

# MARINA INTERNATIONAL SCHOOL

## ICT SCHEME OF WORK

YEAR 2 - TERM 1

WEEK	TOPIC	TOPIC DETAILS
1.1	What is a computer	<p>Define what a computer is</p> <p>Basic Parts of the Computer</p> <p>Identify the basic parts of the computer. Categories the parts of the computer into Input Devices, Processing Device, Output Devices and Storage Devices</p> <p>Input Devices: devices that put data in to the computer</p> <ul style="list-style-type: none"><li>• Input Devices: Define and give examples of input devices</li></ul>
2.1	What is a computer (cont.)	<p>Processing Device: device that process data</p> <p>Output Devices: devices that show the results of processing</p> <p>Storage Devices: devices that store data</p> <ul style="list-style-type: none"><li>• Define and give examples of a processing device</li><li>• Define and give examples of output devices</li><li>• Define and give examples of storage devices</li></ul>
3.1	What is a computer (cont.)?	<p>Processing Device: device that process data</p> <p>Output Devices: devices that show the results of processing</p> <p>Storage Devices: devices that store data</p> <ul style="list-style-type: none"><li>• Define and give examples of a processing device</li><li>• Define and give examples of output devices</li><li>• Define and give examples of storage devices</li></ul>

WEEK	TOPIC	TOPIC DETAILS
4.1	Starting A Computer	<p>Starting A Computer</p> <p>Power Switch: What is the Power Switch, where is it located and how to switch it on.</p> <p>UPS: What is UPS. Identify the UPS and how do we switch it on</p> <p>CPU: Where is the power button?</p> <p>Monitor: Where is the power button?</p> <p>What do you see when you power on the computer?</p> <p>Desktop is what you see when the computer is switched on.</p> <p>Start Button used for opening programs, applications documents etc.</p> <p>Opening an Application using the Start Button</p> <p>Shutting Down a Computer</p> <p>Steps to follow when shutting down a computer</p>
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WEEK	TOPIC	TOPIC DETAILS
6.1	Humans and Computers	<p>Speed humans and computers who work faster</p> <p>Tiredness do they get tired</p> <p>Memory humans and computers who forgets</p> <p>Mistakes humans and computers who make mistakes</p> <p>Feelings humans and computers who has feelings</p> <p>Types of Computers</p> <ul style="list-style-type: none"> <li>• Desktop</li> <li>• Laptop</li> <li>• Tablets</li> <li>• Palmtop</li> </ul> <p>Places where computers are used</p> <ul style="list-style-type: none"> <li>• Schools</li> <li>• Supermarkets</li> <li>• Offices</li> <li>• Banks</li> <li>• Hospitals</li> <li>• Homes</li> </ul>
7.1	Humans and Computers	<p>Speed humans and computers who work faster</p> <p>Tiredness do they get tired</p> <p>Memory humans and computers who forgets</p> <p>Mistakes humans and computers who make mistakes</p> <p>Feelings humans and computers who has feelings</p> <p>Types of Computers</p> <ul style="list-style-type: none"> <li>• Desktop</li> <li>• Laptop</li> <li>• Tablets</li> <li>• Palmtop</li> </ul> <p>Places where computers are used</p> <ul style="list-style-type: none"> <li>• Schools</li> <li>• Supermarkets</li> <li>• Offices</li> <li>• Banks</li> <li>• Hospitals</li> <li>• Homes</li> </ul>

WEEK	TOPIC	TOPIC DETAILS
8.1	Starting Images	<p>Introduction to graphics software</p> <p>How to start Paint</p> <ul style="list-style-type: none"> <li>• In the following activities, learners will be introduced to graphics software and will be encouraged to familiarize themselves with what the software will allow them to do.</li> <li>• Begin by demonstrating how to open a graphics program. Explain that the software is used to create drawings.</li> <li>• Explain that there are a range of tools that learners can use to make their drawings interesting. However, avoid directly demonstrating any of these tools at this stage.</li> <li>• Provide learners with a simple task that is related to a current classroom theme. For example, they could be asked to draw a selection of items which start with the letter 'b' or they could draw three objects that they can currently see in the classroom.</li> <li>• Allow learners time to explore the software program whilst completing their task. Encourage them to experiment.</li> </ul> <p>Basic Pain Tools</p> <ul style="list-style-type: none"> <li>• Pencil Tool</li> <li>• Eraser Tool</li> <li>• Fill with color tool</li> <li>• Brushes</li> <li>• Shapes</li> <li>• Colors</li> <li>• Line tool</li> </ul> <p>Use the paint tool to draw</p> <p>How to save a picture in paint</p>
9.1	Use simple shapes and lines to create pictures or patterns	<p>Introducing shape drawing and colouring tools</p> <ul style="list-style-type: none"> <li>• The following activities will introduce learners to shape drawing tools and will allow them to experiment with adding colours to their shapes.</li> <li>• Begin by demonstrating the closed shape drawing tools, the fill tool and the colour palette.</li> <li>• Ask learners to predict which tools they will need for a specific task. For example, ask the following: - If we want to draw a square, which tool could we choose?</li> </ul>
10.1	Use simple shapes and lines to create pictures or patterns	<p>Allow learners to familiarise themselves with these tools by setting them one or more of the following tasks:</p> <ul style="list-style-type: none"> <li>• draw a red square, a blue triangle and a yellow rectangle</li> <li>• use the shapes and colours to make a repeating pattern</li> <li>• draw a smaller shape inside a larger shape, for example a small circle inside a large one.</li> </ul>

WEEK	TOPIC	TOPIC DETAILS
11.1	Edit pictures, using visual effects	Demonstrate one way of using the 'undo' and 'redo' commands and ask learners to undo a colour and to choose another one for one of the shapes that they have created during this activity
12.1	Use simple shapes and lines to create pictures or patterns	<p>Drawing closed shapes and using the fill tool</p> <ul style="list-style-type: none"> <li>• In the following activities, learners will learn more about creating shapes and about colouring them in using the fill tool.</li> <li>• Remind learners about what they discovered last time about how to create shapes in the selected drawing software.</li> <li>• Discuss the difference between open and closed shapes</li> <li>• Demonstrate the straight line tool by using it to make some shapes.</li> <li>• Allow learners to practice drawing shapes. Ask them to draw at least one open and one closed shape.</li> </ul>
13.1	Edit pictures, using visual effects	<ul style="list-style-type: none"> <li>• Demonstrate what happens when the fill function is used on a shape that isn't quite closed – the whole page becomes coloured.</li> <li>• Start a new file, not saving the old one and ask learners to do the same.</li> <li>• Demonstrate the freehand (pencil and paint brush) tools in the selected software and create scribbles using the various pen and brush shapes.</li> <li>• Ask learners to practice using the pen and brush tools by filling their page with a scribble pattern which contains many closed areas. If it is unclear if an area is closed, learners can use the zoom function to check.</li> </ul>
14.1	Typing Practice (using Mavis Beacon)	<p>Practice the use of the Keys and special keys on the Keyboard</p> <p>Enter Key Space Bar Key Backspace Key Caps Lock</p>
15.1	Typing Practice (using Mavis Beacon) Cont.	<p>Practice the use of the Keys and special keys on the Keyboard</p> <p>Shift Keys Arrow Keys Letter Keys Number Keys</p>



# ICT SCHEME OF WORK

## YEAR 2 - TERM 2

WEEK	TOPIC	TOPIC DETAILS
1.1	Starting with Text	<p>Introduction to computers</p> <p>If this is the first module that learners have studied, then it is important to identify their prior knowledge, understanding and skills about the use of computers. It will also be important to explain the school's rules and policies about computer use.</p> <p>As a class, discuss the differences between using a computer at home and at school, focusing on what learners like doing with computers at home, and what programs they've enjoyed using at school; be aware that not all learners will have computers at home. If learners have little or no experience of computers, ask them what they think they might be used for.</p> <p>Lead a brief demonstration of the main components of the computers that the learners will be using. Concentrate on the input and display devices as these will be most immediately relevant to the learners. If there is time, also demonstrate how these are implemented in desktop, laptops, tablets and smartphones. Again, concentrate on the basic level implementation that learners will need for the following activities, i.e. use of the mouse</p>
2.1	Typing a list and short stories	<p>Introduction to text processing software</p> <p>These activities will introduce learners to the saving their documents.</p> <p>Allow learners to practice entering words by typing a list of their favourite foods and short stories.</p>
3.1	Saving documents	<p>Using a prepared list of your own favourite foods in the same format, demonstrate how to save a file with an appropriate file name.</p> <p>– Ask learners why they think saving documents is useful.</p> <p>Allow learners the opportunity to practise saving files by asking them to save their list of favourite foods. The file name that they use should include their own name</p>
4.1	Select and edit text	<p>Editing text documents</p> <p>During the following activities, learners will be introduced to simple methods for finding errors in text documents and for making the necessary corrections</p>

<b>WEEK</b>	<b>TOPIC</b>	<b>TOPIC DETAILS</b>
5.1	Methods to check text is error free	Show learners how to select text within an onscreen document and then demonstrate how to use the 'delete' key remove the incorrect parts of misspelled words. Also demonstrate how to type in the correct spelling Demonstrate how to use a spellchecker as an alternative method of correcting spellings, either by right clicking on an individual word or by using the spellchecker from the toolbar or ribbon.
6.1	Select basic icons (e.g save or spellcheck) using the mouse	Learners should practise using a spellchecker and consolidate their use of the 'delete' key by correcting one or more of the following documents: – favourite class poems or short stories with certain words spelt incorrectly – lists of words that are relevant to another topic of study with some of them spelt incorrectly. Learners should practice how to bold, underlined, italic and Centre. Demonstrate how to select a text and how to bold, underlined, italic and Centre
7.1	Enter simple words, using keyboard or other input device	Adding punctuation to documents During the following activities, learners will learn how to insert basic punctuation into text Commas, question marks and full stops. hold a class discussion to ensure that all learners understand the function of commas, question marks and full stops
8.1	Enter simple words, using keyboard or other input device	Learners should locate commas and full stops on their keyboards. Learners should practice using these characters by inserting commas and full stops into a passage from a familiar story.
9.1	Enter simple words, using keyboard or other input device	Demonstrate how to add the question mark symbol to a question. Ensure that learners are aware that they may need to press the 'shift' key at the same time to achieve the required symbol. Explain how they should recognize when the 'shift' key is required Quotation marks

WEEK	TOPIC	TOPIC DETAILS
10.1	Enter simple words, using keyboard or other input device	<p>Allow learners time to locate the quotation mark symbols on the keyboard, reminding them of the possible need to use the 'shift' key.</p> <p>Display pictures of people or cartoon characters with speech bubbles attached to them. Demonstrate how to arrange these words into sentences that contain quotation marks.</p>
11.1	Enter simple words, using keyboard or other input device	<p>Provide further example speech bubbles to allow learners to practice adding quotation marks to a document.</p> <p>Learners can then work in pairs to hold a conversation with their partner. Each partner should type their input to the conversation on screen using the appropriate punctuation that has been learned in this activity, including quotation marks at the beginning and end of each entry</p>

# ICT SCHEME OF WORK

## YEAR 2 - TERM 3

WEEK	TOPIC	TOPIC DETAILS
1.1	Starting Graphs/Pictograms	<p>Introduction to data</p> <p>As an introduction to this module, the following activities will introduce learners to how information can be gathered and grouped in order that it can be turned into meaningful data.</p>
2.1	Starting Graphs/Pictograms	<p>Start by asking learners to sort themselves into groups. Examples of groupings that could be used include:</p> <ul style="list-style-type: none"><li>- gender</li><li>- type of shoe fastening</li><li>- favourite lesson at school.</li></ul> <p>Once the learners are in their groups, ask each group to think of a label that provides a good description of their set, for example 'shoe laces' or 'art'. Write each label down and place it next to the relevant group. Learners should then count how many people are in their group. The total number could also be recorded on the group's label</p>
3.1	Store and classify information	<p>Demonstrate the use of the selected graphing program</p> <p>Demonstrate how to transfer the data that has been collected in the class grouping activity into a digital form in the graphing program.</p> <p>Learners to work in pairs to enter the class data into the graphing program.</p> <p>Demonstrate how to convert the information into a suitable, and simple, graph</p> <p>Learners to add a short piece of text, ranging from one sentence to one paragraph, to the bottom of the printed version that briefly describes what the graph is showing.</p>
4.1	Store and classify information	<p>Introduction to using data to answer different questions</p> <p>In the following activities, learners will discover how data can be grouped into different categories in order to represent different attributes or to answer a different question.</p> <p>Give each learner a coloured shape. The learners should familiarise themselves with their shape in order that they can reclaim it throughout this series of activities.</p>

WEEK	TOPIC	TOPIC DETAILS
5.1	Present information in charts or graphs	<p>Ask each learner, in turn, to place their shape into a marked area to match the label for that area. The labels should represent one attribute of the shapes, for example the colour.</p> <p>Ask learners to explain why they have chosen a particular category for their shape, for example 'I'm putting my shape here because it is red and the label says red'.</p> <p>Record the resulting data from this activity and make this visible to the class</p> <p>Repeat the activity by asking the learners to redistribute shapes based upon another attribute, for example their shape.</p> <p>Record the resulting data from this second activity and make this visible to the class</p>
6.1	Present information in charts or graphs	<p>Ask the class to look at the two sets of displayed data that have resulted from these two activities and ask them a series of questions using terms such as 'more than', 'less than', 'most', 'less' and 'same'. As a conclusion, ensure that the learners have understood that the total number of items is the same for each activity.</p> <p>Remind learners how to transfer the displayed data that has been collected in the above activities to digital form in the graphing program.</p>
7.1	Present information in charts or graphs	<p>Using graphing software to present data</p> <p>In the following activities, the learners will take the information that was represented as a pictogram during the last group of activities and experiment with different ways of presenting it using the selected graphing program.</p> <p>Begin by displaying the pictogram that was created previously. Ask learners to make a note of the number of squares in each category</p>
8.1	Use charts or graphs to answer simple questions	<p>Begin by displaying the pictogram that was created previously. Ask learners to make a note of the number of squares in each category selected graphing software and, whilst they do this, introduce the terms 'cell', 'row' and 'column' and explain each one.</p> <p>Once all of the data has been entered, ask learners to select the cells which contain the data and then press the graphing icon.</p>
9.1	Draw simple conclusions from charts or graphs	<p>Demonstrate how a graph can be changed to another type, for example from a bar chart to a pie chart, using the same set of data. Print both versions. Compare the graphs by asking a series of questions, using terms such as 'more than', 'less than', 'most', 'less' and 'same'.</p> <p>Encourage learners to try out different graph types with their data, such as bar graphs and pie charts.</p> <p>Demonstrate how to add a sensible title and how to label the axes of a graph.</p> <p>Ask learners to add titles and, if applicable, label the axes of their graphs</p>

WEEK	TOPIC	TOPIC DETAILS
10.1	Starting With Images (Cont.)	<p>Creating a background for a picture</p> <p>In the following activities, learners will create a suitable background for a picture and then add an image that relates to a familiar short story. They will then be introduced to the 'save as' function.</p> <p>Begin the activity by reading a familiar short story to the class.</p> <p>Discuss with the whole class the concept of a background to a picture.</p> <p>Explain some of the things that could be included in background, such as the sky and grass, and explain that no aspect of the background should be left blank.</p>
11.1	Edit pictures, using visual effects Copy or delete character or object	<p>Discuss with the whole class the concept of a background to a picture.</p> <p>Explain some of the things that could be included in background, such as the sky and grass, and explain that no aspect of the background should be left blank.</p> <p>Demonstrate how to draw a basic background.</p> <p>Discuss other features that could be included in the background, such as the sun or trees. Explain that background features should be kept to a minimum, to one or two items, so that they do not distract the eye from the main content of the picture.</p>
12.1	Use 'save as' to store edited pictures	<p>Demonstrate how to add background features to the picture. Demonstrate how to save work in an appropriate location, such as the Desktop and how to give it an appropriate file name using the 'save as' function.</p> <p>Ask learners to save their pictures using 'save as'</p>