(Lower KS2 Curriculum – Year A)

Differentiation by input see the weekly planning sheet/

- -Key vocab for each learning objective is in red font /
- -Resources -see the weekly planning /
- -Minimum Assessment for Learning strategies for all topics = Peer Talk; targeted questioning; mini white boards; and self and peer marking
- Long term memory development strategies= Recapping pervious learning at the start of each new topic / Long term memory strategy linked to the objectives on this sheet for each week
- Computing Cultural Capital = are responsible, competent, confident and creative users of information and communication technology.

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
	How does a digital device work?	What parts make up a digital device?	How do digital devices help us?	How am I connected?	How are Computers connected?	What does our school network look like?	Assessment, Consolidation and Review
Autumn first half	<u>Learning Objective</u>To explain how digital devices function	 Learning Objective To identify input and output devices 	 Learning Objective To recognise how digital devices can change the way we work 	 Learning Objective To explain how a computer network can be used to share information 	 Learning Objective To explore how digital devices can be connected 	 Learning Objective To recognise the physical components of a network 	and neview
Computing Systems and Networks – Connecting Computers	 Success Criteria I can explain that digital devices accept inputs I can explain that digital devices produce outputs I can follow a process 	 Success Criteria I can classify input and output devices I can design a digital device I can model a simple process 	 Success Criteria I can explain how I use digital devices for different activities I can recognise similarities between using digital devices and non-digital tools I can suggest differences between using digital devices and non-digital tools 	 Success Criteria I can discuss why we need a network switch I can explain how messages are passed through multiple connections I can recognise different connections 	Success Criteria I can demonstrate how information can be passed between devices I can explain the role of a switch, server, and wireless access point in a network I can recognise that a computer network is made up of a number of devices	 Success Criteria I can identify how devices in a network are connected together I can identify networked devices around me I can identify the benefits of computer networks 	
Key Vocabulary	Digital device, input, process, output	Digital device, input, process, output	Program, digital, non-digital	Connection, network, network switch	Server, wireless access point	Network cables, network sockets	
KS2 Computing NC Links	2.2, 2.4, 2.6	2.2, 2.4, 2.6	2.2, 2.4, 2.6	2.2, 2.4, 2.6	2.2, 2.4, 2.6	2.2, 2.4, 2.6	
Computing Strand	CS	CS	CS, IT	CS, NW	CS, NW	CS, NW	
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	<u>Week 1</u>	Week 2	Week 3	Week 4	<u>Week 5</u>	Week 6	Week 7
	Can a picture move?	Frame by frame	What's the story?	Picture perfect	Evaluate and make it great!	Lights, camera, action!	Assessment, Consolidation
Autumn second half	 Learning Objective To explain that animation is a sequence of drawings or photographs 	 Learning Objective To relate animated movement with a sequence of images 	Learning Objective - To plan an animation	 Learning Objective To identify the need to work consistently and carefully 	Learning Objective - To review and improve an animation	 Learning Objective To evaluate the impact of adding other media to an animation 	and Review
Creating Media – Animation	 Success Criteria I can create an effective flip book-style animation I can draw a sequence of pictures I can explain how an animation/flip book works 	Success Criteria - I can create an effective stop frame animation - I can explain why little changes are needed for each frame - I can predict what an animation will look like Stop-frame animation, frame,	Success Criteria - I can break down a story into settings, characters and events - I can create a storyboard - I can describe an animation that is achievable on screen	 Success Criteria I can evaluate the quality of my animation I can review a sequence of frames to check my work I can use onion skinning to help me make small changes between frames 	Success Criteria I can evaluate another learner's animation I can explain ways to make my animation better I can improve my animation based on feedback	Success Criteria I can add other media to my animation I can evaluate my final film I can explain why I added other media to my animation	
Key Vocabulary	Animation, flip book	sequence, image, photograph	Setting, character, events, stop- frame animation, onion skinning	Stop-frame animation, onion skinning, consistency	Stop-frame animation, onion skinning, consistency	Animation, media, import, transition, evaluate	
KS2 Computing NC Links	2.6, 2.7	2.6, 2.7	2.6, 2.7	2.6, 2.7	2.6, 2.7	2.6, 2.7	
Computing Strand	CM, ET	CM, ET	CM, DD	CM, DD, ET	CM, DD, ET	CM, DD, ET	
Education for a Connected World	Copyright and ownershipManaging onlineinformation	Copyright and ownershipManaging onlineinformation	Copyright and ownershipManaging online information	Copyright and ownershipManaging online information	Copyright and ownershipManaging online information	Copyright and ownershipManaging online information	

	<u>Week 1</u>	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
	Introduction to Scratch	Programming sprites	<u>Sequences</u>	Ordering commands	Looking good	Making an instrument	Assessment, Consolidation
	Learning Objective	<u>Learning Objective</u>	Learning Objective	Learning Objective	<u>Learning Objective</u>	<u>Learning Objective</u>	and Review
Spring first half	 To explore a new programming environment 	- To identify that commands have an outcome	- To explain that a program has a start	- To recognise that a sequence of commands can have an order	 To change the appearance of my project 	- To create a project from a task description	
Programming A – Sequence in Music	 Success Criteria I can explain that objects in Scratch have attributes (linked to) I can identify the objects in a Scratch project (sprites, backdrops) I can recognise that commands in Scratch are represented as blocks 	 Success Criteria I can choose a word which describes an on-screen action for my design I can create a program following a design I can identify that each sprite is controlled by the commands I choose 	Success Criteria I can create a sequence of connected commands I can explain that the objects in my project will respond exactly to the code I can start a program in different ways	Success Criteria I can combine sound commands I can explain what a sequence is I can order notes into a sequence	Success Criteria I can build a sequence of commands I can decide the actions for each sprite in a program I can make design choices for my artwork	Success Criteria I can identify and name the objects I will need for a project I can implement my algorithm as code I can relate a task description to a design	
Key Vocabulary	Scratch, programming, blocks, commands, code, sprite, costume, stage, backdrop	Sprites, programming blocks, motion, turn, point in direction, go to, glide	Sequence, event, task, design, code, run the code	Sequence, order, note, chord	Sprite, stage, costume, backdrop	Design, algorithm, bug, debug	
KS2 Computing NC Links	2.1, 2.2, 2.3, 2.6	2.1, 2.2, 2.3, 2.6	2.1, 2.2, 2.3, 2.6	2.1, 2.2, 2.3, 2.6	2.1, 2.2, 2.3, 2.6	2.1, 2.2, 2.3, 2.6	
Computing Strand	ET, PG	PG	PG	PG	DD, PG	AL, CM, DD, PG	
Education for a Connected World	Copyright and ownershipManaging onlineinformation	 Copyright and ownership Managing online information 	Copyright and ownershipManaging online information	Copyright and ownershipManaging onlineinformation	Copyright and ownershipManaging online information	Copyright and ownershipManaging online information	

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
	Yes or no questions	Making groups	Creating a branching database	Structuring a branching database	Using a branching database	Presenting Information	Assessment, Consolidation
	Learning Objective - To create questions with	Learning Objective - To identify the object	Learning Objective - To create a branching	Learning Objective - To explain why it is	Learning Objective - To identify objects	Learning Objective - To compare the	and Review
Spring second half	yes/no answers	attributes needed to collect relevant data	database	helpful for a database to be well structured	using a branching database	information shown in a pictogram with a branching database	
Data and Information – Branching Databases	Success Criteria I can create two groups of objects separated by one attribute I can investigate questions with yes/no answers I can make up a yes/no question about a collection of objects	 Success Criteria I can arrange objects into a tree structure I can create a group of objects within an existing group I can select an attribute to separate objects into groups 	 Success Criteria I can group objects using my own yes/no questions I can prove my branching database works I can select objects to arrange in a branching database 	- I can create yes/no questions using given attributes - I can explain that questions need to be ordered carefully to split objects into similarly sized groups - I can compare two branching database structures	 Success Criteria I can select a theme and choose a variety of objects I can create questions and apply them to a tree structure I can use my branching database to answer questions 	 Success Criteria I can compare two ways of presenting information I can explain what a branching database tells me I can explain what a pictogram tells me 	
Key Vocabulary	Attribute, value, questions, table, objects	Branching database, database, attribute, value, questions, objects, equal, even, separate	Branching database, database, attribute, value, questions, objects	Branching database, attribute, questions, structure, compare, order, organise	Branching database, attribute, value, question, j2data, selecting	Compare, information, explain, pictogram, branching database	
KS2 Computing NC Links	2.6	2.6	2.6	2.6	2.6	2.6	
Computing Strand	DI	DI	DI, ET	DD, DI, ET	DI, ET	DD, DI	
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	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
	Words and pictures	Can you edit it?	Great template!	Can you add content?	Lay it out	Why desktop publishing?	Assessment, Consolidation
	<u>Learning Objective</u>	<u>Learning Objective</u>	Learning Objective	Learning Objective	Learning Objective	<u>Learning Objective</u>	and Review
Summer first half	 To recognise how text and images communicate information 	- To recognise that text and layout can be edited	 To choose appropriate page settings 	- To add content to a desktop publishing publication	- To consider how different layouts can suit different purposes	- To consider the benefits of desktop publishing	
Creating Media – Desktop Publishing	 Success Criteria I can explain the difference between text and images I can identify the advantages and disadvantages of using text and images I can recognise that text and images can communicate messages clearly 	 Success Criteria I can change font style, size, and colour for a given purpose I can edit text I can explain that text can be changed to communicate more clearly 	 Success Criteria I can create a template for a particular purpose I can explain what 'page orientation' means I can recognise placeholders and say why they are important 	Success Criteria I can choose the best locations for my content I can make changes to content after I've added it I can paste text and images to create a magazine cover	Success Criteria I can choose a suitable layout for a given purpose I can identify different layouts I can match a layout to a purpose	Success Criteria I can compare work made on desktop publishing to work created by hand I can identify the uses of desktop publishing in the real world I can say why desktop publishing might be helpful	
Key Vocabulary	Text, images, advantages, disadvantages, communicate	Font, font style, communicate, template	Landscape, portrait, orientation, placeholder, template, layout, content	Desktop publishing, copy, paste	Layout, purpose	Desktop publishing, benefits	
KS2 Computing NC Links	2.5, 2.6	2.5, 2.6	2.5, 2.6	2.5, 2.6	2.5, 2.6	2.5, 2.6	
Computing Strand	СМ	CM, ET	CM, ET	CM, ET	CM, DD, ET	CM, DD, ET, IT	
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	Week 1	Week 2	Week 3	Week 4	<u>Week 5</u>	<u>Week 6</u>	Week 7
	Moving a sprite Learning Objective	Maze movement Learning Objective	Drawing lines Learning Objective	Adding features Learning Objective	Debugging movement Learning Objective	Making a project Learning Objective	Assessment, Consolidation and Review
Summer second half	- To explain how a sprite moves in an existing project	 To create a program to move a sprite in four directions 	- To adapt a program to a new context	- To develop my program by adding features	 To identify and fix bugs in a program 	 To design and create a maze-based challenge 	
Programming B –	Success Criteria	Success Criteria	Success Criteria	Success Criteria	Success Criteria	Success Criteria	
Events and Actions	 I can choose which keys to use for actions and explain my choices I can explain the relationship between an event and an action I can identify a way to improve a program 	 I can choose a character for my project I can choose a suitable size for a character in a maze I can program movement 	 I can choose blocks to set up my program I can consider the real world when making design choices I can use a programming extension 	 I can build more sequences of commands to make my design work I can choose suitable keys to turn on additional features I can identify additional features (from a given set of blocks) 	 I can match a piece of code to an outcome I can modify a program using a design I can test a program against a given design 	 I can evaluate my project I can implement my design I can make design choices and justify them 	
Key Vocabulary	Motion, event, sprite, algorithm, logic	Move, resize, algorithm	Extension block, pen up, set up	Pen, design, event, action, algorithm	Debugging, errors, setup	Design, code, setup, test, debug, actions, events	
KS2 Computing NC Links	2.1, 2.2, 2.3, 2.6	2.1, 2.2, 2.3, 2.6	2.1, 2.2, 2.3, 2.6	2.1, 2.2, 2.3, 2.6	2.1, 2.2, 2.3, 2.6	2.1, 2.2, 2.3, 2.6	
Computing Strand	ET, PG	ET, PG	PG	PG	DD, PG	DD, PG	
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