Year 1 Autumn 1: Computing Knowledge Mat

Computer Science – Moving a Robot

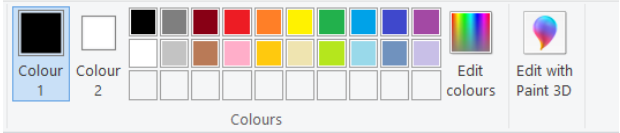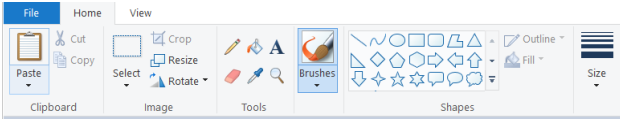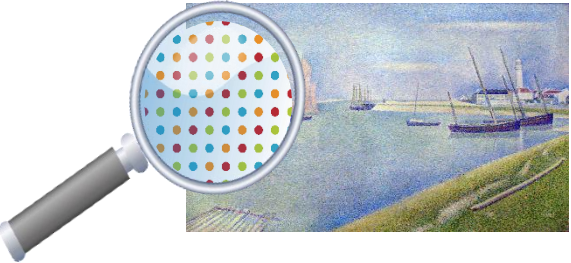| Key Vocabulary		Images/ diagrams	Core Knowledge
Command	An order		➢ I know that a computer program turns an algorithm into a code that the computer can understand
Robot	A programmed machine		
Directions	A course along which something moves		➢ I know that correcting errors in a program or algorithm is called debugging.
Forwards	Moving the way you are facing		➢ I know that the programable character is called a sprite.
Backwards	Moving the opposite way to the one you are facing		➢ I know how to explain what a given command will do.
Debug	To remove mistakes from		
Turn left	Moving to face the left side		
Turn right	Moving to face the right side		
Sprite	An image we can programme to move.		
Algorithm	A process of rules followed by a computer.		
Code	A set of instructions.		

Year 1 Autumn 2: Computing Knowledge Mat

Digital Painting

Key Vocabulary		Images/ diagrams	Core Knowledge
Paint	On a program, a tool which creates a paint like fill on something.		➢ I know how to make marks on a screen and explain which tools I used
Program	Control the operation of a computer		➢ I know how to draw lines on a screen and explain which tools I used
Tool	On a program, something you can use to create a different effect.		➢ I know how to use the paint tools to draw a picture
Paintbrush	On a program, a tool which creates a paintbrush like effect.		➢ I know how to use the shape and line tools to recreate the work of an artist
Erase	On a program, a tool which deletes something you have done.		➢ I know how to create a picture in the style of an artist on a computer painting program.
Fill	On a program, a tool which fills something with a colour.		
Undo	On a program, a tool which undoes something you have done.		➢ I know which tools were helpful and why
Brush	On a program, a tool which has different size and style brushes.		➢ I know how to change the colour and brush sizes
Computers	A machine we can use to complete different tasks.		➢ I know how to use dots of colour to create a picture in the style of an artist on my own

Year 1 Spring: Computing Knowledge Mat

Digital Literacy

Key Vocabulary		Images/ diagrams	Core Knowledge
information	A fact	How old are you?	• I know that information comes from different sources e.g. books, web sites, TV etc.
personal	Eg name, age, address, town		• I know that ICT can give access quickly to a wide variety of resources
private	Something you don't want somebody else to know		• I know how digital technology is used at home and in work.
online	Available on the internet		
technology	Machine or equipment		
digital	Information online	Town	
sources	Where something comes from		
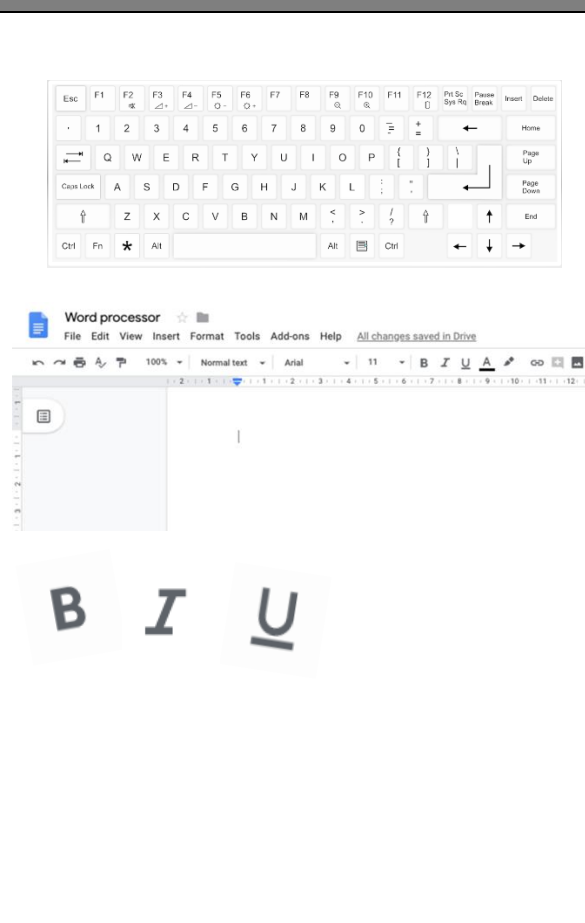
Year 1 Summer 1: Computing Knowledge Mat

Animation

Key Vocabulary		Images/ diagrams	Core Knowledge
sprite	an object that can perform actions		• I know what algorithms are, and how they are implemented as programs on digital devices • I know that programs are executed by following precise and unambiguous instructions • I know how to create and debug simple programs • I know how to use logical reasoning to predict the behaviour of simple programs
command	an instruction for a specific task		
program	the implementation of an algorithm on a digital device		
instructions	telling something to do something		
delete	to get rid of		
de-bug	fixing an error		
algorithm	a set of clear, precise, and ordered instructions		
block	several instructions in a sequence		

Year 1 Summer 1: Computing Knowledge Mat

Digital Writing

Key Vocabulary		Images/ diagrams	Core Knowledge
text	writing that is typed on a computer		• I know how to use technology purposefully to create, organise, store, manipulate, and retrieve digital content • I know how to use technology safely and respectfully, keeping personal information private • I know where to go for help and support when I have concerns about content or contact on the internet or other online technologies.
toolbar	contains buttons that do different commands		
keyboard	contains letters and numbers, for writing text		
keys	each one has a different letter or number or symbol		
mouse	used to click and explore the screen		
word processor	A program used for typing text		