

Subject Coordinators – Key Knowledge grid

Tracking grid to show the Key knowledge which has been planned for each year group during 2020-2021

Subject area: Computing				
Coordinator: Anna Gill				
Term:	Nursery	Reception	Year 1	Year 2
	Planned key knowledge:	Planned key knowledge:	Planned key knowledge:	Planned key knowledge:
Autumn Heroes and Villians (Computer Science)	- Can operate mechanical toys and can say how they work (remote controlled toys, pulley toys, construction with wheels, sand wheels) - Can think of the process/ route to take to get from point A to B (on a twister mat).	- Can press the different buttons on the beebot and describe its movements. - Can use positional language to give instructions for others to follow (forwards, backwards, turn)	- Can say what an algorithm is (A sequence of instructions or a set of rules to get something done). - Can create a simple algorithm using a Beebot. - Can identify and correct errors in a given algorithm (debugging)	- Can identify the outcome of a program e.g. where the sprite will move too. - Can explain how to use Scratch Junior to create a program based on a new design - Can use algorithms to code/debug/program a sprite - Can evaluate the effectiveness of a program, debugging where needed.
Spring What a wonderful world Information Technology – Year 1 Animation- Year 2	- Can name ways to stay safe online (e.g. asking adults for help, telling trusted adults) - Can name some examples of technology (computer, phone, i-Pad, tablet) - Can name some parts of a computer (Mouse, keyboard, screen) - Can name some devices that can help us find information.	- Can name different types of technology that are used within home and school settings and explain how we use it (tablets, netbooks, computers, ipads, beebots-communicating, gaming) - Can name ways to stay safe online e.g. personal information (name, age, address, passwords), talking/telling a trusted adult,	- Names a range of digital devices e.g. laptop, interactive whiteboard, tablets, beebots, washing machines, traffic lights. - Names the different parts of a computer (keyboard, mouse, monitor, tower, speakers, headphones, printer). - Can use a keyboard to type by identifying the	- Can say what animation is (Animation is the process of giving the illusion of movement to drawings, models or inanimate objects) - Can make a stop motion animation by adding frames (12) and sprites to the Jit5 program. - Can use “onion skinning” concept to make fluid movements (sprite

		- Names the different parts of a computer (screen, mouse, keyboard, monitor, tower, speakers). - Can press buttons on a keyboard to type simple words. - Can logon to a computer/netbook using a username and password	different keys (enter, space bar, full stop, capital letters, letters). - Can use the backspace to remove text. - Can add and drag images onto a document (bookcreator) - Can name ways to stay safe and act appropriately online (be kind, not talk to strangers, not saying personal information, telling trusted adults)	moving along the screen). - Can evaluate the effectiveness of the animation, debugging where needed. - Can name ways to stay safe and act appropriately online (be kind, not talk to strangers, not saying personal information, telling trusted adults)
Summer Amazing Adventures Year 1- Digital Literacy/ Data Handling Year 2- IT/ Photography	- Can name ways to stay safe online (e.g. asking adults for help, telling trusted adults) - Can use a simple ICT program to paint a picture online - Can use the mouse to make marks - Can use the mouse to change colour of paints and erase some of their digital work.	- Can name 3 types of personal information (name, age, address passwords). - Can use a range of freehand tools to draw a digital picture (lines) - Can use the fill colour tool to fill the painting - Can clear their drawings - Can use a simple ICT program to paint a picture online.	- Can identify patterns in groups of data and answer questions about the data they see (more/ less preferred) - Can use Jit5 to create a pictogram - Can use a range of freehand tools to draw a digital picture (lines- bold, thin) - Can use the shape and line tools to recreate the work of an artist (square and line tools) - Can compare their digital pictures to paper based versions (art versions and computer versions)	- Can name some devices that are used beyond school (machines- factories, devices- libraries, supermarkets, banks). - Can take a photograph in landscape and portrait on a device (by pressing a button/ touching the screen) - Can identify a good/ bad photograph (light sources, pictures being unclear) - Can edit an image using different tools (tints, effects- colour change)