

Key Stage 3

Subject Assessment Criteria: ICT and CS

Level	Assessment Descriptor
9	<p>Using a spreadsheet I can competently demonstrate the use of Macros to automate the sheet.</p> <p>I know several appropriate structures for example IF statements, WHILE loops, FOR loops, arrays, functions. I am able to use these efficiently in my programming.</p> <p>I know what the following hardware components are for and HOW they impact the performance of a computer: Data packet Ethernet</p> <p>I know what the following hardware components are for and HOW they impact the performance of a computer:</p> <p>RAM ROM Operating system Optical media USB Hard drive (internal/external/solid state/rotating platter) Input/output Expansion capacity Motherboard Microprocessor</p>
8	<p>I am confident in my understanding of how to effectively model a situation allowing for what-if scenarios. I am familiar with financial spreadsheet models and can independently create a break-even chart.</p> <p>I am confident in using a given programming language to produce a program to fulfil a COMPLEX task.</p> <p>I am able to use structures such as IF, WHILE and FOR loops in an efficient manner.</p> <p>I know what the following hardware components are for:</p> <p>RAM ROM Operating system Optical media USB Hard drive (internal/external/solid state/rotating platter) Input/output Motherboard Microprocessor</p> <p>In a database I can create a customised main menu complete with navigation macro buttons.</p>
7	<p>Using a spreadsheet I can competently demonstrate the use of IF statements, conditional formatting, COUNTA, COUNTIF</p> <p>I understand the detailed structure of a program and can describe how the algorithm works.</p> <p>I understand how to break down a problem (decompose) independently</p> <p>I am able to set conditions and variables to determine what a program does for example setting a BOOLEAN flag</p> <p>I know what html and CSS are and know why they are used.</p> <p>I know what the following hardware components are for:</p> <p>RAM ROM</p>

	<p>Operating system Hard drive (internal/external/solid state/rotating platter) Input/output Motherboard Microprocessor</p> <p>I know that a database is constructed of data fields. I know that multiple fields make "records". I know that each field has a specific "data type". I know what a "primary key" is and why it should be present.</p> <p>In a database I can create a customised report to display query results</p> <p>I can give a potential harm of the use of inappropriate material for a given scenario.</p> <p>I can evaluate the measures that can be applied to minimise the impact of commercial data-collecting strategies</p> <p>I have a sound awareness of "online relationships" and the advantages and pitfalls associated with these</p>
6	<p>Using a spreadsheet I can competently demonstrate the use of MAX, MIN and COUNT functions</p> <p>In programming I am able to set conditions and variables to determine what a program does and when it should stop.</p> <p>I can confidently insert third party html tags in order to manipulate my pages further.</p> <p>I can competently manipulate a page using CSS.</p> <p>I can create a html table.</p> <p>I understand that websites are hosted on a domain server.</p> <p>I understand what is meant by a "URL"</p> <p>I know the difference between http and https.</p> <p>I can precisely describe how performance of a computer can be improved with the addition of specific hardware/software</p> <p>I know what the following hardware components are for: RAM</p> <p>Operating system Hard drive (internal/external/solid state/rotating platter) Motherboard Microprocessor</p> <p>I know that a database is constructed of data fields. I know that multiple fields make "records". I know that each field has a specific "data type"</p> <p>In a database I can create a query with multiple criteria</p> <p>I know what copyright is and that it applies to a variety of media</p> <p>I know that copyrighted material requires permission or consent to be given.</p> <p>I can explain my use of technology and can rationalise the possible impact of excessive use.</p> <p>I know that technology can impact my health, wellbeing and lifestyle in a good and bad way.</p> <p>I know what is meant by "self-image and identity" online.</p> <p>I am aware of, and can set up my devices so that the information is made private and secure</p>
	<p>Using a spreadsheet I am able to create a graph showing appropriate and specifically selected data. Graphs are fully labelled and appropriate to the data being displayed</p> <p>In programming I can break down (decompose) a problem with a little help.</p> <p>In programming I am able to understand the structure of a program and describe what it should do</p> <p>Using html I can manipulate text effectively (colour, style, size, bold, underline, italicise).</p> <p>Using html I can create a hyperlink.</p> <p>Using html I can resize an image.</p> <p>I can name three network topologies (shapes) and give a +/- for one of them</p> <p>I can distinguish between three different network topologies (shapes) and confidently evaluate the relative merits of each.</p>

<p>5</p>	<p>I know what html is and why it is used. I understand that a website is hosted on the WWW I knows what http means. I know what the following hardware components are for: Operating system Hard drive (internal/external/solid state/rotating platter) Motherboard Microprocessor I understand that image resolution can greatly affect the physical size of a file. In a database I can create a query with a single criterion I can independently compose an email including CC, BCC, subject, attachment and signature. I can state a risk associated with using electronic databases. I know what the © symbol indicates I can identify and explain measures used to protect myself and others against danger when using social media. I can identify why it isn't always safe to share personal information. I can identify two behaviours that contribute to cyber-bullying. I know I can get help with managing my online data I know I should have a good "online reputation" I know that having "online relationships" can be good and bad I can point out a benefit and a danger of having a digital footprint.</p>
<p>4</p>	<p>I know what a database is and can give one example of a database in action. Using a spreadsheet I can appropriately apply SUM and AVERAGE functions. I am able to follow the flow of a program and change one or two variables. I am able to amend a program and its structure to suit the purpose of my own program. I can confidently debug a program. I can spot a few basic errors in html. I can copy html tags and know what some mean. I can use a template to help me create a html page that works. I can name three network topologies (shapes). I know what "the Internet" is and the difference between the Internet and the WWW I can recall what html stands for. I know what software is and can give an example of a program. I can name an internal and an external hardware component I know what the following hardware components are for: Operating system Hard drive (internal/external/solid state/rotating platter) Motherboard. In a database I can create a table with appropriate field names and data types. I know that binary bit patterns are used to represent data in a number of different ways. Using html I can adjust text alignment (left, right, centre) Using html I can insert an image on to a webpage. Using html I can adjust text alignment (left, right, centre) Using html I can insert an image on to a webpage.</p>

	<p>I can identify several measures used to protect myself against danger when using social media e.g. Social Networks, Chat, IM, Mobile phones, Games consoles especially in adjusting security settings.</p> <p>I can identify one behaviour that contributes to cyber –bullying</p>
<p>3</p>	<p>With help I can get a spreadsheet to calculate a %</p> <p>I am able follow the flow of a program</p> <p>I can spot coding errors and correct them with a little help</p> <p>I know what binary code is and how to represent a “byte” of data using 8 bits.</p> <p>I can clearly target my publication based on the audience it is meant for.</p> <p>I can produce a targeted presentation with text, images, links, animations and transitions.</p> <p>I can compose an email including CC, subject and attachment. I can describe how I can block and report issues and communications on the sites and apps that I use</p> <p>I know that sharing personal data and information could be very dangerous.</p>
<p>2</p>	<p>In a spreadsheet I can effectively use addition, subtraction, multiplication, sometimes division formulae</p> <p>In a spreadsheet I can apply SUM function</p> <p>I know how to structure commands for the computer to follow in an ordered sequence.</p> <p>I am able to copy structures from other programs and use them in my own programs.</p> <p>I can produce a presentation with text, images and animation.</p> <p>I can complete a word-processed publication with an appropriate layout.</p> <p>I can produce a basic presentation with text, images, animations, and transitions.</p> <p>I can rotate and re-size an image</p> <p>I can compose an email including subject and some text.</p> <p>I know what a computer virus is</p> <p>I know how I can report an issue if I have been having trouble with someone online.</p>
<p>1</p>	<p>In a spreadsheet I can change a value and see the effect it has.</p> <p>In a spreadsheet I can give a reason for a change in a value.</p> <p>I know that a program is a set of instructions for the computer to follow.</p> <p>I can interact with a basic program and make it run.</p> <p>In programming I can amend an existing simple program.</p> <p>I can copy and paste text and images.</p> <p>I can produce a basic presentation with text and images.</p> <p>I know how to create a password and know how to get help to change it.</p> <p>I can recognise a safe website compared to an unsafe one.</p>