EYFS PSED / Computing Long Term Progression Map Subject Lead Mrs S Brown

Nursery	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
General Themes	**All about me**	**Let's Celebrate**	**Winter Wonderland**	**Planting & Growing**	**Who can help me?**	**Once Upon a Time**
Personal, Social and Emotional Development	Children's personal, social and emotional development (PSED) is crucial for children to lead healthy and happy lives, and is fundamental to their cognitive development. Underpinning their personal development are the important attachments that shape their social world. Strong, warm and supportive relationships with adults enable children to learn how to understand their own feelings and those of others. Children should be supported to manage emotions, develop a positive sense of self, set themselves simple goals, have confidence in their own abilities, to persist and wait for what they want and direct attention as necessary. Through adult modelling and guidance, they will learn how to look after their bodies, including healthy eating, and manage personal needs independently. Through supported interaction with other children they learn how to make good friendships, co-operate and resolve conflicts peaceably. These attributes will provide a secure platform from which children can achieve at school and in later life. EYFS Statutory Educational Programme					
Computing & Online Safety RSE—online relationships	Use of play technology to explore Use of IWB Digiducks Big Decision online story—Childnet	Use of play technology to explore Use of IWB Chicken Clicking Story	Getting familiar with school iPad Safer Internet Day — Smartie the penguin online story (Childnet)	How to use iPad safely—opening and closing, storage Unplugged Story	Learn how to take a photo of something you are proud of. Dot. story	Use of programable toys—Beebots, Codapillar, Troll Stinks story

Reception	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
General Themes	**Me & My Emotions**	**Celebrations of Light**	**I wonder Why?**	**New Life**	**People Who Help Us**	**Terrific Tales**
Personal, Social and Emotional Development	Children's personal, social and emotional development (PSED) is crucial for children to lead healthy and happy lives, and is fundamental to their cognitive development. Underpinning their personal development are the important attachments that shape their social world. Strong, warm and supportive relationships with adults enable children to learn how to understand their own feelings and those of others. Children should be supported to manage emotions, develop a positive sense of self, set themselves simple goals, have confidence in their own abilities, to persist and wait for what they want and direct attention as necessary. Through adult modelling and guidance, they will learn how to look after their bodies, including healthy eating, and manage personal needs independently. Through supported interaction with other children they learn how to make good friendships, co-operate and resolve conflicts peaceably. These attributes will provide a secure platform from which children can achieve at school and in later life. EYFS Statutory Educational Programme					
Computing & Online Safety RSE—online relationships	Use of IWB How to use iPad safely—opening and closing, storage Digiducks Big Decision online story—Childnet	Take selfies and photos using iPads Chicken Clicking Story	Safer Internet Day — Smartie the penguin online story (Childnet)	Use a basic app on the iPad Unplugged Story	Use a basic app on the iPad Use of beebots/codapillar Troll Stinks story	Use a basic app on the iPad Once Upon a Time Online Story

Progression Map 2021/2022	Subject: Computing			Subject Lead: Mrs Brown			
	Year Group	**Autumn 1**	**Autumn 2**	**Spring 1**	**Spring 2**	**Summer 1**	**Summer 2**
Aims	Can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation Can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems Can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems Are responsible, competent, confident and creative users of information and communication technology.						
Breadth	**1**	**Writing in different styles (laptops)**	**Programming with ScratchJr (iPads)**	**An introduction to animation (Laptops needed for first 3 lessons. Second half iPads)**		**Finding and presenting information (laptops)**	
Knowledge		Introduce children to word processing and desktop publishing using a number of different tools and design tasks.	Introduce students to this great block-based programming language to create animations and games perfect for KS1. Write and debug algorithms, learn about repeating, and different triggers to create actions.	Get really creative as you introduce both 2D and stop frame animation. Students will love creating their own animated clips and stories with a variety of tools.		Introduces children to web browsers to explore and search websites safely, collecting and presenting information in graphs, and different ways of sorting and classifying data with databases.	
Aims	Can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation Can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems Can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems Are responsible, competent, confident and creative users of information and communication technology.						
Vocabulary	Website, rules, online, email, private information, robots, patterns, programme, algorithm, space bar, digital, purpose, online tools, shut down, communicate, photographs, video, sound, multimedia, data, pictogram, digitally, appropriate/inappropriate, cyber-bullying, sites, digital footprint, keyword searching, word process, right-angle turn, sprites, coding, sequence, debug, frames, predict, select tool, drawing tool, search tool, stop motion, animation, enter/return						
Breadth	**2**	**Writing in different styles (laptops)**	**Programming with ScratchJr (iPads)**	**An introduction to animation (Laptops needed for first 3 lessons. Second half iPads)**		**Finding and presenting information (laptops)**	

Knowledge		Introduce children to word processing and desktop publishing using a number of different tools and design tasks.	Introduce students to this great block-based programming language to create animations and games perfect for KS1. Write and debug algorithms, learn about repeating, and different triggers to create actions.	Get really creative as you introduce both 2D and stop frame animation. Students will love creating their own animated clips and stories with a variety of tools.	Introduces children to web browsers to explore and search websites safely, collecting and presenting information in graphs, and different ways of sorting and classifying data with databases.
Aims	Can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation Can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems Can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems Are responsible, competent, confident and creative users of information and communication technology.				
Vocabulary	Appropriate/inappropriate, cyber-bullying, sites, digital footprint, keyword searching, word process, right-angle turn, sprites, coding, sequence, debug, frames, predict, select tool, drawing tool, search tool, stop motion, animation, enter/return, website, rules, online, email, private information, robots, patterns, programme, algorithm, space bar, digital, purpose, online tools, shut down, communicate, photographs, video, sound, multimedia, data, pictogram, digitally				
Breadth	**3**	**Computational Thinking - Alien Contact! (unplugged – no laptops)**	**Communication and collaboration (laptops)**	**Programming Scratch Maze Games (laptops)**	**Searching the web (laptops for searching the web. Loan kit for WeDO)**
Knowledge		An unplugged unit to develop your students into strong computational thinkers by solving a wide range of exciting unplugged problems. Will they be able to solve the problems, earn the trust of an alien species and cement a new galactic friendship?!	Introduce students to email and online collaborative tools. Learn how to safely and appropriately make use of these essential digital tools.	Teach algorithms, repetition, conditions and variables, while introducing students to Scratch's block-based coding language. Build adventure maze games and design your own levels, characters and objects to collect.	Take a detailed look at all elements of searching the web with care and consideration, covering: searching tricks, validating websites, improving your searches, searching images and searching online maps.
Aims	Can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation Can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems Can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems Are responsible, competent, confident and creative users of information and communication technology.				

Vocabulary	E safety rules, log on, personal information, private, attach, open, save, cam, coordinates, variables, broadcast, import, sequence debugging, test and improve, sequence programming, alignment, copy, paste, collaborate, questioning, database, recording data, present data				
Breadth	**4**	**Computational Thinking - Alien Contact! (unplugged – no laptops)**	**Communication and collaboration (laptops)**	**Programming Scratch Maze Games (laptops)**	**Machines and mechanisms laptops for searching the web. Loan kit for WeDO)**
Knowledge		An unplugged unit to develop your students into strong computational thinkers by solving a wide range of exciting unplugged problems. Will they be able to solve the problems, earn the trust of an alien species and cement a new galactic friendship?!	Introduce students to email and online collaborative tools. Learn how to safely and appropriately make use of these essential digital tools.	Teach algorithms, repetition, conditions and variables, while introducing students to Scratch's block-based coding language. Build adventure maze games and design your own levels, characters and objects to collect.	A unit that investigates building mechanisms with Lego WeDo then choose one of our 3 WeDo projects to design, build and program machines.
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Vocabulary	Search engine, reporting, secure, copyright, validate, digital content, kodu, logical reasoning, command, 3d game, debug algorithms, download, upload, resize, enhance, layering, decomposing, input, output				
Breadth	**5**	**Building Retro Games - Pick a project (laptops)**	**Digital Literacy and online safety (Y5) (unplugged – no laptops)**	**What is a computer? (unplugged – no laptops)**	**Programming Robots (Visit and EV3 Loan kit)**
Knowledge		Choose from 3 classic video game projects with this fantastic coding unit. Analyse the original games, build a simple version of them, then let the students get creative and independently extend their projects.	Six lessons taken from Common Sense Education's excellent digital citizenship curriculum, covering a wide range of topics including well-being, privacy and security, online identity, relationships, communication and the media.	Delve into what really makes a computer a computer. Is a TV a computer? Is a fridge a computer? Is a toilet a computer?! It also investigates just what is inside that metal box, how a computer works, memory, data and binary code. By the end you'll know your RAM from your ROM and your CPU from your GPU.	Introduce students to programming LEGO EV3 Robots. Control their movement with precise calculations and coding, then utilise the robot's sensors to interact with its environment and solve problems.

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Vocabulary	Input device, output device, digital device, software, hardware, profile, motherboard, hard drive, RAM, ROM, CPU, GPU, operating systems, design, navigate, 3D model, micro bit, responsibility, editing tools, refinement				
Breadth	**6**	**Digital Literacy and online safety (Y6) (unplugged – no laptops)**	**Inside the internet (laptops)**	**Creating Instructional Videos (iPads)**	***Getting started with the BBC micro:bit* (laptops. Visit and Loan kit) (cross curricular with DT)**
Knowledge		Six lessons taken from Common Sense Education's excellent digital citizenship curriculum, covering a wide range of topics including well-being, privacy and security, online identity, relationships, communication and the media.	Get under the skin of the Internet to investigate how the web works, how it's built and written with HTML code.	Plan, design and create instructional teaching videos. Perfect for reinforcing other areas of the curriculum. Students can create videos to support each other with revision and then share them online to give access to everyone in the class.	Introduce students to physical computing with a BBC micro:bit. Control the LED matrix and find out how screens work, learn about inputs and outputs, turn your micro:bit into a scoring or game device while learning about variables, conditionals and iteration.
Vocabulary	Acronyms, AR, connectivity, generate, variable, operators, list, arithmetic operators, loops, manipulating, interpret, process, concurrently, multitask, conditional, data structure,				