Year 2 - Computing

Learning to be a **Computer Scientist**	Learning to be a **Creator**	Learning to be SMART – **E-safety**
Cs1 - I can give, follow and complete an algorithm that uses directional language.	**Cr1 -** I can use a computer's basic functions e.g. turn on/shut down, log on/off independently.	**Es1 -** I can understand why a secure password is important and should be kept private.
Cs2 - I can give and follow an algorithm to make half and quarter turns left and right using a range of commands e.g. Left 90, Right 90 on TextTease Turtle.	**Cr2 -** I can use basic computer skills e.g. saving work, use a folder.	**Es2 -** I can understand that the internet can be used to communicate with people all around the world.
Cs3 - I can use recognised language to write an algorithm.	**Cr3 -** I can type a simple document/email.	**Es3 -** I know that people may not be who they say they are online.
Cs4 - I can create, test and debug an algorithm for a given purpose including moving and rotating.	**Cr4 -** I can edit a simple document/email.	**Es4 -** I can remember and explain the SMART rules.
Cs5 - I can begin to create a repeating algorithm using repeat commands.	**Cr5 -** I can create a digital video and export/upload the clips.	**Es5 -** I can use the internet to research a given topic.
Cs6 - I understand that an algorithm is a set of clear and precise instructions.	**Cr6 -** I can add and format an image.	**Es6 -** I can write clear and respectful messages when communicating online.
	Cr7 - I can create and edit a range of simple graphs using a computer.	
	Cr8 - I can use a range of tools in a computer program to reproduce a style of art.	
	Cr9 - I can change the shade of a colour for effect.	
	Cr10 - I can edit text in a word processor e.g. .word, publisher, PowerPoint.	
	Cr11 - I can send and open an email.	
	Cr12 - I can understand what a search engine is and can use a child friendly search engine independently.	
	Cr13 - I can use the Internet to find information for a topic, with support (Favourites file, hyperlinks set up by the teacher).	

Year 2 Topic Coverage

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Cr1, Cr2, Cr3, Cr4, Cr10	Cr6, Cr8	Cr7 Cs1, Cs2, Cs3, Cs4, Cs6	Cr5, Cs4, Cs5	Cr3, Cr4, Cr11 Es6	Cr12, Cr13 Es6
Es1, Es2, Es3, Es4, Es5					
Vocabulary					
@, Alter, Cap Lock, Dot, Edit, Email, Email address, Filename, Folder, Format, Full stop, Notepad, Open, Organise, Publisher, Save, Shift, Unique, Word, Word processor	Alter, Brush, Brush stroke, Combine, Edit, Insert, Tool	Algorithm, Bug, Code Coder, Debug, Degrees, Directional, Directions, Error, Graph, Left, Motion, Movement, Precise, Predict, Problem, Programmer, Right, Right-angle, RMGraph, Rotation, Sprite, Turn, Unexpected	Bug, Cable, Code, Coder, Debug, Loop, Precise, Predict, Programmer, Repeat, Repetition, Transfer, Until, Upload, USB	@, Alter, Appropriate, Attachment, Cap Lock, Clear, Digital Citizen, Dot, Edit, Email, Email Address, Format, Full stop, Inappropriate, Permanent, Receive, Scam, Send, Shift	Appropriate, Clear, Digital Citizen, Google, Inappropriate, Input, Key words, Kidrex, Permanent, Research, Results, Search engine
Accept, Access, Browser, CEOPs, Communicate, Cyber-bullying, E-safety, Identity Theft, Meet, Reliable, Research, Safe, Safe, Scam, Search engine, Secure, Sharing, Skype, Stranger, Troll, Trust, Trustworthy, Virus, Zoom					
I will learn…					
How to turn a computer on. How to shut a computer down. How to login independently. How to log out. How to save a file. How to open a file. That folders can be used to organise files. How to make a letter into a capital letter. How to make a full stop and other punctuation. How to create a document/email. How to make changes to a document. That some programs can be used to type work up. That programs used for typing are called word processors.	How to insert a picture into a computer program. How to edit a photos size in a document. That different digital art tools and brushes can be combined for effect.	That some programs and websites let me make graphs. How to make a graph using a digital device. How to follow directional language. How to give directional language. That algorithms for movement need directional language. How to give rotation instructions in an algorithm. That commands like forward, backward, left and right can be used as part of an algorithm. That simple instructions can be built into an algorithm. That algorithms are built from lots of small instructions. That algorithms need to be tested for bugs.	How to record using a tablet or video camera. How to transfer the video files to another device or program. That algorithms are built from lots of small instructions. That algorithms need to be tested for bugs. That if there is a problem the algorithm needs to be debugged. How to debug an algorithm. That repeat commands reduce the amount of code you have to write. How to use a repeat command with some support.	How to make a letter into a capital letter. How to make a full stop and other punctuation. How to create a document/email. How to make changes to a document. How to send an email. How to open emails. That emails need an address just like a letter. That we should treat people on the internet in the same way we would in person. That we need to make sure things we say online are clear and easy to understand. That once something is on the internet it's there forever.	That search engines can be used to find things on the internet. That there are special search engines for children. That search engines need short, simple input. How to use a search engine. That information for school work can be found on the internet. How to find information on the internet with support. That we should treat people on the internet in the same way we would in person. That we need to make sure things we say online are clear and easy to understand. That once something is on the internet it's there forever.

		That if there is a problem the algorithm needs to be debugged. How to debug an algorithm. That algorithms need to be very clear and well thought out. That if algorithms are not clear then unexpected things can happen.			
That a password keeps information safe and sharing the password is like giving away all of your information. That people all around the world have access to the internet. That we can communicate around the word using email, skype, social media etc. That people can pretend to be other people on the internet. That not everybody on the internet is a good person. That bad people on the internet might not act nastily to you. That S stands for safe, M stands for meet, A stands for accept, R stands for Reliable and T stands for tell. That these rules can be used to keep me safe when I use digital devices. That the internet has lots of information on different websites. How to use a search engine safely to research.					