my progress

You have reached the end of this section. Check whether you have achieved the learning outcomes for this section.

LEARNING OUTCOMES	✓ I FEEL CONFIDENT	✓ I STILL NEED PRACTICE
Renaming, inserting and deleting a worksheet		
Inserting, deleting columns and rows and navigating cells		
Using Fill Handles, AutoFill, AutoComplete and inserting formulas		
Formatting Cells		
Saving Excel workbooks		
Create graphs and charts in MS Excel		
Format and label charts and graphs		

What did you like best about this section?

_____

_____

_____

_____

What did you find most difficult in this section?

_____

_____

_____

_____

What do you need to improve on? How will you do this?

_____

_____

_____

_____

How will you do this?

_____

_____

_____

_____

Part 5:
Communication

Part 5: Communication

SECTION 1: E-MAILING

1. Introduction

In this Part, we will focus on how to use the computer to improve communication. In the world of work, or as tertiary education students, it will be essential that you can use the latest communication technologies.

E-mail is electronic mail, which has been an unprecedented success. Businesses have seen the advantages offered as being very important to improving their productivity and profitability.

There are many advantages to using e-mail. E-mail provides a way to exchange information between two or more people with no set-up costs and it is generally far less expensive than physical meetings or phone calls. Much of the business world relies upon communications between people who are not physically in the same building, area or even country; setting up and attending an in-person meeting, telephone call, or conference call would not only be inconvenient, but also time-consuming and costly. E-mail allows asynchrony, which allows the recipient to review and respond to the mail at a time that is convenient. The e-mail recipient is able to decide when and how much time they will spend dealing with any associated information.

There are also a number of disadvantages associated with the use of e-mail as a communication tool. Most business workers today spend from one to two hours of their working day on email: reading, ordering, sorting, „re-contextualising" fragmented information, as well as writing and replying to emails. The use of email is increasing due to increasing levels of globalization, labour division and outsourcing, amongst other things. Email can lead to some well-known problems such as loss of context, where the context is lost forever; information overload, where the use of mailing lists and „copy all" can lead to people receiving unwanted or irrelevant information that is of no use to them.

Learning Outcomes

On completion of this Part, you will:
- Understand the relationship between the Internet, email and communication
- Be aware of the advantages and disadvantages of email communication
- Be able to setup and use a webmail account

2. Communicating via the Internet

The Internet is a communication system that allows computers around the world to communicate and to exchange information with each other. The Internet also facilitates access to resources, such as files, services, or other people.

A group of computers that have been joined together or connected is known as a network. Computers in a network can communicate with one another.

Many schools, universities, businesses, and government institutions around the world have networks. All of these networks are connected to one another in a huge worldwide network, which is called the Internet.

Networked computers communicate through telephone lines, cables, wireless, and satellite links. Being connected is not enough, though computers must also understand one another. Just like people, they must speak the same language in order to communicate. Computers connected to the Internet exchange instructions that allow them to 'talk' to one another.

Computers break information into small chunks, called packets. Each packet travels along the Internet on its own. When the packets reach their destination, they're put back together. Sometimes, a packet gets lost, but even before you now it's missing, it's sent again and joins the other packets.

Packets do not travel directly from one computer to another on the Internet. They travel through machines called routers. A router is like a traffic cop at a busy intersection. It reads the "address" on each packet and decides what path the packets should travel. Packets sent to far off computers may go through many routers.

3. Setting up a webmail account

Setting up a webmail account

Gmail Welcome to Gmail   **1**

New to Gmail? It's free and easy.

Create an account »   **2**

About Gmail   New features!

3

Get started with Gmail

First name: _____

Last name: _____

Desired Login Name: _____ @gmail.com
Examples: JSmith, John.Smith

check availability!

4

I accept. Create my account.

6

Show me my account »

Compose Mail   **6**

Inbox (3)
Starred ☆
Sent Mail
Drafts

Personal
Travel
6 more▾

Contacts
Tasks

There are hundreds of services to choose from where you can create a webmail account, but 3 popular services:

· Google Mail:
http://www.gmail.com

· Yahoo Mail:
http://www.ymail.com

· MS Hotmail:
http://www.hotmail.com

Steps:

1. Type in: http://www.gmail.com

2. Click on "Create an account"

3. Fill in all the information asked of you under "Get started with Gmail"

4. Click on "I accept. Create my account."

5. Congratulations! You've successfully signed up for Gmail!

6. Click on "Show me my account" to start sending e-mails.

7. Click on "Compose Mail" to send someone and e-mail

Netiquette

Examples of emoticons1:

Netiquette refers to the conventions of good behaviour when online. There are 4 sacred netiquette rules:

:-)	:)
:]	=]
=)	:>
=>	:D
^_^	^_^
^3^	^w^
^o^	^x^
^u^	ouo

Smiling, happy

:D
=D
XD
8D
:))

Large grin

:O	=O	:()	:o
o-o	o.o	O.o	o.O
O.O	o_o	O_o	o_O
O_O			

Shocked, surprised

1. Consider email public information. Since messages can be easily leaked, write them professionally because you never know who will see them. Also, don"t include offensive or misleading phrases in the signature that may go against your company's policy.

2. Don"t shout. Writing in capital letters means you're screaming in the digital world. That's not nice. So to emphasize a word, place *asterisks* on either side.

3. Smile. Icons, such as 8), invoking a smile are okay to use and add personality. See Wikipedia for more emoticons examples1.

4. Get to the Point. Email is supposed to increase efficiency. Write short paragraphs and edit messages.

Popular abbreviations and shorthand:

BTW = By The Way
LOL = Laughing Out Loud
ROTFL = Rolling On The Floor Laughing
IMHO = In My Humble Opinion
IYKWIMAITYD = If You Know What I Mean And I Think You Do
JK = Just Kidding
NP = No Problem
WBS = Write Back Soon

Mind your Netiquette

E-mail prudence is becoming more important, as courts recognise e-mail messages as evidence. Keep in mind that for company-owned e-mail accounts, the company owns the e-mail messages, not the employee. Thus, keep the following questions in mind when writing e-mails:

- How would you feel if your boss read this e-mail?
- How would you feel if this e-mail appeared in the newspapers?
- What if the person you are referring to in your e-mail was in the same room?
- How would you feel if you received this e-mail message?

GROUP ACTIVITY 1.1

Your institution possibly also has additional netiquette rules. Find out what they might be. Now have a look at the following scenarios and decide whether they are examples of good or bad netiquette:

SCENARIO	GOOD NETIQUETTE	BAD NETIQUETTE
Joe receives an e-mail message from a colleague. He decides that it is appropriate to mailing list he subscribes to, and decides to pass it along. Before he does this, however, he writes to his colleague to receive permission.	☐	☐
Monge uses a computer in an Internet Cafe where a number of people use the same computer. When she logs on, she discovers that the machine pulls up the previous person''s e-mail. „I know her , we're working on the same assignment," she thinks, "and I don't have time to change the configurations. I'll just use this account to see if there's any new information on the project''.	☐	☐
A group or organization has sent out e-mail to large quantities of people whether they have any interest in what is being offered or not. People enjoy receiving lots of mail, right?	☐	☐
Sipho writes the following e-mail memo to his professor: PROF NCUBE - I HAVE RECEIVED YOUR LATEST EMAIL ON THE ICT MODULE PROJECT AND WOULD LIKE TO DISCUSS THE DEADLINES YOU HAVE SET FOR SUBMISSION. WOULD YOU HAVE TIME IN YOUR SCHEDULE TO MEET WITH ME THIS THURSDAY AT 11:00? THANK YOU, SIPHO	☐	☐

5. Tracking my progress

You have reached the end of this section. Check whether you have achieved the learning outcomes for this section.

LEARNING OUTCOMES	✓ I FEEL CONFIDENT	✓ I STILL NEED PRACTICE
Be aware of the changes communication inventions have undergone throughout the ages.		
Understand the relationship between the Internet, email and communication.		
Be aware of the advantages and disadvantages of email communication.		
Be aware of the different types of email.		
Be able to setup and use a webmail account.		

What did you like best about this section?

_____

_____

_____

_____

What did you find most difficult in this section?

_____

_____

_____

What do you need to improve on? How will you do this?

_____

_____

_____

_____

How will you do this?

_____

Part 5: Communication

1. Introduction

Social networking facilitates communication between individuals or organizations that share common interests, values, visions, ideas, ideals, financial exchange, friendship, or the like. Social networking is very popular online, because the internet is teaming with individuals who are looking to meet other internet users in order to develop friendships or business relationships.

Social networking websites are often referred to as virtual communities, and these can attract members in the hundreds of thousands. Such social networking websites help people who have common interests communicate with one another; members are provided with tools to communicate, discuss issues, make recommendations, as well as upload resources to share with one another.

In the early days of the World Wide Web institutions, used to publish materials for others to read on the web. It was all rather one-way traffic and it was difficult for end users to make queries or to talk to the publishers, let alone with other end users. Social networking sites, however, have overcome these barriers by using online forums, blogs or discussion list facilities. In fact, many of them have developed special applications or "apps" that offer rather unique facilities. For example, you can send "virtual" cakes or flowers for friend's birthdays within FaceBook, add comments to other people's photos in Flickr, or write book recommendations within Amazon. The best way to appreciate social networking is to get involved. This Section focuses on some of the most popular social networking sites.

Learning Outcomes

On completion of this Section, you will:

- Understand the meaning of online social networking;
- Understand the benefits and risks of participating in social networking sites; and
- Join/subscribe to a number of social networking sites.

2. Characteristics of Social Networking Sites

There is certainly no shortage of social networking sites on the web, with new sites popping up almost every day. Therefore, you are bound to find one that appeals to you. But what is it exactly that differentiates a social networking site from a regular web site? According to the site, http://socialnetworking.lovetoknow.com, there are five basic characteristics of social networking sites:

User-based Online social networks are built and directed by users themselves, who populate the network with conversations and content. Anyone who takes part in the discussion can determine the direction of the content, making social networks exciting and dynamic for Internet users.

Interactive The social network websites are often filled with network-based gaming applications, chatrooms and forums. They also serve as entertainment and a way to connect and have fun with friends.

Community-driven

Social networks are founded on the fact that members hold common beliefs, hobbies, interests, etc. You can also discover new friends and reconnect with old friends via these interest-based communities.

Relationships

Social networks thrive on relationships – the more relationships you have, the more established you are toward the centre of that network.

Emotion over content

Social networks provide users with emotional security and a sense that no matter what happens, their friends are within easy reach. Users can go online and communicate directly with a circle of friends, who can provide support.

3. Risks of Social Networking

As with most things in life, there's are pros and cons associated with social networking. Some people are strong supporters of social networking, while others think it withdraws you from the real world.

THE PROS:
- Making new friends
- Connecting with old friends
- Finding romance
- Forming new businesses
- Finding property
- Finding work
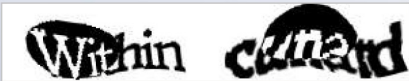- Receiving recommendations

THE CONS:
- Identity theft
- Cyber-stalking
- Internet addiction
- Can waste time
- You face exposure
- Some information is permanent
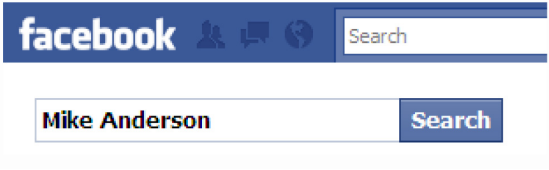- Invasion of privacy

Discuss these with your facilitator and your partner in class. It is important to weigh both opinions in order to thoroughly explore the advantages and disadvantages of social networking.

4. How to join a Social Networking Site

Facebook is a social networking site that has attracted thousands of people all over the world, and is also a favourite of a large South African contingent. There are quizzes and tests, as well as numerous facilities to share information, such as photos, music, favourite films, books, etc.

Register on facebook

1 Go to **www.facebook.com**

2 Enter your first name, last name, e-mail address, password, gender and birthday and click **Sign Up**.

3 Complete the Security Check by filling in the given text in the text box provided and click **Sign Up**.

4 Go to your e-mail account and look for a confirmation e-mail from Facebook and click on **Complete Sign-up**.

5 Complete the information under Step 1, 2 and 3 and click on **Save and Continue**.

6 On the Welcome page you can then **activate your mobile phone** (section 4), **find people you know** (section 5) and **control what information you share** (section 6).

Signing up Friends

Just use **Facebook Search** to find the person you know and then click on the "Add as Friend" button to the right of their search listing. A friend request will be sent to that person. Once they confirm that

	they actually are friends with you, they will show up on your Friends List.
Writing messages on your friends' walls	The Wall is the center of your profile for adding new things, like photos, videos, notes and other application content. The Publisher at the top of your Wall allows you to update your status and share content through many different kinds of Wall posts. Facebook **only** lets you write on your friends' Walls and your own Wall. You can also write on the Wall of any Page you become a fan of. Click on any of your friends'' profiles and select **Wall**. Write in the **'Write something'** block provided and then click on **Share.** Whatever you wrote in the box will then show on that friend''s wall.
My Account and Help Center	Should you have any problems with applications, click on Account and select Help Center. A screen will appear with various applications under **Using Facebook**, **Facebook Applications and Features**, and **Ads and Business Solutions**. Click on any of the items under these headings for assistance.
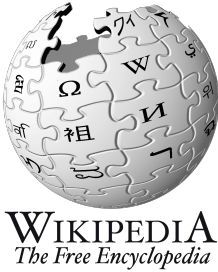
GROUP ACTIVITY 1.2

1 In groups, create your own rating scale (1-5) that you will use to assess a number of websites to determine if they can be classified as social networking sites or not.

2 Visit the following sites listed below and rate each site based on the scale you have developed. Provide explanations for each rating you have provided.

3 Identify some of the "cool" social networking features (if any) contained within each site.

4 Your facilitator will then lead a discussion inviting feedback from each of the groups.

SOCIAL NETWORKING SITE: **RATING SCALE**

1=	2=	3=	4=	5=

	Flickr www.flickr.com	**Rating:**
flickr™		
	MySpace www.myspace.com	**Rating:**
myspace.com		
	News24.com www.news24.com	**Rating:**
NEWS 24.com Breaking News. First.		
	Wikipedia www.wikipedia.org	**Rating:**
WIKIPEDIA The Free Encyclopedia		

	Kalahari.net www.kalahari.net	**Rating:**
	5FM Radio www.5fm.co.za	**Rating:**
	Youtube www.youtube.com	**Rating:**
	Iafrica.com www.iafrica.com	**Rating:**

5. Tracking my progress

You have reached the end of this section. Check whether you have achieved the learning outcomes for this section.

LEARNING OUTCOMES	✓ I FEEL CONFIDENT	✓ I STILL NEED PRACTICE
Understand the meaning of online social networking;		
Understand the benefits and risks of participating in social networking sites;		
Join/subscribe to a number of social networking sites.		

What did you like best about this section?

_____

_____

_____

_____

What did you find most difficult in this section?

_____

_____

_____

_____

What do you need to improve on? How will you do this?

_____

_____

_____

_____

How will you do this?

_____

_____

_____

_____

_____

Part 6:
Research Skills

Part 6: Research Skills

SECTION 1: FINDING INFORMATION ONLINE

1. Introduction

In this Part, we are going to investigate ways to do research using computers and the Internet. You will be required to be able to search, find and analyse data, both for your studies, as well as in the world of work. Having access to the Internet and its vast resources makes this much easier than in the past. Previously we were bound to the information collected by institutional archivists and librarians, but now the Internet can provide access to a lot more information and also the latest information. However, you should not ignore the Resource Centre on campus or your local Library, both are still excellent sources of information and provide an environment that is conducive to learning and study.

Here we will focus on using search engines to identify specific information that will be useful to our studies and assignment-writing. We will also look at a number of strategies to determine the usefulness and authenticity of the websites identified by the search.

Learning Outcomes

On completion of this Section you will be able to:

- Conduct an advanced search using a search engine to find appropriate information on the Internet
- Be aware of the possible dangers of using online search facilities
- Have developed a preference to a particular search engine
- Critically evaluate the usefulness and authenticity of the information provided by the individual websites identified within the search results

2. Search Engines

Recently, there were over 15 billion websites on the World Wide Web. It is easy to find what you are looking for if you know the web address, but one is not always exactly sure what to search for and this is where search engines come in - they help you browse through the sea of content. Most search engines use the simple process of searching the Internet for instances of words or phrases that a user has inserted into a search field. If you click the "Search" button, millions of results are returned. However, not all search engines are the same; you need to find one that consistently returns results that suits you.

Search Engine	Description
www.google.co.za	**Google** is currently the most well-known and „trendy" search engine. People like it because it ranks sites according to *popularity*. It uses the number of links to a site to determine how important the site is. It places these sites high up in the returned search results. Google also has specialised searches for blogs, images, news, scholarly journals, patents and books. It is also very user-friendly.
www.yahoo.com	**Yahoo** is the „grandpa" of search engines and has built up a loyal community around it. The search facility appears at the top of the page and a portal filled with numerous services and content appears on the same page. Noteworthy features include shortcuts to dictionary, synonyms, patents, traffic, stocks, and an encyclopaedia.
www.ask.com	**Ask** uses a system called Subject-Specific Popularity™ ranking that allows you to suggest a broader or narrower search, thereby filtering your search results. It too has an encyclopaedia that is very useful.
www.ananzi.co.za	**Ananzi** is a South African-based search engine and specialises in finding local services and resources. There is also a handy map facility that shows you the street names for any district, town or city in the country.
www.za.msn.com	**MSN** is a popular search facility for those who use the Microsoft Network portal, MSN. In the USA, MSN search accounts for about 10% of all Internet searches. There is a local version that uses the same technology.
www.monstercrawler.com	**Monster Crawler** is an example of a *meta-search engine* that coordinates searches using all of the top 5 US search engines (Google, Yahoo, MSN, Ask and AOL). While it might make sense that more heads are better than one, there are some academics that believe that the results returned by meta-search engines are no better than those sites using one system

3. Advanced Search Strategies

Phrases and exclusion strategies

1 Insert **more than one word** into the search field
Using more than one word to describe what you are searching for forces the search to be more focused. The search engine returns results of web pages that contain all the words you have inserted and, therefore, are more likely to be close to what you are looking for.

2 Insert **phrases inside inverted** commas
Ensure the search engine searches for the instance of a phrase rather than a series of individual words by inserting phrases inside inverted commas like, such as "Search Engine", "Virgin Active" and perhaps most significantly "South Africa".

3 Insert a **minus sign** and then **the ambiguous word you want excluded**
This allows you to ask the search engine to exclude or omit instances of an ambiguous meaning of a word that you are looking for, e.g. glasses – spectacles

ADVANCED SEARCH SCREEN

Most search engines offer you access to a screen that contains a host of different search strategies that allows you to customise how you search. This screen shot belongs to the Google advanced search screen. Notice that it allows you to:

Search Engines	
Find web pages that have...	
all these words:	Search Engines
this exact wording or phrase:	tip
one or more of these words:	OR ___ OR ___ tip
But don't show pages that have...	
any of these unwanted words:	tip
Need more tools?	
Results per page:	10 results
Language:	any language
File type:	any format
Search within a site or domain:	
	(e.g. youtube.com, .edu)
⊟ Date, usage rights, numeric range, and more	
Date: (how recent the page is)	anytime
Usage rights:	not filtered by license
Where your keywords show up:	anywhere in the page
Region:	any region
Numeric range:	--
	(e.g. $1500..$3000)
SafeSearch:	⦿ Off ◯ On
	Advanced Search

1 Use exact or exclude various words
2 Determine how new or old the page should be
3 Identify where in the web page the key words should be found
4 What geographic region or domain the page should come from
5 What language the pages should be in
6 If the resources you are searching for are not web pages, then you can also determine what type of file types you would prefer, e.g. PowerPoint or .ppt

4. Determining the Usefulness of the results

While there are numerous resources available on the Internet, not all of them are accurate. Therefore, it is important to be able to judge which information is trustworthy and which should be ignored. Below is an introduction to evaluating web resources:

You will need to evaluate each website according to the following five main criteria:

Accuracy
- Are the pages accurate?
- First identify who or what institution wrote the page and ask yourself if this person or organisation is known to have relevance in this field? Also try to determine what the page's purpose is. If it's trying to sell a product, then you need question its accuracy.
- **Tip**. Look to see if the author or company is contactable, if they leave an e-mail or telephone number.

Authority
- Does the site have any authority?
- Anyone can publish on the web, which means that there are many people communicating on issues where they have factually unsupported views. So look to see if the website has any authority.
- **Tip**: Look at the domain to determine if the organisation is academic or educational. The URL should contain, .edu or .ac for it to be one of these. Government URLs normally contain the domain, .gov.

Objectivity
- How objective is the information?
- Many people express an subjective opinions that is not always backed up by fact. You need to look for objective sites that have evidence that supports the various outlooks on a praticular subject.
- **Tip**: Determine if the page is really trying to promote something specific (a product, service or perspective) If so it might be biased. It's probably a good idea to always be sceptical about a page and initially view it as an infomercial on TV.

Up-to-date
- How up-to-date is the information?
- Spend some time determining if a site is up to date, as you will usually want the latest information.
- **Tip:** Look for dead links. The existence of broken lines means the site has not been maintained and updated. Some sites have the date the page was updated at the bottom of the page.

Coverage
- How comprehensive is the coverage?
- Some sites look wonderful, but once you start working though the information, you might discover that the information is superficial and suggest more than they actually tell you.
- **Tip:** If the site wants you to use plug-ins to enhance the visual experience of the site, then ask yourself whether these are really necessary for your research.

GROUP LEARNING ACTIVITY 4.1[1]

Access and read the following three websites on **Nelson Mandela** and rank each one according to the 5 criteria outlined above. A score of **1** is poor and **5** is excellent. Also write a comment about the usefulness of the site for research purposes.

WEBSITE, URL & GENERAL COMMENT	ACCURACY					AUTHORITY					OBJECTIVE					UP-TO-DATE					COVERAGE				
SA History Online	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
http://www.sahistory.org.za/pages/people/special%20projects/mandela/bio_1.htm																									
General Comment:																									
Nelson Mandela ThinkQuest	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
http://library.thinkquest.org/C005803F/manhome.htm																									
General Comment:																									
Mandela: An Audio History	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
http://www.radiodiaries.org/mandela/index.html																									
General Comment:																									

[1] See Feedback on page 8

5. Tracking my progress

You have reached the end of this section. Check whether you have achieved the learning outcomes for this section.

LEARNING OUTCOMES	✓ I FEEL CONFIDENT	✓ I STILL NEED PRACTICE
Conduct an advanced search using a search engine to find appropriate information on the Internet		
Be aware of the idiosyncrasies and possible dangers of using online search facilities		
Have developed a preference to a particular search engine		
Critically evaluate the usefulness and authenticity of the information provided by the individual web sites identified within the search results		

What did you like best about this section?

_____

_____

_____

_____

What did you find most difficult in this section?

_____

_____

_____

_____

What do you need to improve on? How will you do this?

_____

_____

_____

_____

How will you do this?

_____

_____

_____

_____

_____

FEEDBACK: GROUP ACTIVITY 4.1

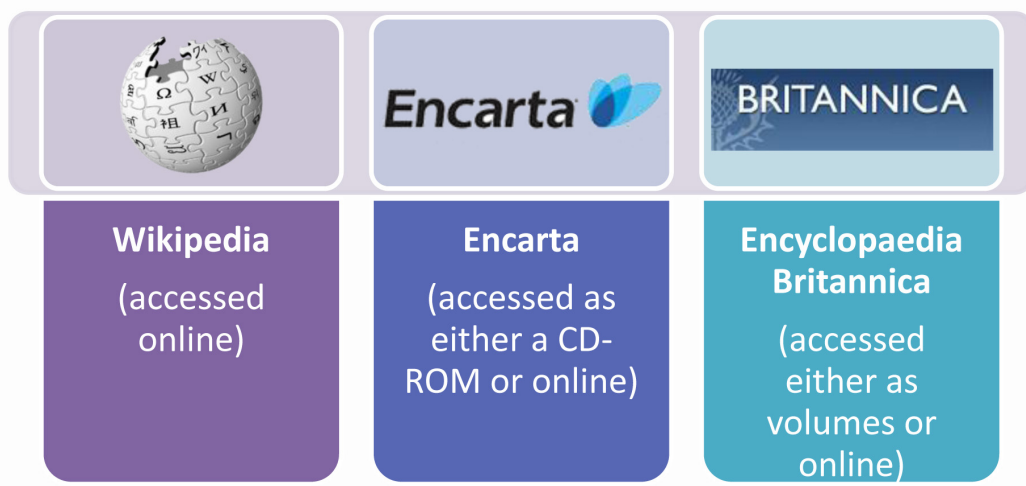| WEBSITE, URL & GENERAL COMMENT	ACCURACY					AUTHORITY					OBJECTIVE					UP-TO-DATE					COVERAGE				
SA History Online	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
http://www.sahistory.org.za/pages/people/special%20projects/mandela/bio_1.htm																									
General Comment: *A very good site that scores highly in all categories. When I reviewed the site, it had not been updated to include his 90th birthday, even though this had passed some months previously.*																									
Nelson Mandela ThinkQuest	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
http://library.thinkquest.org/C005803F/manhome.htm																									
General Comment: *This was in fact part of a secondary-school student's ThinkQuest project on prominent leaders that included a page on Nelson Mandela. Its major failing is that it is not very comprehensive, so it scores poorly on 'Coverage', as it touches on his influence during his retirement, for example. It is, however, fairly accurate otherwise.*																									
Mandela: An Audio History	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
http://www.radiodiaries.org/mandela/index.html																									
General Comment: *An excellent site, but is limited in that it focuses exclusively on the audio history that is available on the subject. It scores high on accuracy, authority and objectivity, but because there is a lack of audio files on certain aspects of his history, there are many gaps. It scores poorly on Coverage.*																									

Part 6: Research Skills

SECTION 2: ENCYCLOPEDIAS

1. Introduction

A good place to start your research is with an **encyclopaedia**. These are very important source of information, both in terms of your studies at university, as well as in the world of work. Encyclopaedias offer you a concise overview of a topic or subject. They centre on what is considered established fact and try to be as objective as possible. Your research will most likely also require you to search for and read articles that focus on the latest research and findings. These views and facts would not yet have been written into any encyclopaedia article.

In this Section, we will focus on using three popular electronic encyclopaedias:

Wikipedia	Encarta	Encyclopaedia Britannica
(accessed online)	(accessed as either a CD-ROM or online)	(accessed either as volumes or online)

Learning Outcomes

On completion of this Section you will be:

- Be aware of the uses of Encyclopaedias
- Be able to access encyclopaedias in 3 different media: paper, DVD and online versions
- Be able to use look up articles in each medium

2. Media of Encyclopaedia

Books and Volumes

Examples of well-known sets of encyclopaedias:

- Collier's Encycolopedia
- Harmsworth's Encyclopaedia
- The Children's Encyclopedia
- World Book Encyclopedia
- Funk and Wagnalis
- Jewish Encyclopedia
- Academic American Encyclopedia

The **Encyclopædia Britannica** is the most famous of these paper-based references, although there are many different publishers. Another popular title is World Book. Currently the latest version of the *Encyclopædia Britannica* includes 32 volumes! Generally, all articles are organised alphabetically, but the set is divided into a number of sections. The first section is a quick-reference set, while the bulk of the volumes are for in-depth references. An annual yearbook is released to update an existing set.

There are many different sets of encyclopaedias available in libraries, aimed at different readers, such as young readers, scientists, religious scholars, etc.

It makes more sense these days to update an encyclopaedia online; Britannica has also moved into this medium. A subscription service allows users" access to their database online. This version of the encyclopaedia contains the most accurate and up-to-date information. You can access the online version at **www.britannica.com**, but in order to use it properly, you will need to subscribe:

1 Click on **Sign up Now**

2 Click on **Sign In / Register**

3 Fill in your e-mail address and select **'I am not yet registered with The Britannica Store'**

4 Click on **Submit**

Add Billing Address [5]

Please Note: Using your browser back button may cause you to lose data you please use other navigation below.

Fields with an asterisk (*) must be filled in.

Your address must match the billing address on your credit/debit card.

You can add other shipping addresses later in the process.

Title:

First Name: *

Last Name: *

Address: *

Address Line 2:

City: *

State: Please select

ZIP code:

Country: *   United States

Phone Number: *

Email: *   drennanl@ufs.ac.za

☐ Please check here to receive exclusive offers from The Britannica Store

Password: *

Verify Password: *

Back

[6]   Register

5 Fill in the information in the **Add Billing Address** window

**6** Click **Register**

Internet

Wikipedia is a well-known, online encyclopaedia which does not require subscription. Its 10 million articles are collaboratively written by volunteers around the world, and almost all the articles can be edited by anyone who can access the Wikipedia website. Because of this, some academics are concerned that the articles might not be objective and that the information might not be reliable.
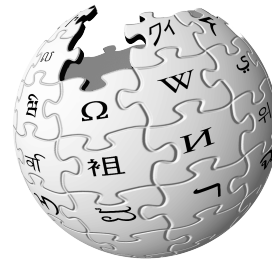
Therefore, it is important that you cross reference anything that you have located on Wikipedia before you include it in your research.
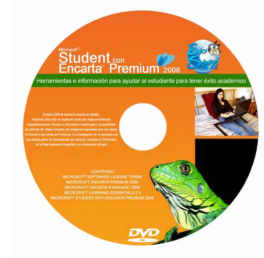
Other online encyclopaedia include:

- **HighBeam Encyclopedia**
  www.encyclopedia.com
- **Knol**
  http://knol.google.com/k
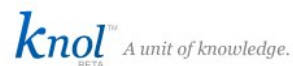
Compact Disk or DVD

Microsoft Encarta is a popular compact disk-based reference that incorporates multimedia (audio clips, photographs, animations and video) in amongst the text. It allows one to see visual examples and hear commentary or sounds, as well as read various articles. Hyperlinks embedded in the text makes cross referencing articles easy. Encarta now has a free online version available from within the MSN portal that incorporates a dictionary and Atlas.

www.encarta.msn.com

GROUP ACTIVITY 2.1[2]

Test the following free online encyclopaedias and do the same search for information on **Nelson Mandela**. To do this, look for the search field on each of the sites, type in the term (Nelson Mandela) you are interested in and click the „Search" button. The results will then appear on the screen

Also, search for **Kaiser Chiefs** and see how similar or different the articles are. Make a comment about your experience and the usefulness of the encyclopaedia in the box provided and, once completed, rank the online reference sites. Note which do you prefer and would use in the future.

HighBeam www.encyclopedia.com	
	RANK
Wikipedia www.wikipedia.org	
	RANK
Knol http://knol.google.com/k	
	RANK

---

[2] See Feedback on page 14

5. Tracking my progress

You have reached the end of this section. Check whether you have achieved the learning outcomes for this section.

LEARNING OUTCOMES	✓ I FEEL CONFIDENT	✓ I STILL NEED PRACTICE
Be aware of the uses of Encyclopaedias		
Be able to access encyclopaedias in 3 different media: paper, DVD and online versions.		
Be able to use look up articles in each medium.		
Be aware of the uses of Encyclopaedias		

What did you like best about this section?

_____

_____

_____

_____

What did you find most difficult in this section?

_____

_____

_____

_____

What do you need to improve on? How will you do this?

_____

_____

_____

_____

How will you do this?

_____

_____

_____

FEEDBACK: GROUP ACTIVITY 2.1[3]

	HighBeam www.encyclopedia.com *This is a free, easy to use online encyclopaedia. This one supposedly has access to 200,000 articles from Britannica, Oxford University Press and Columbia Encyclopaedia. It successfully looked up the term „Nelson Mandela" and provided access to an accurate and accessible article on the politician. It, however, failed to find the soccer club „Kaiser Chiefs" but did link to a news article on the British pop band of the same name.*	**2** **RANK**
	Wikipedia www.wikipedia.org *This is a free, easy to use online encyclopaedia. It found the term „Nelson Mandela" and provided access to a good article on the leader. It also found both the football club and the British band, Kaiser Chiefs, although it defaulted to the pop group first. Both articles were well written.*	**1** **RANK**
	Knol http://knol.google.com/k *This is another free online encyclopaedia, organised by Google. It found the term „Nelson Mandela" easily and provided access to an excellent article on the leader. It failed, however, to find anything on the term „Kaiser Chiefs" except for a few minor mentions within other non related articles on the British pop band.*	**2** **RANK**

---

[3] See Feedback on page 14