Alton Park Junior School Progression of Skills for Computing

Year 3						Year 4						Year 5						Year 6					
A1	A2	S1	S2	Su1	Su2	A1	A2	S1	S2	Su1	Su2	A1	A2	S1	S2	Su1	Su2	A1	A2	S1	S2	Su1	Su2

Year 3	Year 4	Year 5	Year 6
Online Safety **Digital Literacy**	**Online Safety** **Digital Literacy**	**Online Safety** **Digital Literacy**	**Online Safety** **Digital Literacy**
I can create and choose an appropriate password and keep this safe.

I can understand that some information in the internet may not be true.

I can understand the impact of cyberbullying and deal with this in the correct way. | I can explain how to protect myself from online phishing and recognise my digital footprint.

I can identify risks and benefits of installing software onto a device.

I can explain plagiarism and know the difference between researching and copying.

I can recognise and take ownership of healthy screen-time. | I can identify people to speak to about things that upset me online.

I can identify what is appropriate and inappropriate information and media to share online and the impact of these.

I can cite all sources when researching and use techniques to increase reliability.

I can understand the advantages and disadvantages of different forms of communication and when it is appropriate to use each. | I can recognise how to protect my digital footprint and where to go for help.

I can understand how what I share impacts myself and others including the consequences of promoting inappropriate content online.

I can take ownership of how I use my free time and have a balanced, healthy screen-time. |
| **Touch Typing** **Computer Science**

I can understand the different keys on a keyboard.

I can use two hands to type letters on a keyboard. | **Hardware Investigators**

I can name the different parts of a computer

I can understand the functions of different parts of a computer. | **Concept Maps**

I can understand concept maps and the importance of recording these visually.

I can create a basic concept map. | **Networks**

I can understand the difference between the World Wide Web and the internet.

I can understand and explain my school network. |

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			I can research and explain about Tim Berners-Lee.

A1	A2	S1	S2	Su1	Su2	A1	A2	S1	S2	Su1	Su2	A1	A2	S1	S2	Su1	Su2	A1	A2	S1	S2	Su1	Su2

Coding	**Coding**	**Coding**	**Coding**
I can create an algorithm that includes a variable. I can explain how a command can be repeated. I can debug simple programs	I can create an algorithm using if/else buttons. I can explain what a variable is and change this where necessary. I can create an algorithm modelling on a simple game.	I can use a simplified code to make my programming more efficient. I can create an algorithm after decomposing a simulation. I can create a program representing a physical system. I can set and change variables appropriately.	I can use functions and understand why these are useful when coding. I can follow flowcharts to create and debug code. I can plan a program before coding and foresee the variables required to achieve the chosen effect.

A1	A2	S1	S2	Su1	Su2	A1	A2	S1	S2	Su1	Su2	A1	A2	S1	S2	Su1	Su2	A1	A2	S1	S2	Su1	Su2

Spreadsheets	**Spreadsheets**	**Spreadsheets**	**Spreadsheets**
I can create a pie chart and bar chart from a spreadsheet. I can compare numbers to work out solutions to calculations. I can describe the location of a cell.	I can use a formula in my spreadsheet. I can create a line graph using data from a spreadsheet.	I can create a formula to convert measurements in a spreadsheet. I can create formulae that uses different variables.	I can use a spreadsheet to complete basic calculation formulae. I can recognise how a formula allows data to change automatically.

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Graphing I can produce and share graphs made on a computer. I can solve a maths investigation using graphs. I can present my results in a range of graphical formats.	I can use a spreadsheet to budget an event.	I can use a spreadsheet to model a real-life situation.	I can use a spreadsheet to model a situation. I can use spreadsheets to organise data and understand what a delimiter is. I can incorporate formulae of calculations into my spreadsheets.

A1	A2	S1	S2	Su1	Su2	A1	A2	S1	S2	Su1	Su2	A1	A2	S1	S2	Su1	Su2	A1	A2	S1	S2	Su1	Su2

Email I can open and respond to an email. I can be safe using an email. I can attach work to an email.	**Animation** I can use the onion skin tool to create an animation. I can create an idea for a stop motion animation. **Logo** I can follow simple instructions to create shapes. I can write and use the repeat function of logo instructions to draw shapes.	**Databases** I can search a database to answer questions. I can create a database.	**Understanding Binary** I can explain how all data in a computer is saved in the computer memory in binary format. I can convert numbers to binary using the division by two method.

							I can make predictions.																
A1	A2	S1	S2	Su1	Su2	A1	A2	S1	S2	Su1	Su2	A1	A2	S1	S2	Su1	Su2	A1	A2	S1	S2	Su1	Su2

Presenting

I can make a presentation from a blank page.

I can add variables to a presentation.

Branching databases.

I can generate questions using yes or no answers.

I can create a branching database.

Writing for different audiences

I can discuss a variety of written material where the fonts are appropriate.

I can use a simulated scenario to produce appropriate writing depending on the audience.

Effective searching

I can use a search engine to locate specific information.

I can analyse what I have read to assess whether the information is true or reliable.

Word processing

I can create a word processing document.

I can use appropriate texts and images and know which ones are permitted to use.

Game Creator

I can analyse and review a computer game.

I can design a computer game.

I can change the sounds and visuals to male a game more unique.

Quizzing

I can understand different types of quizzes.

I can create a quiz with a variety of style of questions.

Blogging

I can create a blog with a specific purpose.

I understand that the way in which information is presented has an impact upon the audience.

I can assess the effectiveness and impact of a blog.

A1	A2	S1	S2	Su1	Su2	A1	A2	S1	S2	Su1	Su2	A1	A2	S1	S2	Su1	Su2	A1	A2	S1	S2	Su1	Su2

Simulations

I can give advantages and disadvantages of simulations.
I can make predictions using simulations.

Making music

I can create a simple melodic pattern.

Modelling

I can edit the polygon 3D models to design a 3D model for a purpose.

Text adventures

I can use coding concepts of functions, two-way selection (if/else statements) and repetition

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I can evaluate a simulation.	I can explore and understand how music is created.	I can create a 2D net to build a 3D model.	in conjunction with one another to code my game. I can debug my game.