MARINA INTERNATIONAL SCHOOL

ICT SCHEME OF WORK

FORM 2 - TERM 1

WEEK	TOPIC	TOPIC DETAILS
1.1	Output Devices and Their Uses	To identify some output devices and their uses, monitors, printers, Plotters, Loud speakers
1.2	Exploring Documents :- Create and editing a text document for a specific audience	o Create paragraph of text and use word processing software to make changes to the text o Text formatting, including font style, size and color, to make it suit a specific audience.
1.3	Exploring Documents :- Create and editing a text document for a specific audience	Saving changes to a document o Text, including font style, size and color, to make it suit a specific audience.
2.1	Output Devices and Their Uses :- monitors	CRT monitor, TFT/LCD monitor ☐ Description ☐ Uses ☐ Comparison; advantages and disadvantages of each monitor type compared with the other
2.2	Exploring Documents :- Add images or other objects to ☐ a document	o Insert an image (or other object, e.g. A chart) into an appropriate place within a document.
2.3	Exploring Documents :- Add images or other objects to ☐ a document	Editing images o Wrapping text around an image o Image size o Aspect ratio
3.1	Output Devices And Their Uses :- LED monitor, touch screen	LED monitor, touch screen (as an output device) o Description o Uses o Comparison; advantages and disadvantages of LED monitor type compared with CRT and TFT

WEEK	TOPIC	TOPIC DETAILS
3.2	Exploring Documents :- organize the layout of a document for a specific audience	Changing document layout to meet the needs the target audience o Choice of font style for a particular audience o Choice of font size and color o Error checking (proofreading document for errors) o Checking that the document layout is clear and saving changes to a document
3.3	Exploring Documents :- organize the layout of a document for a specific audience	Changing document layout to meet the needs the target audience o Choice of font style for a particular audience o Choice of font size and color o Error checking (proofreading document for errors) o Checking that the document layout is clear and saving changes to a document
4.1	Output Devices And Their Uses:- Multimedia projector	Multimedia projector o Uses o Discuss advantages and disadvantages of using projectors
4.2	Exploring Documents :- Evaluate a finished document	o Error checking (proofreading document for errors) o Checking that the document layout is clear and saving changes to a document
4.3	Exploring Documents :- Evaluate a finished document	o Error checking (proofreading document for errors) o Checking that the document layout is clear and saving changes to a document
5.1	Output Devices And Their Uses :- Laser printer	Laser printer o Description o Uses o Advantages and disadvantages of laser printers
5.2	Exploring Images :-	o Use software tools to place and edit an image to meet the requirements of its intended application and audience
5.3	Exploring Images	o Use software tools to place and edit an image to meet the requirements of its intended application and audience

WEEK	TOPIC	TOPIC DETAILS
6.1	Output Devices And Their Uses :- inkjet printer	inkjet printer o Description o Uses o compare laserjet and inkjet printers; advantages and disadvantages of each printer type compared with the others
6.2	Exploring Images	o Inserting images from Microsoft office clip gallery, clipart, internet, scanned image, importing from digital camera o Coping images
6.3	Exploring Images :- □ Create repeating patterns, using stamps and/or copy tools	o Inserting images from Microsoft office clip gallery, clipart, internet, scanned image, importing from digital camera o Coping images
7.1	Output Devices And Their Uses :- Dot matrix printer	Dot matrix printer o Description o Uses o Advantages and disadvantages over Wide Format Printer and 3D Printer
7.2	Exploring Images :- Editing images	o Resizing images o Cropping images o Scaling images (maintaining or adjusting the aspect ratio
7.3	Exploring Images :- Editing images	o Resizing images o Cropping images o Scaling images (maintaining or adjusting the aspect ratio
8.1	Output Devices And Their Uses :- Wide Format Printer	Wide Format Printer o Description o Uses o Advantages and disadvantages over dot matrix Printer and 3D Printer
8.2	Exploring Images :- Editing images □ Saving images	o Scaling images (maintaining or adjusting the aspect ratio o Rotate an image
8.3	Exploring Images :- Editing images □ Saving images	o Flip an image horizontally or vertically o Saving image drafts

WEEK	TOPIC	TOPIC DETAILS
9.1	Output Devices And Their Uses :- 3D Printer	3D Printer o Description o Uses o Advantages and disadvantages of Wide Format Printer and 3D Printer
9.2	Exploring Spreadsheets :- Introduction to Microsoft excel	o Identify parts of Microsoft excel application window o Identify row, columns, cells, sheet tabs in Microsoft excel
9.3	Exploring Spreadsheets :- Introduction to Microsoft excel	o Identify name box and formula bar o Name cells and ranges in a worksheet
10.1	Output Devices And Their Uses :- speakers	Speakers, o Explain uses of loud speakers o Discuss advantages and disadvantages of loud speakers
10.2	Exploring Spreadsheets :- Introduction to Microsoft excel	o Inserting rows and columns o Deleting rows and columns
10.3	Exploring Spreadsheets :- Introduction to Microsoft excel	o Inserting and deleting cells o Resizing rows and columns
11.1	Output Devices And Their Uses :- Motors	Motors o Description o Explain uses of motors o Discuss advantages and disadvantages of motors
11.2	Exploring Spreadsheets :- Enter and copy simple formulas	o Entering numbers and labels into a spreadsheet o Enter simple formula to get the sum
11.3	Exploring Spreadsheets :- Enter and copy simple formulas	o Entering numbers and labels into a spreadsheet o Enter simple formula to get the sum
12.1	Output Devices And Their :- buzzers	buzzers o Description of buzzers o Explain uses of buzzers o Discuss advantages and disadvantages of buzzers
12.2	Exploring Spreadsheets :- Enter and copy simple formulas	o Entering numbers and labels into a spreadsheet o difference or product. Formula to make use of cell addresses
12.3	Exploring Spreadsheets :- Enter and copy simple formulas	o Entering numbers and labels into a spreadsheet o difference or product. Formula to make use of cell addresses

WEEK	TOPIC	TOPIC DETAILS
13.1	Output Devices And Their Uses :- Heaters	Heaters, Lights/Lamps o Explain uses of heaters o Discuss advantages and disadvantages of Heaters
13.2	3 Exploring Spreadsheets :- Enter and copy simple formulas	o Copying formula to another location within the spreadsheet o Write SUM function to calculate the total of values in a set of data in a worksheet
13.3	3 Exploring Spreadsheets :- Enter and copy simple formulas	o Copying formula to another location within the spreadsheet o Write SUM function to calculate the total of values in a set of data in a worksheet
14.1	Output Devices And Their Uses :- Lights/Lamps	Lights/Lamps o Explain uses of lamps as output devices o Advantages and disadvantages of Lights/Lamps
14.2	Exploring Spreadsheets :- Enter and copy simple formulas and function (intervention)	-Write simple formula to get the sun, difference and product of values in a worksheet -Writing function to add values in a range

ICT SCHEME OF WORK

FORM 2 - TERM 2

WEEK	TOPIC	TOPIC DETAILS
1.1	Storage devices and media	o Describe data storage o Measuring data storage in the computer; o basic unit of computer storage and other quantities of expressing computer data storage
1.2	Exploring Spreadsheets :-	o Copying formula to another location within the spreadsheet o Write SUM function to calculate the total of values in a set of data in a worksheet
1.3	Exploring Spreadsheets :- Create a graph in spreadsheet	o Using data in a worksheet to create a graph/chart
2.1	Storage devices and media :- Primary storage devices and media	o Identify some storage devices and their uses o classification of storage devices into primary(main storage) and backup storage o Describe Primary storage media (RAM and ROM) and their uses in the computer
2.2	Exploring Spreadsheets :- Create a graph in spreadsheet	o Using data in a worksheet to create a graph/chart o Adding a meaningful title to a graph o Labelling axes in a graph
2.3	Exploring Spreadsheets :- Create a graph in spreadsheet	o Adding a meaningful title to a graph o Labelling axes in a graph
3.1	Storage devices and media :- backup storage	o Explain the meaning of the term Backup in data storage o Explain why it is important to backup data
3.2	Exploring Databases :- Microsoft access	☐ How to create a Microsoft access database file (parts of Microsoft access application window)
3.3	Exploring Databases :- Add new records to a data file	☐ Database tables:- accurately enter data in database tables

WEEK	TOPIC	TOPIC DETAILS
4.1	Storage devices and media :- backup storage	o Identify some backup storage devices o Explain the difference between storage device and media o Identify some backup storage devices and their associated media
4.2	Exploring Databases :- Add new records to a data file, Field data types	☐ Accurately entering data into a database ☐ Identify FIELD and RECORD in a database table Field data types (text, numbers, date and time,,,)
4.3	Exploring Databases :- Add new records to a data file, Field data types	☐ Identify FIELD and RECORD in a database table Field data types (text, numbers, date and time,,,)
5.1	Storage devices and media :- Serial and direct data access	Types of data access o Describe serial and direct access and their differences o Outline devices which use serial and direct access
5.2	Exploring Databases :- Searching for data in a database	o Use 'equals', 'more than' and 'less than' to search for records in a database
5.3	Exploring Databases :- Searching for data in a database	o Use 'equals', 'more than' and 'less than' to search for records in a database
6.1	backup storage media:- Classification of backup storage media	Classification of storage media into: ☐ Magnetic ☐ Optical ☐ Solid-state o Explain magnetic data storage o Identify some magnetic storage media (such as magnetic tape, fixed hard disk and floppy disk)
6.2	Exploring Programming	Explaining the features SCRATCH APPLICATION: 1. Scripts, Costumes, Sounds, Sprites, Motions, Looks, Pen, Data 2. Events 3. Control
6.3	Exploring Programming	Explaining the features SCRATCH APPLICATION: 4. Sensing 5. Operators 6. More blocks 7. Stage backdrop

WEEK	TOPIC	TOPIC DETAILS
7.1	Backup storage media:- magnetic backup media	Magnetic tape o Identify magnetic tape and describe the method of access o Explain some uses of magnetic tape o Discuss advantages and disadvantages of magnetic tape
7.2	Exploring Programming	Flowchart and its uses The different shapes used in flowchart including: ☐ Start/end, Arrows, input/output, process and Decision
7.3	Plan an interactive program using abstraction	☐ Start/end, Arrows, input/output, process and Decision o Movement of object on the screen using the correct steps and directions
8.1	Magnetic backup media :- Fixed hard disk and drive	Fixed hard disk and drive o Demonstrate some images of fixed hard disk o Memory capacity of hard disk and method of data access o Explain uses of fixed hard disk o Discuss advantages and disadvantages of fixed hard disk in comparison with magnetic tape
8.2	Exploring Programming:- Using scratch application to design a program	o Explain that learners are going to create a program involving the main flowchart symbols using SCRATCH application o Input, output, or information displayed on the screen, which is determined by an input, or information entered by the user
8.3	Exploring Programming:- Using scratch application to design a program	o Explain that learners are going to create a program involving the main flowchart symbols using SCRATCH application o Input, output, or information displayed on the screen, which is determined by an input, or information entered by the user
9.1	Magnetic backup media :- portable hard disk and drive	Portable hard disk o Comparison with fixed hard disk drive o Uses of portable hard disk drive in backing up and transferring large files between computers o Discuss advantages and disadvantages of portable hard disk drive
9.2	Exploring Programming :- Using scratch application to design a program	o Introducing selection, inputs and outputs using a block-based programming environment

WEEK	TOPIC	TOPIC DETAILS
9.3	Exploring Programming :- Using scratch application to design a program	o Introducing selection, inputs and outputs using a block-based programming environment
10.1	Magnetic backup media:- Floppy discs	Floppy discs o Display images of floppy disks o Memory capacity of floppy disk and method of data access o Explain uses of floppy disks o Discuss advantages and disadvantages of floppy disks in comparison with hard disk drives
10.2	Exploring Programming :- Using scratch application to design a program	o Adding text in an input/output block
10.3	Exploring Programming :- Using scratch application to design a program	-show an example of the text that could be included within an input / output block -Explain that this block can be found in the "Sensing" block palette
11.1	Optical backing storage devices and media	Optical backing storage devices and media o Describe optical storage and media o Identify some optical storage media (CD/DVD/Blu-ray) Memory capacity of CD, DVD and Blu-ray disk
11.2	Exploring Programming :- Using scratch application to design a program	o Demonstrate inputting a range of text, including "left", "right", and "move" and discuss the program's behavior.
11.3	Exploring Programming :- Using scratch application to design a program	Inputting a range of text, including "left", "right", and "move" and discuss the program's behavior.
12.1	Optical backing storage devices and media :- CD ROM/DVD ROM	CD ROM/DVD ROM o Explain the meaning of Read Only Memory as used in the storage media o Uses of CD ROM/DVD ROM o Discuss advantages and disadvantages of CD ROM/DVD ROM
12.2	Exploring Programming :- Using scratch application to design a program (Continued))	Designing program using scratch application

ICT SCHEME OF WORK

FORM 2 - TERM 3

WEEK	TOPIC	TOPIC DETAILS
1.1	Optical backing storage media :- CD R/DVD R	CD R/DVD R o Describe CD R/DVD R, o Explain uses of CD R/DVD R, o Compare CD R/DVD R, with CD ROM/DVD ROM
1.2	Exploring the Internet :- Searching the web	o Use internet tools to find information: use web browsers and search engines o Use a web browser and one or more search engines to retrieve information about a topic or subject matter
1.3	Exploring the Internet :- Searching the web	o Use internet tools to find information o Use a web browser and one or more search engines to retrieve information about a topic or subject matter -Navigate through web pages to find information
2.1	optical backing storage media:- CD-RW/DVD-RW	CD RW/DVD RW o Describe CD RW/DVD RW, o Explain uses of CD RW/DVD RW, o Compare CD RW/DVD RW, with CD ROM/DVD ROM
2.2	Exploring the Internet :- Store and retrieve information from web pages	o Save a web page and view it later o Use the browser software to print a web page
2.3	Exploring the Internet :- Store and retrieve information from web pages	o Use the browser software to print a web page o Bookmark a site and view it later : how to bookmark a particular web page
3.1	optical backing storage media:- ☐DVD RAM	o Describe DVD-RAM, o Explain uses of DVD-RAM, o Compare DVD-RAM with CD RW/DVD RW o Compare DVD RAM with DVR R o Discuss advantages and disadvantages of DVD RAM
3.2	Exploring the Internet :- Copy and paste information from a website	o Use the browser software to select, copy and paste useful text into another software package or document.

WEEK	TOPIC	TOPIC DETAILS
3.3	Exploring the Internet :- Copy and paste information from a website	o Use the browser software to select, copy and paste useful text into another software package or document.
4.1	optical backing storage media :- Blu-ray disk	Blu-ray disk o Memory capacity of Blu-ray disk o Explain Uses of Blu-ray disk o Discuss advantages and disadvantages of Blu-ray disk
4.2	Exploring the Internet :- Save URLs and objects from a website	o use copy and paste to copy URLs into another document or email
4.3	Exploring the Internet :- Save URLs and objects from a website	o Save single objects, such as images from a webpage, for their own use.
5.1	solid state storage media	solid state storage media o describe solid state storage media as storage media without any movable parts o Identify solid state storage media (Eg: solid state drives (SSDs), flash drives (pen drive/memory stick/USB stick) o Explain advantages associated with all solid-state storage media
5.2	Exploring Email :- Compose, edit, read and respond to emails	o Use the email software to : • Compose an email, (use the text tools in the email software, such as copy, paste, delete and spellchecker (if appropriate), to edit or refine email messages.)
5.3	Exploring Email :- Compose, edit, read and respond to emails	o Use the email software to : • Send an email, • read and reply to messages.
6.1	solid- state storage media :- Solid state drives (SSDs)	solid state hard drives (SSDs) ☐ Uses of solid-state drives (SSDs) as internal storage in portable computers and for backup ☐ Discuss advantages and disadvantages and of solid-state drives (SSDs),
6.2	Exploring Email :- Add addresses to the address book	o Use email software to add new email addresses and groups to address book
6.3	Exploring Email :- Add addresses to the address book	o Use email software to add addresses to email groups

WEEK	TOPIC	TOPIC DETAILS
7.1	solid state storage media :- Flash drives	Flash drives (pen drive/memory stick/USB stick) o Explain uses of flash drives (pen drive/memory stick/USB stick) for backup and transferring files from one computer to another o Discuss advantages and disadvantages of flash drives (pen drive/memory stick/USB stick)
7.2	Exploring Email :- Use the address book to CC copies, Bcc copies and forward emails	o Explain the difference between cc, bcc and forward and how to use them
7.3	xploring Email :- Use the address book to CC copies, Bcc copies and forward emails	Use the address book to send copies and forward emails to addresses in ones address book.
8.1	Comparison between backup media	Comparison between backup media o Comparing various backup media in terms of: ☐ Memory capacity ☐ Method of data access ☐ portability
8.2	Exploring Email :- Add an attachment to an email	o Attach an image or document file to an email. o Send email attachment
8.3	Exploring Email :- Add an attachment to an email	o View an attachment received with an email o Download attachment received with an email
9.1	Backup storage :- Topic summary	Summary of the main topic areas: o Types of storage (primary and backup) o Primary storage media:- RAM and ROM o summary of secondary storage media (optical, magnetic and solid-state)
9.2	Exploring Email :- Manage email folders	o Create and name a new folder, o Manually move email to the folder created
9.3	Exploring Email :- Manage email folders	o Create and name a new folder, o Manually move email to the folder created
10.1	operating systems	o Define and describe operating systems which contain a Command Line Interface (CLI)
10.2	Exploring Email :- Manage email folders	-Show/hide email folders -Remove label -

WEEK	TOPIC	TOPIC DETAILS
10.3	Exploring Email :- Manage email folders	Edit email folder o Rename email Folders o Add label color
11.1	operating systems:- Graphical User Interface (GUI)	o Define and describe operating systems which contain a Graphical User Interface (GUI)
11.2	Exploring Programming :- Using scratch application to design a program (revisit topic)	Create a program as a sequence of instructions to achieve a specified objective o design a short sequence of instructions using flow charts
11.3	Exploring Programming :- Using scratch application to design a program (revisit topic)	Create a program as a sequence of instructions to achieve a specified objective o create a short sequence of instructions on the screen