

## Computing KS3 Matrix

	Emerging	Developing	Secure	Mastery
<b><u>Business and Computing Basics</u></b>	I can use software under the control of the teacher to create, store and edit digital content using appropriate file and folder names. I know that people interact with computers. I know that all software executed on digital devices is programmed. I can share my use of technology in school. I know common uses of information technology beyond the classroom. I can talk about my work and make changes to improve it.	I can use technology with increasing independence to purposefully organise digital content. I can show an awareness for the quality of digital content collected. I can use a variety of software to manipulate and present digital content: and information. I can share my experiences of technology in school and beyond the classroom. I can talk about my work and make improvements to solutions based on feedback received.	I can collect, organise and present data and information in digital content. I can create digital content to achieve a given goal through combining software packages and internet services to communicate with a wider audience e.g. blogging. I can make appropriate improvements to solutions based on feedback received, and can comment on the success the solution.	I can make judgements about digital content when evaluating and repurposing it for a given audience. I know the audience when I am designing and creating digital content. I know the potential of information technology for collaboration when computers are networked. I can use criteria to evaluate the quality of solutions and can identify improvements making some refinements to the solution, and future solutions.
<b><u>Graphic Design</u></b>	I understand the key areas of fireworks and know where to access tools. I understand the fundamentals of bitmap images. I understand the fundamentals of vector images. I am able to produce a simple plan that is partially capable of producing promotional material. I have presented my conclusions.	I can choose the correct tool to complete tasks. I am able to create bitmap images and modify them in Fireworks. I am able to create vector images and modify them in Fireworks. I am able to plan a project that is fully capable of producing promotional material.  I have presented and explained my conclusions.	I am able to use a wide range of tools to create digital graphics that are suitable for the target audience. I am able to use a variety of tools to modify bitmap images and produce images of a good standard. I am able to use a variety of tools to modify vector images and produce images of a good standard. I am able to plan a project that is fully capable of producing promotional material that I have followed to completion. I have presented and explained my conclusions by selecting relevant information to support them.	I am able to combine Bitmap and vector graphics to produce material to a high standard. I am able to use a wide variety of tools with bitmap images and I am able to evaluate when the use of bitmap images is appropriate, I am able to use a wide variety of tools with vector images and I am able to evaluate when the use of bitmap images is appropriate, I am able to plan a project that is fully capable of producing promotional material that adapts as time goes on. I have presented, explained & justified (in detail) my conclusions by selecting <i>all</i> relevant information to support them, why other information was excluded & the format of the presented information
<b><u>Business Research</u></b>	I can conduct research into a number of businesses to find out how they operate and then use this information to identify things that I would like to include in my business.	I can conduct research into a number of businesses to find out how they operate and then use this information to identify things that I would like to include in my business. I am able to analyse the things that make a business successful.	I can conduct research into a number of businesses to find out how they operate and then use this information to identify things that I would like to include in my business. I am able to analyse the things that make a business successful. I can evaluate businesses and entrepreneurs and show how I am able to model these traits.	I can conduct research into a number of businesses to find out how they operate and then use this information to identify things that I would like to include in my business. I am able to analyse the things that make a business successful. I can evaluate businesses and entrepreneurs and show how I am able to model these traits. I can use these skills that I have built in myself to successfully pitch a business.
<b><u>Basic Programming</u></b>	I know that users can write their own programs. I can create a simple block program. I can run, check and change programs. I know that programs run by following precise instructions.	I can use arithmetic operators, if statements, and loops, within programs. I can use logical reasoning to predict the behaviour of programs. I can find and correct simple semantic errors i.e. debugging, in programs.	I can create block programs that implement algorithms to achieve given goals. I can declare and assign variables. I can use post-tested loops e.g. 'until', and a sequence of selection statements in programs.	I can use variable and relational operators within a loop to govern termination. I can design, write and debug modular programs using procedures. I know that a procedure can be used to hide the detail with sub-solution (procedural abstraction).
<b><u>Web Design and Development</u></b>	I can use software under the control of the teacher to create, store and edit digital content using appropriate file and folder names. I know that people interact with computers. I know that all software executed on digital devices is programmed. I can share my use of technology in school. I know common uses of information technology beyond the classroom. I can talk about my work and make changes to improve it.	I can use technology with increasing independence to purposefully organise digital content. I can show an awareness for the quality of digital content collected. I can use a variety of software to manipulate and present digital content: and information. I can share my experiences of technology in school and beyond the classroom. I can talk about my work and make improvements to solutions based on feedback received.	I can collect, organise and present data and information in digital content. I can create digital content to achieve a given goal through combining software packages and internet services to communicate with a wider audience e.g. blogging. I can make appropriate improvements to solutions based on feedback received, and can comment on the success the solution.	I can make judgements about digital content when evaluating and repurposing it for a given audience. I know the audience when I am designing and creating digital content. I know the potential of information technology for collaboration when computers are networked. I can use criteria to evaluate the quality of solutions and can identify improvements making some refinements to the solution, and future solutions.

\*Guru: computer specialist (Synonyms: digital native, developer, technophile, technoid)

Year 8	Emerging	Developing	Secure	Mastery
<p><b>Programming Principles</b> Building on from their skills from block programming, Gurus can understand the process of developing programs, the importance of writing correct syntax, being able to formulate algorithms for simple programs and debugging their solutions.</p>	<p>I can create a simple textual program. I can run, check and change programs. I know that programs run by following precise instructions.</p>	<p>I can use arithmetic operators, if statements, and loops, within programs. I can use logical reasoning to predict the behaviour of programs. I can find and correct simple semantic errors i.e. debugging, in programs.</p>	<p>I can create textual programs that implement algorithms to achieve given goals. I can declare and assign variables. I can use post-tested loops e.g. 'until', and a sequence of selection statements in programs, including use of if...then... else statement.</p>	<p>I can use variable and relational operators within a loop to govern termination. I can design, write and debug modular programs using procedures. I know that a procedure can be used to hide the detail with sub-solution (procedural abstraction).</p>
<p><b>Spreadsheet Modelling</b></p>	<p>I can use spreadsheet software with increasing independence to create a data model for a given scenario. I can identify all data types and explain how they increase data accuracy. I can identify user requirements for a data model. I can apply some formatting techniques correctly to increase user experience (e.g. text formatting, filling, borders). I can demonstrate the use of basic formulae and functions (e.g. +, -, /, *, SUM).</p>	<p>I can use spreadsheet software independently to create a data model for a given scenario. I can explain user requirements for a data model. I can independently demonstrate the use of formulae and functions (e.g. +, -, /, *, SUM, AVERAGE). I can apply formatting techniques correctly to increase user experience (e.g. text formatting, filling, borders, autofill, absolute cell referencing).</p>	<p>I can identify advantages and disadvantages of using spreadsheets. I can create a data model for a given scenario, applying correct data types and evaluate outcomes. I can independently analyse how individuals/organisations collect data. I can independently demonstrate the use of advanced formulae and functions (e.g. SUMIF, COUNT). I can apply advanced formatting techniques correctly to increase user experience (e.g. text formatting, filling, borders, autofill, absolute cell referencing)</p>	<p>I can explain and analyse how manipulating data can be used for predictions and future benefits. I can independently demonstrate the use of advanced formulae and functions (e.g. IF Statements and VLOOKUP). I can evaluate a project by comparing the results to the success criteria. I can evaluate the advantages and disadvantages of using spreadsheets</p>
<p><b>Enterprise Project</b></p>				