

Computing	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	Computing Systems and Networks – IT around us	Creating Media – Digital Photography	Programming A – Robot Algorithms	Data and information – Pictograms	Creating Media – Making Music	Programming B – An introduction to quizzes
Year 2	To identify the uses of information technology	Using digital devices to take photographs and to understand what makes a good photograph or not.	Use a series of instructions to create a sequence Explain what happens when we change the order of instructions	Be able to create pictograms based on a set of data.	To look at some of the way that music is created digitally and gain an appreciation for it.	To create a program from a given design to make a quiz
		Begin to use tools to change an image	Use logical reasoning to predict the outcome of a series of commands	Cross-curricular link to statistics in maths on creating pictograms	Cross-curricular link to music and beginning to create music for purposes	
	Concepts: - Computer Systems (CS) - Impact of Technology (IT) - Safety and Security (SS) - Networks (NW)	Concepts: - Creating Media (CM) - Design and Development (DD) - Effective use of tools (ET) - Computer Science (CS)	Concepts: - Algorithms (AL) - Programming (PG) - Design & Development (DD)	Concepts: - Data and information - Effective use of tools - Security & Safety	Concepts: - Creating Media - Design and Development - Effective use of tools - Data and information	Concepts: - Programming - Design & Development
National Curriculum Coverage	use technology purposefully to create, organise, store, manipulate and retrieve digital content	use technology purposefully to create, organise, store, manipulate and retrieve digital content	understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by	use technology purposefully to create, organise, store, manipulate and retrieve digital content	use technology purposefully to create, organise, store, manipulate and	understand what algorithms are; how they are implemented as programs on

	- recognise common uses of information technology beyond school - use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.	- recognise common uses of information technology beyond school - use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.	following precise and unambiguous instructions - Create and debug simple programs - Use logical reasoning to predict the behaviour of simple programs - Use technology to purposefully create, organise, store, manipulate and retrieve digital content	use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.	retrieve digital content	digital devices; and that programs execute by following precise and unambiguous instructions - Create and debug simple programs - Use logical reasoning to predict the behaviour of simple programs
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Sticky Knowledge	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
SK1	- I know how to describe some uses of computers (CS) - I know how to identify examples of computers (CS) - I know how to identify that a computer is a part of IT (NW)	- I know how to explain what I did to capture a digital photo - I know how to recognise what devices can be used to take photographs - I know how to talk about how to take a photograph	- I know how to choose a series of words that can be enacted as a sequence - I know how to follow instructions given by someone else - I know how to give clear and unambiguous instructions	- I know how to compare totals in a tally chart - I know how to record data in a tally chart - I know how to represent a tally count as a total	- I know how to describe how music makes me feel, e.g. happy or sad - I know how to identify simple differences in pieces of music - I know how to listen with concentration to a range of music (links to the Music curriculum)	- I know how to identify that a program needs to be started - I know how to identify the start of a sequence - I know how to show how to run my program
SK2	- I know how to identify examples of IT (CS)	- I know how to explain the process of taking a good photograph	- I know how to create different algorithms for a range of sequences	- I know how to enter data onto a computer - I know how to use a	- I know how to create a rhythm pattern	- I know how to change the outcome of a sequence of

	- I know how to identify that some IT can be used in more than one way - I know how to sort school IT by what it's used for	- I know how to explain why a photo looks better in portrait or landscape format - I know how to take photos in both landscape and portrait format	(using the same commands) - I know how to show the difference in outcomes between two sequences that consist of the same commands - I know how to use an algorithm to program a sequence on a floor robot	- computer to view data in a different format - I know how to use pictograms to answer simple questions about objects	- I know how to explain that music is created and played by humans - I know how to play an instrument following a rhythm pattern	- commands - I know how to match two sequences with the same outcome - I know how to predict the outcome of a sequence of commands
SK3	- I know how to find examples of information technology - I know how to sort IT by where it is found - I know how to talk about uses of information technology	- I know how to discuss how to take a good photograph - I know how to identify what is wrong with a photograph - I know how to improve a photograph by retaking it	- I know how to compare my prediction to the program outcome - I know how to follow a sequence - I know how to predict the outcome of a sequence	- I know how to explain what the pictogram shows - I know how to organise data in a tally chart - I know how to use a tally chart to create a pictogram	- I know how to identify that music is a sequence of notes - I know how to refine my musical pattern on a computer - I know how to use a computer to create a musical pattern using three notes	- I know how to build the sequences of blocks I need - I know how to decide which blocks to use to meet the design - I know how to work out the actions of a sprite in an algorithm
SK4	- I know how to demonstrate how IT devices work together - I know how to recognise common types of technology - I know how to say why we use IT	- I know how to experiment with different light sources - I know how to explain why a picture may be unclear - I know how to explore the effect that light has on a photo	- I know how to explain the choices I made for my mat design - I know how to identify different routes around my mat - I know how to test my mat to make sure that it is usable	- I know how to answer 'more than'/'less than' and 'most/least' questions about an attribute - I know how to create a pictogram to arrange objects by an attribute - I know how to tally objects using a common attribute	- I know how to identify that music is a sequence of notes - I know how to refine my musical pattern on a computer - I know how to use a computer to create a musical pattern using three notes	- I know how to choose backgrounds for the design - I know how to choose characters for the design - I know how to create a program based on the new design
SK5	- I know how to list different uses of information technology	- I know how to explain my choices - I know how to recognise that images	- I know how to create an algorithm to meet my goal - I know how to explain	- I know how to choose a suitable attribute to compare people - I know how to collect	- I know how to describe an animal using sounds - I know how to	- I know how to build sequences of blocks to match my design - I know how to

	- I know how to say how rules can help keep me safe - I know how to talk about different rules for using IT	- can be changed - I know how to use a tool to achieve a desired effect	- what my algorithm should achieve - I know how to use my algorithm to create a program	- the data I need - I know how to create a pictogram and draw conclusions from it	- explain my choices - I know how to save my work	- choose the images for my own design - I know how to create an algorithm
SK6	- I know how to explain the need to use IT in different ways - I know how to identify the choices that I make when using IT - I know how to use IT for different types of activities	- I know how to apply a range of photography skills to capture a photo - I know how to identify which photos are real and which have been changed - I know how to recognise which photos have been changed	- I know how to plan algorithms for different parts of a task - I know how to put together the different parts of my program - I know how to test and debug each part of the program	- I know how to give simple examples of why information should not be shared - I know how to share what I have found out using a computer - I know how to use a computer program to present information in different ways	- I know how to explain how I made my work better - I know how to listen to music and describe how it makes me feel - I know how to reopen my work	- I know how to compare my project to my design - I know how to debug my program - I know how to improve my project by adding features