



Algorithms

	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	
Progression	<p>Programming: Moving a robot</p> <ul style="list-style-type: none"> I can move a robot using a remote control 	<p>Programming: Moving a robot</p> <ul style="list-style-type: none"> I can move a robot using a remote control I can move a robot by giving it discreet instructions 	<p>Programming A: Moving a robot</p> <ul style="list-style-type: none"> I can match a command to an outcome I can predict the outcome of a command on a device I can run a command on a device I can follow an instruction I can give directions I can recall words that can be acted out <p>Programming B: Programming animations</p> <ul style="list-style-type: none"> I can add programming blocks based on my algorithm I can test the programs I have created I can use sprites that match my design 				<p>Programming B: Repetition in games</p> <ul style="list-style-type: none"> I can choose when to use a count-controlled and an infinite loop I can modify loops to produce a given outcome I can recognise that some programming languages enable more than one process to be run at once 	<p>Programming B: Selection in quizzes</p> <ul style="list-style-type: none"> I can identify conditions in a program I can modify a condition in a program I can recall how conditions are used in selection I can create a program with different outcomes using selection I can identify the condition and outcomes in an 'if... then... else...' statement I can use selection in an infinite loop to check a condition I can design the flow of a program which contains 'if... then... else...' I can explain that program flow can branch according to a condition I can show that a condition can direct program flow in one of two ways 	
Vocabulary	instructions, sequence, forward, backward, left, right, stop, on, off	remote control, robot, buttons, instructions, sequence, instructions	command, instructions, program, block, Scratch Jr, APP, iPad, Password, Safe, sprite, algorithm, design			instructions, sequence, algorithm, repeat, sprite, loop, design, condition, debug, predict, modify	if/then statement, blocks, sprite, condition, test, debug, program, algorithm, modify, input, design, output		

Programming

Progression			<p>Programming B: Programming animations</p> <ul style="list-style-type: none"> I can compare different programming tools I can find which commands to move a sprite I can use commands to move a sprite I can run my program I can use a Start block in a program I can use more than one block by joining them together I can change the value I can find blocks that have numbers I can say what happens when I change a value I can add blocks to each of my sprites I can delete a sprite I can show that a project can include more than one sprite I can choose appropriate artwork for my project I can create an algorithm for each sprite I can decide how each sprite will move I can add programming blocks based on my algorithm I can test the programs I have created I can use sprites that match my design 	<p>Programming B: Programming quizzes</p> <ul style="list-style-type: none"> I can identify that a program needs to be started I can identify the start of a sequence I can show how to run my program I can change the outcome of a sequence of commands I can match two sequences with the same outcome I can predict the outcome of a sequence of commands I can build the sequences of blocks I need I can decide which blocks to use to meet the design I can work out the actions of a sprite in an algorithm I can choose backgrounds for the design I can choose characters for the design I can create a program based on the new design I can build sequences of blocks to match my design I can choose the images for my own design I can create an algorithm I can compare my project to my design I can debug my program I can improve my project by adding features 	<p>Programming B: Events and actions in programs</p> <ul style="list-style-type: none"> 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 given design I can test a program against a given design I can improve my project I can implement my design I can make design choices and justify them 	<p>Programming B: Repetition in games</p> <ul style="list-style-type: none"> I can list an everyday task as a set of instructions including repetition I can modify a snippet of code to create a given outcome I can predict the outcome of a snippet of code I can choose when to use a count-controlled and an infinite loop I can modify loops to produce a given outcome I can recognise that some programming languages enable more than one process to be run at once I can choose which action will be repeated for each object I can evaluate the effectiveness of the repeated sequences used in my program I can explain what the outcome of the repeated action should be I can explain the effect of my changes I can identify which parts of a loop can be changed I can re-use existing code snippets on new sprites I can develop my own design, explaining what my project will do I can evaluate the use of repetition in a project I can select key parts of a given project to use in my own design I can build a program that follows my design I can evaluate the steps I followed when building my project I can refine the algorithm in my design 	<p>Programming B: Selection in quizzes</p> <ul style="list-style-type: none"> I can identify conditions in a program I can modify a condition in a program I can recall how conditions are used in selection I can create a program with different outcomes using selection I can identify the condition and outcomes in an 'if... then... else...' statement I can use selection in an infinite loop to check a condition I can design the flow of a program which contains 'if... then... else...' I can explain that program flow can branch according to a condition I can show that a condition can direct program flow in one of two ways I can identify the outcome of user input in an algorithm I can outline a given task I can use a design format to outline my project I can implement my algorithm to create the first section of my program I can share my program with others I can test my program I can extend my program further I can identify the setup code I need in my program I can identify ways the program could be improved 	<p>Programming B: Sensing movement</p> <ul style="list-style-type: none"> I can apply my knowledge of programming to a new environment I can test my program on an emulator I can transfer my program to a controllable device I can determine the flow of a program using selection I can identify examples of conditions in the real world I can use a variable in an if, then, else statement to select the flow of a program I can experiment with different physical inputs I can explain that checking a variable doesn't change its value I can use a condition to change a variable I can explain the importance of the order of conditions in else, if statements I can modify a program to achieve a different outcome I can use an operand (e.g. <=>) in an if, then statement I can decide what variables to include in a project I can design the algorithm for my project I can design the program flow for my project I can create a program based on my design I can test my program against my design <p>I can use a range of approaches to find and fix bugs</p> <p>Data and Information: Spreadsheets</p> <ul style="list-style-type: none"> I can construct a formula in a spreadsheet I can explain which data types can be used in calculations I can identify that changing inputs changes outputs I can apply a formula to multiple cells by duplicating it I can calculate data using different operations I can create a formula which includes a range of cells
Vocabulary			command, instructions, program, block, Scratch Jr, APP, iPad, Password, Safe, sprite, algorithm, design	Command, instructions, program, block, Scratch Jr, APP, iPad, Password, Safe, sprite, algorithm, design, predict, modify	event, action, features, blocks, design, program, modify, sprite, predict	instructions, sequence, algorithm, repeat, sprite, loop, design, condition, debug, predict, modify	if/then statement, blocks, sprite, condition, test, debug, program, algorithm, modify, input, design, output	data, spreadsheet, information, formula, operations, input, output, present, chart, table, calculation, software





Creating Media

Progression

Nursery

Reception

Year 1

Year 2

Year 3

Year 4

Year 5

Year 6

Creating media

- I can take photographs on tablets and iPads, with adult support.
- I can record video on tablets and iPads, I can ask permission to record my friends.
- I can listen to music and watch video clips, with adult supervision

Creating media: Digital photography

- I can explain what I did to capture a digital photo
- I can recognise what devices can be used to take photographs
- I can talk about how to take a photograph
- I can explain the process of taking a good photograph
- I can explain why a photo looks better in portrait or landscape format
- I can take photos in both landscape and portrait format
- I can discuss how to take a good photograph
- I can identify what is wrong with a photograph
- I can improve a photograph by retaking it
- I can experiment with different light sources
- I can explain why a picture may be unclear
- I can explore the effect that light has on a photo
- I can explain my choices
- I can recognise that images can be changed
- I can use a tool to achieve a desired effect
- I can apply a range of photography skills to capture a photo
- I can identify which photos are real and which have been changed
- I can recognise which photos have been changed

Online Safety Day

- I can explain why copying someone else's work from the internet without permission isn't fair and what problems this might cause.

Creating media: Audio production

- I can discuss what sounds can be added to a podcast
- I can inspect the soundwave view to know where to trim my recording
- I can re-record my voice to improve my recording
- I can explain how sounds can be combined to make a podcast more engaging
- I can plan appropriate content for a podcast
- I can save my project so the different parts remain editable
- I can improve my voice recordings
- I can record content following my plan
- I can review the quality of my recordings
- I can choose appropriate edits to improve my podcast
- I can listen to an audio recording to identify its strengths
- I can suggest improvements to an audio recording
- I can arrange multiple sounds to create the effect I want
- I can explain the difference between saving a project and exporting an audio file
- I can open my project to continue working on it

Creating media: Photo editing

- I can explain why I might crop an image
- I can improve an image by rotating it
- I can use photo editing software to crop an image

Data and information: Spreadsheets

- I can produce a chart
- I can suggest when to use a table or chart
- I can use a chart to show the answer to questions

picture, camera app, play, stop, iPad, permission

photo, capture, portrait, landscape, editing, crop

play, pause, mute, podcast, recording device, audio, Garageband (audio editing), splice, fade, volume, software, hardware, copyright, ownership

Copyright, ownership, edit, effects, crop

Data and Information

Progression

Online Safety Day

- I can identify some simple examples of my personal information (e.g. name, address, birthday, age, location).
- I can explain why it is important to always ask a trusted adult before sharing online any personal information belonging to myself or others.

Data and information: Pictograms

- I can compare totals in a tally chart
- I can record data in a tally chart
- I can represent a tally count as a total
- I can enter data onto a computer
- I can use a computer to view data in a different format
- I can use pictograms to answer simple questions about objects
- I can explain what the pictogram shows
- I can organise data in a tally chart
- I can use a tally chart to create a pictogram
- I can answer 'more than/less than' and 'most/least' questions about an attribute
- I can create a pictogram to arrange objects by an attribute
- I can tally objects using a common attribute
- I can choose a suitable attribute to compare people
- I can collect the data I need
- I can create a pictogram and draw conclusions from it
- I can give simple examples of why information should not be shared
- I can share what I have found out using a computer
- I can use a computer program to present information in different ways

Creating Media: Audio production

- I can explain that the person who records the sound can say who is allowed to use it
- I can identify the input and output devices used to record and play sound
- I can use a computer to record audio
- I can explain how sounds can be combined to make a podcast more engaging
- I can plan appropriate content for a podcast
- I can save my project so the different parts remain editable

Data and information: Spreadsheets

- I can collect data
- I can enter data into a spreadsheet
- I can suggest how to structure my data
- I can apply an appropriate format to a cell
- I can choose an appropriate format for a cell
- I can explain what an item of data is
- I can construct a formula in a spreadsheet
- I can explain which data types can be used in calculations
- I can identify that changing inputs changes outputs
- I can apply a formula to multiple cells by duplicating it
- I can calculate data using different operations
- I can create a formula which includes a range of cells
- I can apply a formula to calculate the data I need to answer questions
- I can explain why data should be organised
- I can use a spreadsheet to answer questions
- I can produce a chart
- I can suggest when to use a table or chart
- I can use a chart to show the answer to questions

picture, camera app, play, stop, iPad, permission

tally chart, pictogram, data, information, design, present, data table, attribute.

play, pause, mute, podcast, recording device, audio, Garageband (audio editing), splice, fade, volume, software, hardware, copyright, ownership

data, spreadsheet, information, formula, operations, input, output, present, chart, table, calculation, software

Vocabulary





Design and Development

Nursery

Reception

Year 1

Year 2

Year 3

Year 4

Year 5

Year 6

Progression

Vocabulary

Programming B: Programming animations

- I can choose appropriate artwork for my project
- I can create an algorithm for each sprite
- I can decide how each sprite will move
- I can add programming blocks based on my algorithm
- I can test the programs I have created
- I can use sprites that match my design.

Programming B: Programming quizzes

- I can build the sequences of blocks I need
- I can decide which blocks to use to meet the design
- I can work out the actions of a sprite in an algorithm
- I can choose backgrounds for the design
- I can choose characters for the design
- I can create a program based on the new design
- I can build sequences of blocks to match my design
- I can choose the images for my own design
- I can create an algorithm
- I can compare my project to my design
- I can debug my program
- I can improve my project by adding features

Creating Media: Digital photography

- I can discuss how to take a good photograph
- I can identify what is wrong with a photograph
- I can improve a photograph by retaking it
- I can experiment with different light sources
- I can explain why a picture may be unclear
- I can explore the effect that light has on a photo

command, instructions, program, block, Scratch Jr, APP, iPad, Password, Safe, sprite, algorithm, design

Programming B: Programming quizzes

- I can build the sequences of blocks I need
- I can decide which blocks to use to meet the design
- I can work out the actions of a sprite in an algorithm
- I can choose backgrounds for the design
- I can choose characters for the design
- I can create a program based on the new design
- I can build sequences of blocks to match my design
- I can choose the images for my own design
- I can create an algorithm
- I can compare my project to my design
- I can debug my program
- I can improve my project by adding features

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- I can identify what is wrong with a photograph
- I can improve a photograph by retaking it
- I can experiment with different light sources
- I can explain why a picture may be unclear
- I can explore the effect that light has on a photo

Command, instructions, program, block, Scratch Jr, APP, iPad, Password, Safe, sprite, algorithm, design, predict, modify

photo, capture, portrait, landscape, editing, crop

Programming B: Events and actions in programs

- 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

Programming B: Events and actions in programs

- 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

event, action, features, blocks, design, program, modify, sprite, predict

Creating media: Audio production

- I can discuss what sounds can be added to a podcast
- I can inspect the soundwave view to know where to trim my recording
- I can re-record my voice to improve my recording
- I can explain how sounds can be combined to make a podcast more engaging
- I can plan appropriate content for a podcast
- I can save my project so the different parts remain editable
- I can choose appropriate edits to improve my podcast
- I can listen to an audio recording to identify its strengths
- I can suggest improvements to an audio recording

Programming B: Repetition in games

- I can list an everyday task as a set of instructions including repetition
- I can modify a snippet of code to create a given outcome
- I can predict the outcome of a snippet of code
- I can choose which action will be repeated for each object
- I can evaluate the effectiveness of the repeated sequences used in my program
- I can explain what the outcome of the repeated action should be
- I can develop my own design, explaining what my project will do
- I can evaluate the use of repetition in a project
- I can select key parts of a given project to use in my own design
- I can build a program that follows my design
- I can evaluate the steps I followed when building my project
- I can refine the algorithm in my design

play, pause, mute, podcast, recording device, audio, Garageband (audio editing), splice, fade, volume, software, hardware, copyright, ownership

Programming B: Selection in quizzes

- I can identify the outcome of user input in an algorithm
- I can outline a given task
- I can use a design format to outline my project
- I can implement my algorithm to create the first section of my program
- I can share my program with others
- I can test my program
- I can extend my program further
- I can identify the setup code I need in my program
- I can identify ways the program could be improved

Computing systems and networks: Systems and searching

- I can describe some of the ways that search results can be influenced
- I can explain how search engines make money
- I can recognise some of the limitations of search engines

if/then statement, blocks, sprite, condition, test, debug, program, algorithm, modify, input, design, output

Programming B: Sensing movement

- I can decide what variables to include in a project
- I can design the algorithm for my project
- I can design the program flow for my project
- I can create a program based on my design
- I can test my program against my design
- I can use a range of approaches to find and fix bugs

Programming B: Sensing movement

- I can decide what variables to include in a project
- I can design the algorithm for my project
- I can design the program flow for my project
- I can create a program based on my design
- I can test my program against my design
- I can use a range of approaches to find and fix bugs

Micro:Bit, device, LED, USB, input, output, blocks, program, algorithm, predict, modify, debug



Inspiring minds through opportunity





Computing Systems

	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Progression	<p>Computing systems and networks: Technology around us</p> <ul style="list-style-type: none"> I can name some of the parts of a computer/iPad. I can name technology at home and school. I know ways to keep safe when using technology. 	<p>Computing systems and networks: Technology around us</p> <ul style="list-style-type: none"> I know ways to keep safe when using technology. <p>Computing systems: Searching</p> <ul style="list-style-type: none"> I know information can be retrieved from computers. I can search for information on the internet with adult support. 	<p>Computing systems and networks: Technology around us</p> <ul style="list-style-type: none"> I can explain how these technology examples help us I can explain technology as something that helps us I can locate examples of technology in the classroom I can name the main parts of a computer I can switch on and log into a computer I can use a mouse to click and drag I can click and drag to make objects on a screen I can use a mouse to create a picture I can use a mouse to open a program I can save my work to a file I can say what a keyboard is for I can type my name on a computer I can delete letters I can open my work from a file I can use the arrow keys to move the cursor I can discuss how we benefit from these rules I can give examples of some of these rules I can identify rules to keep us safe and healthy when we are using technology in and beyond the home 	<p>Creating media: Digital photography</p> <ul style="list-style-type: none"> I can explain what I did to capture a digital photo I can recognise what devices can be used to take photographs I can talk about how to take a photograph I can explain the process of taking a good photograph I can explain why a photo looks better in portrait or landscape format. I can take photos in both landscape and portrait format 	<p>Computing systems and networks: Connecting computers</p> <ul style="list-style-type: none"> I can explain that digital devices accept inputs I can explain that digital devices produce outputs I can follow a process I can classify input and output devices I can describe a simple process I can design a digital device 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 I can discuss why we need a network switch I can explain how messages are passed through multiple connections I can recognise different connections 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 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 	<p>Creating media: Audio production</p> <ul style="list-style-type: none"> I can explain that the person who records the sound can say who is allowed to use it I can identify the input and output devices used to record and play sound I can use a computer to record audio 	<p>Computing systems and networks: Systems and searching</p> <ul style="list-style-type: none"> I can describe that a computer system features inputs, processes, and outputs I can explain that computer systems communicate with other devices I can explain that systems are built using a number of parts I can explain the benefits of a given computer system I can identify tasks that are managed by computer systems I can identify the human elements of a computer system 	<p>Programming B - Sensing movement</p> <ul style="list-style-type: none"> I can apply my knowledge of programming to a new environment I can test my program on an emulator I can transfer my program to a controllable device I can determine the flow of a program using selection I can identify examples of conditions in the real world I can use a variable in an if, then, else statement to select the flow of a program I can experiment with different physical inputs I can explain that checking a variable doesn't change its value I can use a condition to change a variable I can explain the importance of the order of conditions in else, if statements I can modify a program to achieve a different outcome I can use an operand (e.g. <=>) in an if, then statement I can decide what variables to include in a project I can design the algorithm for my project I can design the program flow for my project I can create a program based on my design I can test my program against my design I can use a range of approaches to find and fix bugs
Vocabulary	trusted adult, rules, friends	trusted adult, rules, friends, iPad, stranger, computer, internet, Google, search engine, type	technology, mouse, computer, laptop, tablet, keyboard, type, cursor, double click, enter, space, delete, backspace, hardware, software	photo, capture, portrait, landscape, editing, crop	network, connected, ethernet, switch, data, input, output	play, pause, mute, podcast, recording device, audio, Garageband (audio editing), splice, fade, volume, software, hardware, copyright, ownership	search engine, results, rank, advertising, refine, input, output, database	Micro:Bit, device, LED, USB, input, output, blocks, program, algorithm, predict, modify, debug

Impact of Technology

Progression		<p>Computing systems: Searching</p> <ul style="list-style-type: none"> I know information can be retrieved from computers. I can search for information on the internet with adult support. 	<p>Computing systems and networks: Technology around us</p> <ul style="list-style-type: none"> I can explain how these technology examples help us I can explain technology as something that helps us I can locate examples of technology in the classroom <p>Programming A: Moving a robot</p> <ul style="list-style-type: none"> I can follow an instruction I can give directions I can recall words that can be acted out 		<p>Computing systems and networks: Connecting computers</p> <ul style="list-style-type: none"> 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 		<p>Computing systems and networks: Systems and searching</p> <ul style="list-style-type: none"> I can explain the benefits of a given computer system I can identify tasks that are managed by computer systems I can identify the human elements of a computer system I can explain why we need tools to find things online I can recognise the role of web crawlers in creating an index I can relate a search term to the search engine's index 	
Online Safety Day	<ul style="list-style-type: none"> I can identify rules that help keep us safe and healthy in and beyond the home when I am using technology. I can give some simple examples of these rules I can apply these rules during my play I can link feelings to my online experiences 	<ul style="list-style-type: none"> I can identify rules that help keep us safe and healthy in and beyond the home when I am using technology. I can give some simple examples of these rules I can apply these rules during my play I can link feelings to my online experiences 	<ul style="list-style-type: none"> I can identify some simple examples of my personal information (e.g. name, address, birthday, age, location). I can explain why it is important to always ask a trusted adult before sharing online any personal information belonging to myself or others. 			<ul style="list-style-type: none"> I can recognise when someone is upset, hurt or angry online. I can describe ways people can be bullied through a range of media (e.g. image, video, text, chat). 	<ul style="list-style-type: none"> I can explain that information about other people online might not be correct and build a positive profile of myself online. I can describe ways that information about anyone online can be used by others to make judgments about an individual and why these may be incorrect. 	<ul style="list-style-type: none"> I can explain that taking or sharing inappropriate images of someone (e.g. embarrassing images), even if they say it is okay, may have an impact for the sharer and others; and I can explain who can help if someone is worried about this.
Vocabulary		internet, Google, search engine, type	technology, mouse, computer, laptop, tablet, keyboard, type, cursor, double click, enter, space, delete, backspace, hardware, software	command, instructions, program, block, Scratch Jr, APP, iPad, Password, Safe, sprite, algorithm, design	network, connected, ethernet, switch, data, input, output		search engine, results, rank, advertising, refine, input, output, database	





Effective Use of Tools

Nursery

Reception

Year 1

Year 2

Year 3

Year 4

Year 5

Year 6

Progression	<p>Interacting with technology</p> <ul style="list-style-type: none"> I can watch and respond to videos. I can interact with videos and sounds. <p>Computing systems and networks: Technology around us</p> <ul style="list-style-type: none"> I know ways to keep safe when using technology. <p>Creating media</p> <ul style="list-style-type: none"> I can use sound buttons, record my voice and listen back. 	<p>Computing systems and networks: Technology around us</p> <ul style="list-style-type: none"> I can use technology to talk to friends, I can take turns to listen and respond. I know ways to keep safe when using technology. 	<p>Computing systems and networks: Technology around us</p> <ul style="list-style-type: none"> I can click and drag to make objects on a screen I can use a mouse to create a picture I can use a mouse to open a program I can save my work to a file I can say what a keyboard is for I can type my name on a computer I can delete letters I can open my work from a file I can use the arrow keys to move the cursor I can discuss how we benefit from these rules I can give examples of some of these rules I can identify rules to keep us safe and healthy when we are using technology in and beyond the home 	<p>Creating media: Digital photography</p> <ul style="list-style-type: none"> I can explain the process of taking a good photograph I can explain why a photo looks better in portrait or landscape format I can take photos in both landscape and portrait format I can experiment with different light sources I can explain why a picture may be unclear I can explore the effect that light has on a photo I can explain my choices I can recognise that images can be changed I can use a tool to achieve a desired effect I can apply a range of photography skills to capture a photo I can identify which photos are real and which have been changed I can recognise which photos have been changed <p>Data and information: Pictograms</p> <ul style="list-style-type: none"> I can enter data onto a computer I can use a computer to view data in a different format I can use pictograms to answer simple questions about objects I can explain what the pictogram shows I can organise data in a tally chart I can use a tally chart to create a pictogram I can answer 'more than'/'less than' and 'most/least' questions about an attribute I can create a pictogram to arrange objects by an attribute I can tally objects using a common attribute I can choose a suitable attribute to compare people I can collect the data I need I can create a pictogram and draw conclusions from it I can give simple examples of why information should not be shared I can share what I have found out using a computer I can use a computer program to present information in different ways <p>Online Safety Day</p> <ul style="list-style-type: none"> I can use simple keywords in search engines. I can explain the difference between things that are imaginary, made up or make believe and things that are true or real. I can explain why some information I find online may not be real or true. 	<p>Programming B: events and actions in programs</p> <ul style="list-style-type: none"> 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 	<p>Creating media: Audio production</p> <ul style="list-style-type: none"> I can explain how sounds can be combined to make a podcast more engaging I can plan appropriate content for a podcast I can save my project so the different parts remain editable I can improve my voice recordings I can record content following my plan I can review the quality of my recording I can arrange multiple sounds to create the effect I want I can explain the difference between saving a project and exporting an audio file I can open my project to continue working on it <p>Creating media: Photo editing</p> <ul style="list-style-type: none"> I can explain why I might crop an image I can improve an image by rotating it I can use photo editing software to crop an image 	<p>Computing systems and networks: Systems and searching</p> <ul style="list-style-type: none"> I can explain that a search engine follows rules to rank results I can give examples of criteria used by search engines to rank results I can order a list by rank I can describe some of the ways that search results can be influenced I can explain how search engines make money I can recognise some of the limitations of search engines 	<p>Data and information: Spreadsheets</p> <ul style="list-style-type: none"> I can construct a formula in a spreadsheet I can explain which data types can be used in calculations I can identify that changing inputs changes outputs I can apply a formula to multiple cells by duplicating it I can calculate data using different operations I can create a formula which includes a range of cells I can apply a formula to calculate the data I need to answer questions I can explain why data should be organised I can use a spreadsheet to answer questions I can produce a chart I can suggest when to use a table or chart I can use a chart to show the answer to questions
	Vocabulary	watch, listen, TV screen, trusted adult, rules, friends, record, play, listen, stop	radio, button, on, off, trusted adult, rules, friends, iPad, stranger, computer	technology, mouse, computer, laptop, tablet, keyboard, type, cursor, double click, enter, space, delete, backspace, hardware, software	photo, capture, portrait, landscape, editing, crop	event, action, features, blocks, design, program, modify, sprite, predict	play, pause, mute, podcast, recording device, audio, Garageband (audio editing), splice, fade, volume, software, hardware, copyright, ownership	search engine, results, rank, advertising, refine, input, output, database



Inspiring minds through opportunity





Safety & Security

	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	
Progression	Computing systems and networks: Technology around us <ul style="list-style-type: none"> I know ways to keep safe when using technology. 	Computing systems and networks: Technology around us <ul style="list-style-type: none"> I know ways to keep safe when using technology. 	Computing systems and networks: Technology around us <ul style="list-style-type: none"> I can discuss how we benefit from these rules. I can give examples of some of these rules. I can identify rules to keep us safe and healthy when we are using technology in and beyond the home. 						
Online Safety Day	<ul style="list-style-type: none"> I can identify rules that help keep us safe and healthy in and beyond the home when I am using technology. I can give some simple examples of these rules. I can apply these rules during my play. I can link feelings to my online experiences. 	<ul style="list-style-type: none"> I can identify rules that help keep us safe and healthy in and beyond the home when I am using technology. I can give some simple examples of these rules. I can apply these rules during my play. I can link feelings to my online experiences. 	<ul style="list-style-type: none"> I can identify some simple examples of my personal information (e.g. name, address, birthday, age, location). I can explain why it is important to always ask a trusted adult before sharing online any personal information belonging to myself or others. 	<ul style="list-style-type: none"> I can use simple keywords in search engines. I can explain the difference between things that are imaginary, made up or make believe and things that are true or real. I can explain why some information I find online may not be real or true. 	<ul style="list-style-type: none"> I can explain why copying someone else's work from the internet without permission isn't fair and what problems this might cause. 	<ul style="list-style-type: none"> I can recognise when someone is upset, hurt or angry online. I can describe ways people can be bullied through a range of media (e.g. image, video, text, chat). 	<ul style="list-style-type: none"> I can explain that information about other people online might not be correct and build a positive profile of myself online. I can describe ways that information about anyone online can be used by others to make judgments about an individual and why these may be incorrect. 	<ul style="list-style-type: none"> I can explain that taking or sharing inappropriate images of someone (e.g. embarrassing images), even if they say it is okay, may have an impact for the sharer and others; and I can explain who can help if someone is worried about this. 	
Vocabulary	trusted adult, rules, friends	trusted adult, rules, friends, iPad, stranger, computer	tally chart, pictogram, data, information, design, present, data table, attribute						

NB: Online Safety is woven though all topics and units, this is where it is taught specifically as an outcome and is part of the success criteria.



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