Year 5	Computing						
KS2 Objectives	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2	
Focus	Scratch: Developing Games	Flowol	Online Safety	Radio Station	3D Modelling: Sketch Up	Using and Applying	
To design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts	Design a set of instructions on paper for a character game, to convert into Scratch algorithm. Design an original character or backdrop for a specific purpose within a computer game. Improve an existing game by adding additional features such as sound, movement or speech bubbles. Use forms of animation to create a new computer game, with a specific purpose or goal. Make an object move automatically and change its appearance. Improve the effect of the game by add further costumes and programming costume changes to sprites as a consequence to an event. Complete game playability by adding scoring and levels.	Children are introduced to flowcharts and practise reading them as a sequence of instructions, then designing their own. Children use the control software (Flowol) to create a simple flowchart for a zebra crossing, then learn how to edit, delete and insert new symbols. Children control a simulated pair of traffic lights in sequence, which must run simultaneously. Children deconstruct and then recreate a flowchart using a decision symbol, based on the input of the sunlight at a lighthouse. Children are introduced to the concept of subroutines by editing an already familiar flowchart (Lighthouse). Children are introduced to a new scenario (Robot toy) for which they must design and create their own programming solution. This should involve one or more inputs controlling one or more outputs. Some children will be able to					

Year 5	Computing					
KS2 Objectives	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Focus	Scratch: Developing Games	Flowol	Online Safety	Radio Station	3D Modelling: Sketch Up	Using and Applying
		include subroutines for clearer organisation.				
To use sequence, selection, and repetition in programs; work with variables and various forms of input and output	Design a set of instructions on paper for a character game, to convert into Scratch algorithm. Design an original character or backdrop for a specific purpose within a computer game. Improve an existing game by adding additional features such as sound, movement or speech bubbles. Use forms of animation to create a new computer game, with a specific purpose or goal. Make an object move automatically and change its appearance. Improve the effect of the game by add further costumes and programming costume changes to sprites as a consequence to an event. Complete game playability by adding scoring and levels.	Children are introduced to flowcharts and practise reading them as a sequence of instructions, then designing their own. Children use the control software (Flowol) to create a simple flowchart for a zebra crossing, then learn how to edit, delete and insert new symbols. Children control a simulated pair of traffic lights in sequence, which must run simultaneously. Children deconstruct and then recreate a flowchart using a decision symbol, based on the input of the sunlight at a lighthouse. Children are introduced to the concept of subroutines by editing an already familiar flowchart (Lighthouse). Children are introduced to a new scenario (Robot toy) for which they must design and create their own programming solution. This should involve one or more				

Year 5		Computing						
KS ₂ Objectives	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2		
Focus	Scratch: Developing Games	Flowol	Online Safety	Radio Station	3D Modelling: Sketch Up	Using and Applying		
To use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs	Design a set of instructions on paper for a character game, to convert into Scratch algorithm. Design an original character or backdrop for a specific purpose within a computer game. Improve an existing game by adding additional features such as sound, movement or speech bubbles. Use forms of animation to create a new computer game, with a specific purpose or goal. Make an object move automatically and change its appearance.	inputs controlling one or more outputs. Some children will be able to include subroutines for clearer organisation.						
	Improve the effect of the game by add further costumes and programming costume changes to sprites as a consequence to an event.							

Year 5	Computing					
KS2 Objectives	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Focus	Scratch: Developing Games	Flowol	Online Safety	Radio Station	3D Modelling: Sketch Up	Using and Applying
	Complete game playability by adding scoring and levels.					
To understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration						
To use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content			Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content in the context of finding out how photos can be altered and presented as reality online			
To select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information				Children use Audacity software as an introduction to sound recording. Children combine existing sounds with their own unique voice content to create sounds in the style of a radio jingle. Children research and plan appropriate digital content for presentation on a radio show podcast. Children use sound recording software to create appropriate digital content for presentation on a radio show podcast.	Select, use and combine a variety of software (including Internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information by drawing and manipulating simple 3D shapes. Select, use and combine a variety of software (including Internet services) on a range of digital devices to design and create a range of	Children research and plan a new bedroom design.

Year 5	Computing					
KS2 Objectives	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Focus	Scratch: Developing Games	Flowol	Online Safety	Radio Station	3D Modelling: Sketch Up	Using and Applying
				Children examine the features of advertisements and use the ideas to design their own advert to be recorded using audio software as part of their radio station or podcast Children are given the opportunity to complete previous projects (podcast or radio advert) then present to their peers.	programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information by adding detail to simple 3D shapes. Select, use and combine a variety of software (including Internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information by adding detail to simple 3D shapes. Select, use and combine a variety of software (including Internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information by adding more complex 3D models.	

Year 5	Computing							
KS2 Objectives	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2		
Focus	Scratch: Developing Games	Flowol	Online Safety	Radio Station	3D Modelling: Sketch Up	Using and Applying		
					 Select, use and combine a variety of software (including Internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information by creating complex 3D furniture models. Select, use and combine a variety of software (including Internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including networks, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information by applying the skills they have learnt in this unit to their own design. 			
To use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.			Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact in the context of identifying and avoiding spam emails.					

Year 5	Computing						
KS2 Objectives	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2	
Focus	Scratch: Developing Games	Flowol	Online Safety	Radio Station	3D Modelling: Sketch Up	Using and Applying	
			Use technology safely, respectfully and responsibly; recognise acceptable/ unacceptable behaviour; identify a range of ways to report concerns about content and contact in the context of citing the work of others. Use technology safely, respectfully and responsibly; recognise acceptable/ unacceptable behaviour; identify a range of ways to report concerns about content and contact in the context of following rules to help create strong passwords. Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact in the context of planning a story about the consequences of not following online safety rules Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range				

Year 5	Computing					
KS ₂ Objectives	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Focus	Scratch: Developing Games	Flowol	Online Safety	Radio Station	3D Modelling: Sketch Up	Using and Applying
			of ways to report concerns about content and contact in the context of creating a comic strip about the consequences of not following online safety rules.			
HC Confidence /Aspiration /Resilience / Spirituality						