Year 7 Computing

	FOUNDATION	DEVELOPING	SECURE	EXCELLING
Online use	* I can log onto the school network *I can identify reliable websites *I can save suitable images into a folder *I recognise potential dangers on social media * I can send an email using MS Outlook.	* I can set up subject folders on MS OneDrive *I can describe 'misinformation' *I can explain the importance of naming files *I recognise potential dangers on social media * I can send a formal email.	* I can create subfolders for topics *I can evaluate the reliability of sources using criteria *I can identify different image file types for different purposes *I am able to identify how to alert online threats * I am able to send a scheduled email.	* I can share files on MS OneDrive *I can assess the implications of misinformation *I can discuss the use of images subject to copyright *I can design guidance for remaining safe online * I can apply advanced email features.
Spreadsheets	* I can explain how data is structured using cells, columns and rows *I can identify cell references such as C4 *I can add borders around data *I recognise that spreadsheets are used for calculations * I recognise that formulae start with an = sign	* I can recognise that recognise that cells are referenced using coordinates *I am able to format cells to improve the appearance using shading * I am able to select appropriate data types for different purposes * I am able to rename, add and delete sheets *I can create a chart for a purpose	* I can design formula using functions such as SUM, AVERAGE, MIN and MAX * I am able to replicate a formulae to other cells * I am able to select appropriate data types for different purposes * I can sort and filter data *I am able to format the appearance of a chart * I can discuss benefits of using a spreadsheet in real-life	* I can model different scenarios using IF statements, COUNTIF Statements and goal seek *I am able to apply conditional formatting tools *I can design macros for a specific purpose *I am able to add images to a chart * I can apply validations to ensure data is reasonable *I can make decisions based on changes in data
Word Processors	* I write a basic letter using MS Word *I can insert a table setting rows and columns *I can select different font styles and sizes *I can add Word Art * I insert images to a document	* I write a letter using paragraphs *I can insert a table with shading *I can move objects using wrapping tools *I can add borders using art and colours * I add bullet points and numbers * I can perform a mail merge using table from data provided.	* I write a letter using suitable alignment *I can add headers and footers *I can add and align cells in a table. *I can align images to the front or behind *I can format the borders of images *I can add charts *I can perform a mail merge using original data	* I format paragraph spacing in a paragraph *I can add page-breaks * I can apply images to bullet point *I can remove the background and adjust transparency of image *I can format a range of charts * I can perform a mail merge using spreadsheet data

Cybersecurity	* I am able to describe risks to a network *I can explain how a virus works *I can describe a hacker *I can design a secure password * I can explain why it is important to keep your password private	* I can identify a range of malware *I can explain how to reduce the risk of a virus *I can discuss the impact of a hacking attack *I can explain why you must use eight or more characters in a password *I can explain the difference between physical security and software/data security * I can explain why it is important to lock your computer when you are away from the desk	* I can describe adware and spyware *I can explain why people are security risks *I can discuss the impact of a hacking attack *I can explain why you must use characters, symbols and numbers in a password * I can explain why it is important to lock your computer when you are away from the desk *I can describe how encryption works	* I can discuss DDOS and Brute Force Attacks *I can explain how to reduce the risk of a malware *I can describe how encryption works *I can explain the importance of training and policies to reduce the threat of social engineering * I can describe the purpose of a 'white hat hacker' * I can evaluate preventative measures to protect the security of a network * I can discuss legal, social, political and ethical consequences of cyber-attacks.
Computational Thinking	*I can explain that thinking computationally is not programming *I understand that planning routes is an example of computational thinking *I can identify that there are four cornerstones of computational thinking *I can demonstrate computational thinking skills by solving a problem step-by-step and following directions.	* I can explain how computational thinking allows to take a complex problem and is used to develop a solution * I can describe the link between computational thinking and solving problems *I can identify decomposition, pattern recognition, abstraction and algorithms *I understand that a computer is most likely to be used at the end when programming a computer.	* I can explain using examples how computational thinking allows to take a problem and is used to develop a solution *I can provide real-life examples of decomposition, pattern recognition, abstraction and algorithms *I understanding that computational thinking enables me to work out exactly what to tell a computer to do *I can describe computational thinking rules used to plan coding a basic program	* I can decompose a complex problem of how to create an app *I can use abstraction to calculate the area of shapes *I can provide real-life examples of decomposition, pattern recognition, abstraction and algorithms *I can apply computational thinking skills to a game *I can apply computational thinking rules to plan a complex program

Scratch Basics	*I understand that Scratch is a programming language using block code and diagrams *I can connect blocks of code to show the flow of a program *I can follow algorithms to design shapes *I can describe Sprites and Scripts *I can demonstrate using costumes and stages	* I can use iteration to design shapes *I can identify five features of Scratch *I can follow algorithms to design shapes *I understand that different colour blocks perform different tasks *I can design my own costumes and stages *I can adapt code and explain the results *I can code to output text to the screen.	*I can apply sounds to my scripts *I can apply sequence, selection and iterations to my code *I can explain the commands motion, control, sounds and looks *I can explain how sprites and blocks interact *I can design my own game *I can demonstrate using costumes and stages *I can test my coding project	*I can experiment using variables and If Statements to control / adapt the code *I can design my own game including scoring tools *I can compose musical tunes *I can demonstrate using costumes and stages *I can apply parallel/ sequential execution instructions / blocks to play a musical tune *Evaluate and improve my coding project.