

NAME OF SCHOOL:

GRADE 8 COMPUTER STUDIES – SCHEMES OF WORK –THEORY

CLASS: **TERM: ONE**

YEAR

DURATION (WEEKS)	TOPIC and CONTENT	METHODS, OBJECTIVES, AIDS, PROJECTS	SOURCES & REFERENCES
2	Getting Started 1.Introduction to Computers-Terminologies Explanation & Definition of: <ul style="list-style-type: none"> ➤ Information and Communication Technology (ICT). ➤ Information Technology (IT) ➤ Data Processing 	Teacher's Explanation	ICDL Material Basic Concepts of IT - Module 1 pgs 5-9
2	Computer System <ul style="list-style-type: none"> ➤ Explanation & Definition of Computer System ➤ Advantages and disadvantages of a computer system Parts of a Computer System / Components of a Computer System <ul style="list-style-type: none"> ➤ Mouse, Keyboard, Central Processing Unit (CPU) ➤ Visual Display Unit (VDU)/Monitor, Use of main parts of a computer system - Explanation <ul style="list-style-type: none"> ➤ Mouse, Keyboard - Input, entering data ➤ CPU – Processing ➤ Storage – store & keep data ➤ VDU/Monitor - Output, Display 	Class Discussions Drawing parts of a computer system. Observing different types of keys on the keyboard Explanation	Technology Applications Student WorkText Grade 6 by: Pearson Prentice Hall pgs 2-12 Computer Lab ICDL Material Basic Concepts of IT - Module 1 pgs 12-19
2	Hardware <ul style="list-style-type: none"> ➤ Definition of Hardware devices ➤ Explanation on how Hardware parts operates ➤ Examples of Hardware e.g. Mouse, Keyboard, CPU, VDU/Monitor, Printer, Scanner, ➤ Uninterrupted Power Supply (UPS) 	Teacher's Explanation Class Discussions Questions & Answer session	Technology Applications Student WorkText Grade 6 by: Pearson Prentice Hall pgs 8 ICDL Material Basic Concepts of IT - Module 1 pgs 11-17
2	Software <ul style="list-style-type: none"> ➤ Explanation & Definition of Software ➤ Definition of Operating Systems and Application Software ➤ Examples of Operating System e.g. Ms DOS, Windows 95,98,2000, XP, Vista, Windows 7, Windows 8, LINUX, UNIX, Ubuntu, Macintosh etc ➤ Examples of Application Software e.g. Word processors (Ms Word), Open office writer, Spreadsheet (Ms Excel), Open office Calc, PowerPoint Presentation (Ms PowerPoint), Open Office Presentation, database, Publisher, games etc. 	Teacher's Explanation Class Discussions Questions & Answer session Notes writing	Technology Applications Student WorkText Grade 6 by: Pearson Prentice Hall pgs 12-14, 47-153 ICDL Material Basic Concepts of IT - Module 1 pgs 34-37
2	Types of computers <ul style="list-style-type: none"> ➤ Super Computers, Mainframe Computers, ➤ Mini- Computers, Micro Computers, Notebooks/Laptops ➤ Palm Computers, PDAs, Tablets 	Explanation	
1	Data and Information <ul style="list-style-type: none"> ➤ Definition of data & how it is used in the computer ➤ Examples of data ➤ Definition of Information & how it is processed ➤ Examples of information ➤ Differences between data and information Tests on the topics covered	Class Tests	ICDL Material Basic Concepts of IT - Module 1 pgs 7-10

NAME OF SCHOOL:

GRADE 8 COMPUTER STUDIES – SCHEMES OF WORK –THEORY

CLASS: TERM: TWO

YEAR

DURATION (WEEKS)	TOPIC and CONTENT	METHODS, OBJECTIVES, AIDS, PROJECTS	SOURCES & REFERENCES
2	Input/output processing and Operations Basic Operations in a Computer System <ul style="list-style-type: none"> ➤ Explanation of Input, Processing and Output ➤ Definition of Input devices and how they work ➤ Examples of Input devices (Mouse, Keyboard, Scanner, Digital Camera, OMR, OCR, Microphone etc) ➤ Definition of Processing e.g. CPU ➤ Definition of Output devices and how they work ➤ Examples of Output devices (VDU/Monitor, Printer, Speakers etc.) 	Explanation and discussion Questions & Answer session Teacher's explanation	Cheltenham ICDL Material Pgs 12-16, 17-20 Technology Applications Student WorkText Grade 6 by: Pearson Prentice Hall pgs 19-29
2	<ul style="list-style-type: none"> ➤ Definition of Storage devices and how they work ➤ Examples of storage device (CD/DVD, flash, memory stick etc) 		
2	3. Memory <ul style="list-style-type: none"> ➤ Definition and explanation of memory ➤ Types of Memory e.g. Random Access Memory (RAM), Read Only Memory (ROM). ➤ Differences between ROM and RAM Storage <ul style="list-style-type: none"> ➤ Definition and explanation of storage ➤ Main storage Devices and examples ➤ Appreciating different types of storage media e.g. CD/DVD, Flash disk etc. 	Explanation & Discussions Notes writing	Technology Applications Student WorkText Grade 6 by: Pearson Prentice Hall pgs 31- 45 ICDL Material Basic Concepts of IT - Module 1 pgs 21-32
2	Basic Operations Computers and Peripherals <ul style="list-style-type: none"> ➤ Definition and explanation of peripherals ➤ Examples of peripherals, Usage of peripherals Care for Computer Systems <ul style="list-style-type: none"> ➤ Explain the procedure on how to switch on/off the computer system ➤ Demonstrate on how to switch on/off the computer system correctly, Ways of losing data, Methods of preventing data loss 	Explanation and discussion Questions & Answer session Pupils observation Teacher's explanation Notes writing	Cheltenham ICDL Material Computer ICDL Material Basic Concepts of IT - Module 1 pgs 74-76
2	Security and Viruses <ul style="list-style-type: none"> ➤ Definition and explanation of viruses ➤ Examples of viruses ➤ Effects of viruses (loss/damages computer files etc) ➤ Sources of viruses ➤ Methods of protecting computer system from viruses (use of updated antivirus, not to use disks from unknown sources etc) Health & Safety Issues <ul style="list-style-type: none"> ➤ Explain how to keep the computer room clean ➤ Repetitive Strain Injuries (RSI) ➤ Eye strain, problems associated with bad postures ➤ Environmental concerns 	Questions & Answer session Teacher's explanation Notes writing	ICDL Material Basic Concepts of IT - Module 1 pgs 66-68
1	Tests on the topics covered	Class Tests	

NAME OF SCHOOL:

GRADE 8 COMPUTER STUDIES – SCHEMES OF WORK –THEORY

CLASS: TERM: THREE YEAR

DURATION (WEEKS)	TOPIC and CONTENT	METHODS, OBJECTIVES, AIDS, PROJECTS	SOURCES & REFERENCES
1	Computer Interface Types of interfaces <ul style="list-style-type: none"> ➤ Definition and explanation of interface ➤ Graphical User Interface (GUI) & Command-line interface(CLS) ➤ Examples of GUI & CLS ➤ Advantages & Disadvantages of GUI & CLS 	Pupils' observation Teacher's explanation	ICDL Material Basic Concepts of IT - Module 1 Pgs 36- 37
2	Computers in Everyday Life Household, entertainment & recreation appliances <ul style="list-style-type: none"> ➤ Explanation on how microprocessors embedded controlled devices work or operate(Washing machine, microwave ovens, digital watches & cameras, air conditioned systems etc) Office equipment <ul style="list-style-type: none"> ➤ Explanation on how office equipment operates (Printers, fax machines, telephone systems, scanners, LCD projectors) Industrial & commercial applications of computers <ul style="list-style-type: none"> ➤ Explanation on how computers work in industries (Chemical plants, Indeni, mining, Liming, cement, beverage, manufacturing) ➤ Shops and Financial institutions (Electronic Point Of Sale (EPOS), Electronic Fund Transfer Point Of Sale (EFTPOS) Barcode Readers, Automatic Teller Machines (ATM), Health & Hospitals, LUSE, ticket reservation systems, defense & security) Computer Based Learning (CBL) - Explanation on how computers are used as aids for learning (e-learning, interactive lessons) Social & economic effects of computers <ul style="list-style-type: none"> ➤ Security concerns, Deskillling, loss of employment, Failure of systems, human rights violation, computer misuse 	Questions & Answer session Teacher's explanation Explanation and discussion Notes writing	ICDL Material Basic Concepts of IT - Module 1 Pgs 54- 57 Technology Applications Student WorkText Grade 6 by: Pearson Prentice Hall pgs 171- 183 ICDL Material Basic Concepts of IT - Module 1 Pgs 59 – 64
2	Networks <ul style="list-style-type: none"> ➤ Definition and explanation of network ➤ Advantages & Disadvantages networks ➤ Difference between wired & wireless networks ➤ Local Area Network (LAN) & Wide Area Network (WAN) The Internet <ul style="list-style-type: none"> ➤ Definition and explanation of internet ➤ Uses of internet Web browsers <ul style="list-style-type: none"> ➤ Definition and explanation of web browsers ➤ Examples of web browsers and its uses (Mozilla Firefox, internet explorer, Chrome etc) ➤ Universal Resource Locator (URL) Search Engines <ul style="list-style-type: none"> ➤ Definition and explanation of search engines ➤ Examples of search engines and its uses(Google, Yahoo etc) Electronic mail (Email) <ul style="list-style-type: none"> ➤ Definition and explanation of email ➤ Examples of email and its uses 	Pupils' observation Teacher's explanation Explanation and discussion Notes writing Explanation and discussion	Technology Applications Student WorkText Grade 6 by: Pearson Prentice Hall pgs 187- 233 ICDL Material Basic Concepts of IT - Module 1 Module 7 Pgs 6-8, 45 < ICDL Material Information Network Services Module 7 Pgs 62 – 68
2	Multimedia Files <ul style="list-style-type: none"> ➤ Definition and explanation of multimedia systems and files ➤ Components of multimedia ➤ Difference types of various media (Clipart, video, sound, animations, graphics) 	Teacher's explanation Notes writing	Technology Applications StudWorkText Grade 6 by: Pearson Prentice Hall pgs 154- 164