



COMPUTING SKILLS & PROGRESSION

EYFS

<p>Personal, Social and Emotional Development</p>	<ul style="list-style-type: none"> • Show resilience and perseverance in the face of a challenge. • Know and talk about the different factors that support their overall health and wellbeing: -sensible amounts of 'screen time' <p><u>Managing Self:</u></p> <ul style="list-style-type: none"> • Be confident to try new activities and show independence, resilience and perseverance in the face of challenge. • Explain the reasons for rules, know right from wrong and try to behave accordingly
<p>Physical Development</p>	<ul style="list-style-type: none"> • Develop their small motor skills so that they can use a range of tools competently, safely and confidently.
<p>Expressive Arts and Design</p>	<ul style="list-style-type: none"> • Explore, use and refine a variety of artistic effects to express their ideas and feelings. <p><u>Creating with Materials:</u></p> <ul style="list-style-type: none"> • Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.

VOCABULARY

Information, programme, computers, software, turn on, Google, Turn off, technology, louder, quieter, CD, CD player, skip, remote control, camera mobile phone, Ipad, tablet, computer, mouse, keyboard, Bee-bot, torches, knobs, pulleys

Key Stage 1 Pupils should be taught to:

- understand what algorithms are; how they are implemented as programs on 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
- use technology purposefully to create, organise, store, manipulate and retrieve digital content
- 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.

COMPUTING SKILLS & PROGRESSION

YEAR 1	YEAR 2
Self-image and identity Health, wellbeing and lifestyle – Autumn Term 1	Self-image and identity Health, wellbeing and lifestyle – Autumn Term 1
Identify what things count as personal information	Identify what things count as personal information
Identify what is appropriate and inappropriate behaviour on the internet	Identify what is appropriate and inappropriate behaviour on the internet
Agree and follow sensible online safety rules, e.g., taking pictures, sharing information, storing passwords	Agree and follow sensible online safety rules, e.g. taking pictures, sharing information, storing passwords
Seek help from an adult when they see something that is unexpected or worrying	Seek help from an adult when they see something that is unexpected or worrying
Demonstrate how to safely open and close applications and log on and log off from websites	Demonstrate how to safely open and close applications and log on and log off from websites
Use key vocabulary to demonstrate knowledge and understanding in this strand: safe, meet, accept, reliable, tell, online, trusted, adult, information, safety, personal, key, question, tell, safe, share, stranger, danger, internet	Use key vocabulary to demonstrate knowledge and understanding in this strand: safe, meet, accept, reliable, tell, online, trusted, adult, information, safety, personal, key, question, tell, safe, share, stranger, danger, internet
Using an IPAD including photo and video manipulation, presentation skills - Autumn Term 1	Using an IPAD including photo and video manipulation, presentation skills - Autumn Term 1

Recognise ways that technology is used in the home and community, e.g. taking photos, blogs, shopping	Recognise ways that technology is used in the home and community, e.g. taking photos, blogs, shopping
Use links to websites to find information	Use links to websites to find information;
Recognise age-appropriate websites	Recognise age-appropriate websites
Use safe search filters	Use safe search filters
Use key vocabulary to demonstrate knowledge and understanding in this strand: filter, Google, search engine, image, keyboard, email, internet, subject, address, communicate, sender, safe, secure.	Use key vocabulary to demonstrate knowledge and understanding in this strand: filter, Google, search engine, image, keyboard, email, internet, subject, address, communicate, sender, safe, secure
Use software to record sounds	Use software to record sounds
Change sounds recorded	Change sounds recorded
Save, retrieve and organise work	Save, retrieve and organise work
Use key vocabulary to demonstrate knowledge and understanding in this strand: commands, add sound	Use key vocabulary to demonstrate knowledge and understanding in this strand: commands, add sound
Add text strings, text boxes and show and hide objects and images, manipulating the features	Add text strings, text boxes and show and hide objects and images, manipulating the features;
Use various tools, such as brushes, pens, eraser, stamps and shapes, and set the size, colour and shape	Use various tools, such as brushes, pens, eraser, stamps and shapes, and set the size, colour and shape;
Use applications and devices in order to communicate ideas, work, messages and demonstrate control	Use applications and devices in order to communicate ideas, work, messages and demonstrate control
Save, retrieve and organise work	Save, retrieve and organise work;
Use key vocabulary to demonstrate knowledge and understanding in this strand: paint, colour, brush, tools, settings, undo, redo, text, image, size, poster, launch, application, software, window, minimise, restore, size, move, screen, close, click, drag, log on, log off, keyboards, keys, mouse, click, button, double click, drag, present	Use key vocabulary to demonstrate knowledge and understanding in this strand: paint, colour, brush, tools, settings, undo, redo, text, image, size, poster, launch, application, software, window, minimise, restore, size, move, screen, close, click, drag, log on, log off, keyboards, keys, mouse, click, button, double click, drag, present.
Online relationships – Autumn Term 2	Online relationships – Autumn Term 2
Identify what things count as personal information	Identify what things count as personal information
Identify what is appropriate and inappropriate behaviour on the internet	Identify what is appropriate and inappropriate behaviour on the internet
Agree and follow sensible online safety rules, e.g., taking pictures, sharing information, storing passwords	Agree and follow sensible online safety rules, e.g. taking pictures, sharing information, storing passwords
Seek help from an adult when they see something that is unexpected or worrying	Seek help from an adult when they see something that is unexpected or worrying

Demonstrate how to safely open and close applications and log on and log off from websites	Demonstrate how to safely open and close applications and log on and log off from websites
Use key vocabulary to demonstrate knowledge and understanding in this strand: safe, meet, accept, reliable, tell, online, trusted, adult, information, safety, personal, key, question, tell, safe, share, stranger, danger, internet	Use key vocabulary to demonstrate knowledge and understanding in this strand: safe, meet, accept, reliable, tell, online, trusted, adult, information, safety, personal, key, question, tell, safe, share, stranger, danger, internet
Puppet Pals – Autumn Term 2	Puppet Pals – Autumn Term 2
Give commands one at a time to control direction and movement, including straight, forwards, backwards, turn	Give commands one at a time to control direction and movement, including straight, forwards, backwards, turn;
Control the nature of events: repeat, loops, single events and add and delete features	control the nature of events: repeat, loops, single events and add and delete features
Give a set of instructions to follow and predict what will happen	Give a set of instructions to follow and predict what will happen
Improve/change their sequence of commands by debugging	Improve/change their sequence of commands by debugging
Use key vocabulary to demonstrate knowledge and understanding in this strand: algorithm, instruction, order, debug, program, turn, left, right, clockwise, anticlockwise, blocks, sequence, project, repeat, repeat forever, invisible, grow, shrink.	Use key vocabulary to demonstrate knowledge and understanding in this strand: algorithm, instruction, order, debug, program, turn, left, right, clockwise, anticlockwise, blocks, sequence, project, repeat, repeat forever, invisible, grow, shrink.
	Use software to record sounds;
	Change sounds recorded;
	Save, retrieve and organise work;
	Use key vocabulary to demonstrate knowledge and understanding in this strand: commands, add sound.
Managing Online Information – Spring Term 1	Managing Online Information – Spring Term 1
Identify what things count as personal information	Identify what things count as personal information
Identify what is appropriate and inappropriate behaviour on the internet	Identify what is appropriate and inappropriate behaviour on the internet
Agree and follow sensible online safety rules, e.g. taking pictures, sharing information, storing passwords	Agree and follow sensible online safety rules, e.g., taking pictures, sharing information, storing passwords
Seek help from an adult when they see something that is unexpected or worrying	Seek help from an adult when they see something that is unexpected or worrying
Demonstrate how to safely open and close applications and log on and log off from websites	Demonstrate how to safely open and close applications and log on and log off from websites

Use key vocabulary to demonstrate knowledge and understanding in this strand: safe, meet, accept, reliable, tell, online, trusted, adult, information, safety, personal, key, question, tell, safe, share, stranger, danger, internet	Use key vocabulary to demonstrate knowledge and understanding in this strand: safe, meet, accept, reliable, tell, online, trusted, adult, information, safety, personal, key, question, tell, safe, share, stranger, danger, internet.
Unplugged Programming – Spring Term 1	Unplugged Programming – Spring Term 1
Give commands one at a time to control direction and movement, including straight, forwards, backwards, turn	Give commands one at a time to control direction and movement, including straight, forwards, backwards, turn;
Control the nature of events: repeat, loops, single events and add and delete features	Control the nature of events: repeat, loops, single events and add and delete features
Give a set of instructions to follow and predict what will happen;	Give a set of instructions to follow and predict what will happen
Improve/change their sequence of commands by debugging;	Improve/change their sequence of commands by debugging
Use key vocabulary to demonstrate knowledge and understanding in this strand: algorithm, instruction, order, debug, program, turn, left, right, clockwise, anticlockwise, blocks, sequence, project, repeat, repeat forever, invisible, grow, shrink.	Use key vocabulary to demonstrate knowledge and understanding in this strand: algorithm, instruction, order, debug, program, turn, left, right, clockwise, anticlockwise, blocks, sequence, project, repeat, repeat forever, invisible, grow, shrink.
Online Bullying – Spring Term 2	Online Bullying – Spring Term 2
Identify what things count as personal information	Identify what things count as personal information;
Identify what is appropriate and inappropriate behaviour on the internet	Identify what is appropriate and inappropriate behaviour on the internet
Agree and follow sensible online safety rules, e.g. taking pictures, sharing information, storing passwords	Agree and follow sensible online safety rules, e.g., taking pictures, sharing information, storing passwords
Seek help from an adult when they see something that is unexpected or worrying;	Seek help from an adult when they see something that is unexpected or worrying
Demonstrate how to safely open and close applications and log on and log off from websites	Demonstrate how to safely open and close applications and log on and log off from websites
Use key vocabulary to demonstrate knowledge and understanding in this strand: safe, meet, accept, reliable, tell, online, trusted, adult, information, safety, personal, key, question, tell, safe, share, stranger, danger, internet	Use key vocabulary to demonstrate knowledge and understanding in this strand: safe, meet, accept, reliable, tell, online, trusted, adult, information, safety, personal, key, question, tell, safe, share, stranger, danger, internet.
Programming Toys/Turtle Logo/Scratch – Spring Term 2	Programming Toys/Turtle Logo/Scratch – Spring Term 2
Give commands one at a time to control direction and movement, including straight, forwards, backwards, turn;	Give commands one at a time to control direction and movement, including straight, forwards, backwards, turn;
Control the nature of events: repeat, loops, single events and add and delete features;	Control the nature of events: repeat, loops, single events and add and delete features
Give a set of instructions to follow and predict what will happen;	Give a set of instructions to follow and predict what will happen

Improve/change their sequence of commands by debugging	Improve/change their sequence of commands by debugging
Use key vocabulary to demonstrate knowledge and understanding in this strand: algorithm, instruction, order, debug, program, turn, left, right, clockwise, anticlockwise, blocks, sequence, project, repeat, repeat forever, invisible, grow, shrink.	Use key vocabulary to demonstrate knowledge and understanding in this strand: algorithm, instruction, order, debug, program, turn, left, right, clockwise, anticlockwise, blocks, sequence, project, repeat, repeat forever, invisible, grow, shrink.
Online Reputation – Summer Term 1	Online Reputation – Summer Term 1
Identify what things count as personal information	Identify what things count as personal information
Identify what is appropriate and inappropriate behaviour on the internet	Identify what is appropriate and inappropriate behaviour on the internet
Agree and follow sensible online safety rules, e.g., taking pictures, sharing information, storing passwords	Agree and follow sensible online safety rules, e.g., taking pictures, sharing information, storing passwords
Seek help from an adult when they see something that is unexpected or worrying	Seek help from an adult when they see something that is unexpected or worrying
Demonstrate how to safely open and close applications and log on and log off from websites	Demonstrate how to safely open and close applications and log on and log off from websites
Use key vocabulary to demonstrate knowledge and understanding in this strand: safe, meet, accept, reliable, tell, online, trusted, adult, information, safety, personal, key, question, tell, safe, share, stranger, danger, internet	Use key vocabulary to demonstrate knowledge and understanding in this strand: safe, meet, accept, reliable, tell, online, trusted, adult, information, safety, personal, key, question, tell, safe, share, stranger, danger, internet.
Scratch – Summer Term 1	Scratch – Summer Term 1
Give commands one at a time to control direction and movement, including straight, forwards, backwards, turn	Give commands one at a time to control direction and movement, including straight, forwards, backwards, turn
Control the nature of events: repeat, loops, single events and add and delete features	Control the nature of events: repeat, loops, single events and add and delete features
Give a set of instructions to follow and predict what will happen	Give a set of instructions to follow and predict what will happen
Improve/change their sequence of commands by debugging	Improve/change their sequence of commands by debugging
Use key vocabulary to demonstrate knowledge and understanding in this strand: algorithm, instruction, order, debug, program, turn, left, right, clockwise, anticlockwise, blocks, sequence, project, repeat, repeat forever, invisible, grow, shrink	Use key vocabulary to demonstrate knowledge and understanding in this strand: algorithm, instruction, order, debug, program, turn, left, right, clockwise, anticlockwise, blocks, sequence, project, repeat, repeat forever, invisible, grow, shrink
Copyright and ownership/Privacy and security – Summer Term 2	Copyright and ownership/Privacy and security – Summer Term 2
Recognise ways that technology is used in the home and community, e.g., taking photos, blogs, shopping	Recognise ways that technology is used in the home and community, e.g. taking photos, blogs, shopping
Use links to websites to find information	Use links to websites to find information

Recognise age-appropriate websites	Recognise age-appropriate websites
Use safe search filters	Use safe search filters
Use key vocabulary to demonstrate knowledge and understanding in this strand: filter, Google, search engine, image, keyboard, email, internet, subject, address, communicate, sender, safe, secure.	Use key vocabulary to demonstrate knowledge and understanding in this strand: filter, Google, search engine, image, keyboard, email, internet, subject, address, communicate, sender, safe, secure
Data organising – Summer Term 2	Data organising – Summer Term 2
Use software to record sounds	Use software to record sounds
Change sounds recorded	Change sounds recorded
Save, retrieve and organise work	Save, retrieve and organise work
Use key vocabulary to demonstrate knowledge and understanding in this strand: commands, add sound	Use key vocabulary to demonstrate knowledge and understanding in this strand: commands, add sound.

VOCABULARY

Year 1 – as EYFS plus:

Computer Science: - algorithm, create, command, organise, sequence, software, store, program

Information Technology: - digital content, digital devices, computer network

Digital Literacy: - personal information, world wide web

Year 2 – as Year 1 plus:

Computer Science: - algorithm, blocks, command, debug, execute, manipulate, organise, scripted, sequence, software, sprite, store, predict, program, retrieve, reverse, engineer

Information Technology: -data, digital content, digital devices, network

Digital Literacy:- password, personal information, private, world wide web

Key Stage 2 Pupils should be taught to:

- design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts
- use sequence, selection, and repetition in programs; work with variables and various forms of input and output
- use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs
- 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
- use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content

- 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
- use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

COMPUTING SKILLS & PROGRESSION

YEAR 3	YEAR 4
Self-image and identity Health, wellbeing and lifestyle – Autumn Term 1	Self-image and identity Health, wellbeing and lifestyle – Autumn Term 1
Reflect on their own digital footprint and behaviour online	Reflect on their own digital footprint and behaviour online
Identify what is appropriate and inappropriate behaviour on the internet, recognising the term cyberbullying	Identify what is appropriate and inappropriate behaviour on the internet, recognising the term cyberbullying
Agree and follow sensible online safety rules, e.g., taking pictures, sharing information, storing passwords	Agree and follow sensible online safety rules, e.g., taking pictures, sharing information, storing passwords
Seek help from an adult when they see something that is unexpected or worrying	Seek help from an adult when they see something that is unexpected or worrying
Demonstrate understanding of age-appropriate websites and adverts	Demonstrate understanding of age-appropriate websites and adverts
Use key vocabulary to demonstrate knowledge and understanding in this strand: safe, meet, accept, reliable, tell, online, trusted, adult, information, safety, personal, internet, world wide web, communicate, message, social media, email, password, cyberbullying/bullying, plagiarism, profiles, account, private, public.	Use key vocabulary to demonstrate knowledge and understanding in this strand: safe, meet, accept, reliable, tell, online, trusted, adult, information, safety, personal, internet, world wide web, communicate, message, social media, email, password, cyberbullying/bullying, plagiarism, profiles, account, private, public.
Online Relationships – Autumn Term 2	Online Relationships – Autumn Term 2
Reflect on their own digital footprint and behaviour online	Reflect on their own digital footprint and behaviour online
Identify what is appropriate and inappropriate behaviour on the internet, recognising the term cyberbullying	Identify what is appropriate and inappropriate behaviour on the internet, recognising the term cyberbullying
Agree and follow sensible online safety rules, e.g. taking pictures, sharing information, storing passwords	Agree and follow sensible online safety rules, e.g., taking pictures, sharing information, storing passwords
Seek help from an adult when they see something that is unexpected or worrying	Seek help from an adult when they see something that is unexpected or worrying
Demonstrate understanding of age-appropriate websites and adverts	Demonstrate understanding of age-appropriate websites and adverts

Use key vocabulary to demonstrate knowledge and understanding in this strand: safe, meet, accept, reliable, tell, online, trusted, adult, information, safety, personal, internet, world wide web, communicate, message, social media, email, password, cyberbullying/bullying, plagiarism, profiles, account, private, public.	Use key vocabulary to demonstrate knowledge and understanding in this strand: safe, meet, accept, reliable, tell, online, trusted, adult, information, safety, personal, internet, world wide web, communicate, message, social media, email, password, cyberbullying/bullying, plagiarism, profiles, account, private, public
Pictograms/Word Processing – Autumn Term 2	Pictograms/Word Processing – Autumn Term 2
Talk about the different ways data can be organised	Talk about the different ways data can be organised
Sort and organise information to use in other ways	Sort and organise information to use in other ways
Search a ready-made database to answer questions	Search a ready-made database to answer questions
Use key vocabulary to demonstrate knowledge and understanding in this strand: Google Docs, insert, table	Use key vocabulary to demonstrate knowledge and understanding in this strand: Google Docs, insert, table
Create different effects with different technological tools, demonstrating control	Create different effects with different technological tools, demonstrating control
Use appropriate keyboard commands to amend text on a device	Use appropriate keyboard commands to amend text on a device
Use applications and devices in order to communicate ideas, work, and messages	Use applications and devices in order to communicate ideas, work, and messages;
Save, retrieve and evaluate work, making amendments	Save, retrieve and evaluate work, making amendments
Insert a picture/text/graph/hyperlink from the internet or a personal file	Insert a picture/text/graph/hyperlink from the internet or a personal file
Use key vocabulary to demonstrate knowledge and understanding in this strand: draw, object, shape, line, line colour, fill colour, group, ungroup, font, size, text box, format, image, wrap text, plan, link, image, object, link, hyperlink, minimise, restore, size, move, screen, split, create, organise, file, folder, close, exit, search, print, password, screenshot, snipping tool, shift, undo, redo, menu, dictionary, highlight, cursor, toolbar, spellcheck.	Use key vocabulary to demonstrate knowledge and understanding in this strand: draw, object, shape, line, line colour, fill colour, group, ungroup, font, size, text box, format, image, wrap text, plan, link, image, object, link, hyperlink, minimise, restore, size, move, screen, split, create, organise, file, folder, close, exit, search, print, password, screenshot, snipping tool, shift, undo, redo, menu, dictionary, highlight, cursor, toolbar, spellcheck.
Managing Online Information – Spring Term 1	Managing Online Information – Spring Term 1
Reflect on their own digital footprint and behaviour online	Reflect on their own digital footprint and behaviour online
Identify what is appropriate and inappropriate behaviour on the internet, recognising the term cyberbullying	Identify what is appropriate and inappropriate behaviour on the internet, recognising the term cyberbullying
Agree and follow sensible online safety rules, e.g. taking pictures, sharing information, storing passwords	Agree and follow sensible online safety rules, e.g. taking pictures, sharing information, storing passwords
Seek help from an adult when they see something that is unexpected or worrying	Seek help from an adult when they see something that is unexpected or worrying

Demonstrate understanding of age-appropriate websites and adverts	Demonstrate understanding of age-appropriate websites and adverts
Use key vocabulary to demonstrate knowledge and understanding in this strand: safe, meet, accept, reliable, tell, online, trusted, adult, information, safety, personal, internet, world wide web, communicate, message, social media, email, password, cyberbullying/bullying, plagiarism, profiles, account, private, public.	Use key vocabulary to demonstrate knowledge and understanding in this strand: safe, meet, accept, reliable, tell, online, trusted, adult, information, safety, personal, internet, world wide web, communicate, message, social media, email, password, cyberbullying/bullying, plagiarism, profiles, account, private, public
Emailing/Cyber bullying – Spring Term 1	Emailing/Cyber bullying – Spring Term 1
Explain ways to communicate with others online	Explain ways to communicate with others online
Describe the world wide web as the part of the internet that contains websites	Describe the world wide web as the part of the internet that contains websites
Add websites to a favourites list	Add websites to a favourites list
Use search tools to find and use an appropriate website and content	Use search tools to find and use an appropriate website and content
Use strategies to improve results when searching online	Use strategies to improve results when searching online
Use key vocabulary to demonstrate knowledge and understanding in this strand: filter, Google, search engine, image, keyboard, email, subject, address, communicate, sender, safe, secure, internet, world wide web, social media.	Use key vocabulary to demonstrate knowledge and understanding in this strand: filter, Google, search engine, image, keyboard, email, subject, address, communicate, sender, safe, secure, internet, world wide web, social media
Online bullying – Spring Term 2	Online bullying – Spring Term 2
Reflect on their own digital footprint and behaviour online	Reflect on their own digital footprint and behaviour online
Identify what is appropriate and inappropriate behaviour on the internet, recognising the term cyberbullying	Identify what is appropriate and inappropriate behaviour on the internet, recognising the term cyberbullying
Agree and follow sensible online safety rules, e.g. taking pictures, sharing information, storing passwords	Agree and follow sensible online safety rules, e.g. taking pictures, sharing information, storing passwords;
Seek help from an adult when they see something that is unexpected or worrying	Seek help from an adult when they see something that is unexpected or worrying
Demonstrate understanding of age-appropriate websites and adverts	Demonstrate understanding of age-appropriate websites and adverts
Use key vocabulary to demonstrate knowledge and understanding in this strand: safe, meet, accept, reliable, tell, online, trusted, adult, information, safety, personal, internet, world wide web, communicate, message, social media, email, password, cyberbullying/bullying, plagiarism, profiles, account, private, public	Use key vocabulary to demonstrate knowledge and understanding in this strand: safe, meet, accept, reliable, tell, online, trusted, adult, information, safety, personal, internet, world wide web, communicate, message, social media, email, password, cyberbullying/bullying, plagiarism, profiles, account, private, public
Networks sharing information and the internet – Spring Term 2	Networks sharing information and the internet – Spring Term 2
Explain ways to communicate with others online	Explain ways to communicate with others online;

Describe the world wide web as the part of the internet that contains websites	Describe the world wide web as the part of the internet that contains websites;
Add websites to a favourites list	Add websites to a favourites list
Use search tools to find and use an appropriate website and content	Use search tools to find and use an appropriate website and content;
Use strategies to improve results when searching online	Use strategies to improve results when searching online
Use key vocabulary to demonstrate knowledge and understanding in this strand: filter, Google, search engine, image, keyboard, email, subject, address, communicate, sender, safe, secure, internet, world wide web, social media	Use key vocabulary to demonstrate knowledge and understanding in this strand: filter, Google, search engine, image, keyboard, email, subject, address, communicate, sender, safe, secure, internet, world wide web, social media.
Online Reputation – Summer Term 1	Online Reputation – Summer Term 1
Reflect on their own digital footprint and behaviour online	Reflect on their own digital footprint and behaviour online
Identify what is appropriate and inappropriate behaviour on the internet, recognising the term cyberbullying	Identify what is appropriate and inappropriate behaviour on the internet, recognising the term cyberbullying
Agree and follow sensible online safety rules, e.g. taking pictures, sharing information, storing passwords	Agree and follow sensible online safety rules, e.g. taking pictures, sharing information, storing passwords
Seek help from an adult when they see something that is unexpected or worrying;	Seek help from an adult when they see something that is unexpected or worrying
Demonstrate understanding of age-appropriate websites and adverts	Demonstrate understanding of age-appropriate websites and adverts
Use key vocabulary to demonstrate knowledge and understanding in this strand: safe, meet, accept, reliable, tell, online, trusted, adult, information, safety, personal, internet, world wide web, communicate, message, social media, email, password, cyberbullying/bullying, plagiarism, profiles, account, private, public	Use key vocabulary to demonstrate knowledge and understanding in this strand: safe, meet, accept, reliable, tell, online, trusted, adult, information, safety, personal, internet, world wide web, communicate, message, social media, email, password, cyberbullying/bullying, plagiarism, profiles, account, private, public.
Scratch – Summer Term 1	Scratch – Summer Term 1
Use logical thinking to solve an open-ended problem by breaking it up into smaller parts	Use logical thinking to solve an open-ended problem by breaking it up into smaller parts
Write a program, putting commands into a sequence to achieve a specific outcome	Write a program, putting commands into a sequence to achieve a specific outcome
Give a set of instructions to follow and predict what will happen	Give a set of instructions to follow and predict what will happen
Keep testing a program and recognise when it needs to be debugged	Keep testing a program and recognise when it needs to be debugged
Use variables to create an effect, e.g. repetition, if, when, loop	Use variables to create an effect, e.g. repetition, if, when, loop
Use key vocabulary to demonstrate knowledge and understanding in this strand: decompose, decomposing, logical sequence, flowchart, sprite, block, command,	Use key vocabulary to demonstrate knowledge and understanding in this strand: decompose, decomposing, logical sequence, flowchart, sprite, block,

algorithm, answer, correct, errors, program, algorithm, instructions, commands, forward (fd), left (lt), right (rt), move, turn, clear screen (cs), variable	command, algorithm, answer, correct, errors, program, algorithm, instructions, commands, forward (fd), left (lt), right (rt), move, turn, clear screen (cs), variable
Copyright and ownership – Summer Term 2	Copyright and ownership – Summer Term 2
Explain ways to communicate with others online	Explain ways to communicate with others online
Describe the world wide web as the part of the internet that contains websites	Describe the world wide web as the part of the internet that contains websites
Add websites to a favourites list	Add websites to a favourites list
Use search tools to find and use an appropriate website and content	Use search tools to find and use an appropriate website and content
Use strategies to improve results when searching online	Use strategies to improve results when searching online
Use key vocabulary to demonstrate knowledge and understanding in this strand: filter, Google, search engine, image, keyboard, email, subject, address, communicate, sender, safe, secure, internet, world wide web, social media	Use key vocabulary to demonstrate knowledge and understanding in this strand: filter, Google, search engine, image, keyboard, email, subject, address, communicate, sender, safe, secure, internet, world wide web, social media
Privacy and security – Summer Term 2	Privacy and security – Summer Term 2
Explain ways to communicate with others online	Explain ways to communicate with others online
Describe the world wide web as the part of the internet that contains websites	Describe the world wide web as the part of the internet that contains websites
Add websites to a favourites list	Add websites to a favourites list
Use search tools to find and use an appropriate website and content	Use search tools to find and use an appropriate website and content
Use strategies to improve results when searching online	Use strategies to improve results when searching online
Use key vocabulary to demonstrate knowledge and understanding in this strand: filter, Google, search engine, image, keyboard, email, subject, address, communicate, sender, safe, secure, internet, world wide web, social media	Use key vocabulary to demonstrate knowledge and understanding in this strand: filter, Google, search engine, image, keyboard, email, subject, address, communicate, sender, safe, secure, internet, world wide web, social media

VOCABULARY

Year 3 – as Key Stage One plus:

Computer Science: - algorithm, block, language, command, debug, execute, input, output, loops, manipulate, organise, program, repetition, scripted, sequence, simulation, sprite, software, store, program, physical system, repetition, retrieve, reverse, engineer

Information Technology: - data, digital content, digital devices, network, safe, search, mode, search technologies, software

Digital Literacy: - command, evaluating, digital content, password, personal information, private, world wide web

Year 4 – as Year 3 plus:

Computer Science: - algorithm, block, language, command, collaboration, debug, encrypted, execute, HTTP, input, output, loops, manipulate, organise, program, repetition, scripted, selection, sequence, simulation, sprite, software, store, packets of data, program, physical system, repetition, retrieve, reverse, engineer, URL
 Information Technology: - cached, collecting data, digital content, digital devices, network, safe search, mode, search technologies, server, software
 Digital Literacy:- acceptable/unacceptable behaviours, command, evaluating, digital content, password, personal information, private, world wide web

COMPUTING SKILLS & PROGRESSION

YEAR 5	YEAR 6
Self-image and identity	Self-image and identity
Health, wellbeing and lifestyle – Autumn Term 1	Health, wellbeing and lifestyle – Autumn Term 1
Protect their password and other personal information	Protect their password and other personal information
Be a good online citizen and friend	Be a good online citizen and friend
Judge what sort of privacy settings might be relevant to reducing different risks	Judge what sort of privacy settings might be relevant to reducing different risks
Seek help from an adult when they see something that is unexpected or worrying	Seek help from an adult when they see something that is unexpected or worrying
Discuss scenarios involving online risk	Discuss scenarios involving online risk
Use key vocabulary to demonstrate knowledge and understanding in this strand: spam, link, privacy, virus, scam, phishing, inbox, junk, sender, subject, secure, safe, account, online, private, social media, adverts, cyberbullying, reporting, anonymous, victim, fraud/fraudulent, policy, private/personal.	use key vocabulary to demonstrate knowledge and understanding in this strand: spam, link, privacy, virus, scam, phishing, inbox, junk, sender, subject, secure, safe, account, online, private, social media, adverts, cyberbullying, reporting, anonymous, victim, fraud/fraudulent, policy, private/personal.
Purpose of Programming – Autumn Term 1	Purpose of Programming – Autumn Term 1
Use external triggers and infinite loops to demonstrate control	Use external triggers and infinite loops to demonstrate control;
Follow a sequence of instructions, e.g. in a flowchart and modify a flowchart using symbols	Follow a sequence of instructions, e.g. in a flowchart and modify a flowchart using symbols
Use conditional statements and edit variables	Use conditional statements and edit variables
Decompose a problem into smaller parts to design an algorithm for a specific outcome and use this to write a program	Decompose a problem into smaller parts to design an algorithm for a specific outcome and use this to write a program
Keep testing a program and recognise when it needs to be debugged	Keep testing a program and recognise when it needs to be debugged
Use key vocabulary to demonstrate knowledge and understanding in this strand: flowchart, algorithm, control, output, symbol, start, stop, delay, process, decision, loop, backdrop, script, block, repeat, commentary, sequence, consequence, debug,	Use key vocabulary to demonstrate knowledge and understanding in this strand: flowchart, algorithm, control, output, symbol, start, stop, delay, process, decision, loop, backdrop, script, block, repeat, commentary, sequence,

program, Kodu, world, object, tool palette, program environment, smooth, flatten, raise	consequence, debug, program, Kodu, world, object, tool palette, program environment, smooth, flatten, raise.
Online Relationships – Autumn Term 2	Online Relationships – Autumn Term 2
Protect their password and other personal information	Protect their password and other personal information
Be a good online citizen and friend	Be a good online citizen and friend
Judge what sort of privacy settings might be relevant to reducing different risks	Judge what sort of privacy settings might be relevant to reducing different risks
Seek help from an adult when they see something that is unexpected or worrying	Seek help from an adult when they see something that is unexpected or worrying
Discuss scenarios involving online risk	Discuss scenarios involving online risk
Use key vocabulary to demonstrate knowledge and understanding in this strand: spam, link, privacy, virus, scam, phishing, inbox, junk, sender, subject, secure, safe, account, online, private, social media, adverts, cyberbullying, reporting, anonymous, victim, fraud/fraudulent, policy, private/personal.	Use key vocabulary to demonstrate knowledge and understanding in this strand: spam, link, privacy, virus, scam, phishing, inbox, junk, sender, subject, secure, safe, account, online, private, social media, adverts, cyberbullying, reporting, anonymous, victim, fraud/fraudulent, policy, private/personal.
Photography and digital art – Autumn Term 2	Photography and digital art – Autumn Term 2
Collect audio from a variety of resources including own recordings and internet clips	Collect audio from a variety of resources including own recordings and internet clips
Use a digital device to record sounds and present audio	Use a digital device to record sounds and present audio
Trim, arrange and edit audio levels to improve quality	Trim, arrange and edit audio levels to improve quality
Publish their animation and use a movie editing package to edit/refine and add titles	Publish their animation and use a movie editing package to edit/refine and add titles
Use key vocabulary to demonstrate knowledge and understanding in this strand: audio, record, edit, play stop, skip, waveform, input, output, record, edit, play podcast, digital content, downloadable, backing track, voiceover, mute, gain, production, post-production, documentary, project, evaluation, screening, ceremony, upload.	Use key vocabulary to demonstrate knowledge and understanding in this strand: audio, record, edit, play stop, skip, waveform, input, output, record, edit, play podcast, digital content, downloadable, backing track, voiceover, mute, gain, production, post-production, documentary, project, evaluation, screening, ceremony, upload
Managing Online Information – Spring Term 1	Managing Online Information – Spring Term 1
Protect their password and other personal information	Protect their password and other personal information
Be a good online citizen and friend	Be a good online citizen and friend
Judge what sort of privacy settings might be relevant to reducing different risks	Judge what sort of privacy settings might be relevant to reducing different risks
Seek help from an adult when they see something that is unexpected or worrying	Seek help from an adult when they see something that is unexpected or worrying
Discuss scenarios involving online risk	Discuss scenarios involving online risk

Use key vocabulary to demonstrate knowledge and understanding in this strand: spam, link, privacy, virus, scam, phishing, inbox, junk, sender, subject, secure, safe, account, online, private, social media, adverts, cyberbullying, reporting, anonymous, victim, fraud/fraudulent, policy, private/personal	Use key vocabulary to demonstrate knowledge and understanding in this strand: spam, link, privacy, virus, scam, phishing, inbox, junk, sender, subject, secure, safe, account, online, private, social media, adverts, cyberbullying, reporting, anonymous, victim, fraud/fraudulent, policy, private/personal.
Bletchley Park – Code breaking & password hacking – Spring Term 1	Bletchley Park – Code breaking & password hacking – Spring Term 1
Use external triggers and infinite loops to demonstrate control	Use external triggers and infinite loops to demonstrate control
Follow a sequence of instructions, e.g. in a flowchart and modify a flowchart using symbols	Follow a sequence of instructions, e.g. in a flowchart and modify a flowchart using symbols
Use conditional statements and edit variables	Use conditional statements and edit variables
Decompose a problem into smaller parts to design an algorithm for a specific outcome and use this to write a program	Decompose a problem into smaller parts to design an algorithm for a specific outcome and use this to write a program
Keep testing a program and recognise when it needs to be debugged	Keep testing a program and recognise when it needs to be debugged
Use key vocabulary to demonstrate knowledge and understanding in this strand: flowchart, algorithm, control, output, symbol, start, stop, delay, process, decision, loop, backdrop, script, block, repeat, commentary, sequence, consequence, debug, program, Kodu, world, object, tool palette, program environment, smooth, flatten, raise.	Use key vocabulary to demonstrate knowledge and understanding in this strand: flowchart, algorithm, control, output, symbol, start, stop, delay, process, decision, loop, backdrop, script, block, repeat, commentary, sequence, consequence, debug, program, Kodu, world, object, tool palette, program environment, smooth, flatten, raise
Online bullying – Spring Term 2	Online bullying – Spring Term 2
Protect their password and other personal information	Protect their password and other personal information
Be a good online citizen and friend	Be a good online citizen and friend
Judge what sort of privacy settings might be relevant to reducing different risks	Judge what sort of privacy settings might be relevant to reducing different risks
Seek help from an adult when they see something that is unexpected or worrying	Seek help from an adult when they see something that is unexpected or worrying
Discuss scenarios involving online risk	Discuss scenarios involving online risk
Use key vocabulary to demonstrate knowledge and understanding in this strand: spam, link, privacy, virus, scam, phishing, inbox, junk, sender, subject, secure, safe, account, online, private, social media, adverts, cyberbullying, reporting, anonymous, victim, fraud/fraudulent, policy, private/personal.	Use key vocabulary to demonstrate knowledge and understanding in this strand: spam, link, privacy, virus, scam, phishing, inbox, junk, sender, subject, secure, safe, account, online, private, social media, adverts, cyberbullying, reporting, anonymous, victim, fraud/fraudulent, policy, private/personal.
Bletchley Park – First computers – Spring Term 2	Bletchley Park – First computers – Spring Term 2
Search for information using appropriate websites and advanced search functions within Google	Search for information using appropriate websites and advanced search functions within Google

Use strategies to check the reliability of information (cross-check with another source such as books)	Use strategies to check the reliability of information (cross-check with another source such as books)
Talk about the way search results are selected and ranked	Talk about the way search results are selected and ranked
Check the reliability of a website, including the photos on site	Check the reliability of a website, including the photos on site
Tell you about copyright and acknowledge the sources of information	Tell you about copyright and acknowledge the sources of information
Use key vocabulary to demonstrate knowledge and understanding in this strand: world wide web, search, search engine, advanced search, results, Google, browser, terms of use, bias, authority, citation, plagiarism, source, website, secure, https, site, domain, website, browser, address bar	Use key vocabulary to demonstrate knowledge and understanding in this strand: world wide web, search, search engine, advanced search, results, Google, browser, terms of use, bias, authority, citation, plagiarism, source, website, secure, https, site, domain, website, browser, address bar
Online Reputation – Summer Term 1	Online Reputation – Summer Term 1
Protect their password and other personal information	Protect their password and other personal information
Be a good online citizen and friend	Be a good online citizen and friend
Judge what sort of privacy settings might be relevant to reducing different risks	Judge what sort of privacy settings might be relevant to reducing different risks
Seek help from an adult when they see something that is unexpected or worrying	Seek help from an adult when they see something that is unexpected or worrying
Discuss scenarios involving online risk	Discuss scenarios involving online risk
Use key vocabulary to demonstrate knowledge and understanding in this strand: spam, link, privacy, virus, scam, phishing, inbox, junk, sender, subject, secure, safe, account, online, private, social media, adverts, cyberbullying, reporting, anonymous, victim, fraud/fraudulent, policy, private/personal.	Use key vocabulary to demonstrate knowledge and understanding in this strand: spam, link, privacy, virus, scam, phishing, inbox, junk, sender, subject, secure, safe, account, online, private, social media, adverts, cyberbullying, reporting, anonymous, victim, fraud/fraudulent, policy, private/personal.
Power Points and presentations – Summer Term 1	Power Points and presentations – Summer Term 1
Use the skills already developed to create content using unfamiliar technology	Use the skills already developed to create content using unfamiliar technology;
Select, use and combine the appropriate technology tools to create effect	Select, use and combine the appropriate technology tools to create effect;
Review and improve their own work and support others to improve their work	Review and improve their own work and support others to improve their work
Save, retrieve and evaluate their work, making amendments	Save, retrieve and evaluate their work, making amendments;
Insert a picture/text/graph/hyperlink from the internet or personal file	Insert a picture/text/graph/hyperlink from the internet or personal file
Use key vocabulary to demonstrate knowledge and understanding in this strand: window, layout, text, font, colour, format, heading, hyperlink, 2D shape, 3D shape, orbit, pan, zoom, eraser, dimension, measurement, guide.	Use key vocabulary to demonstrate knowledge and understanding in this strand: window, layout, text, font, colour, format, heading, hyperlink, 2D shape, 3D shape, orbit, pan, zoom, eraser, dimension, measurement, guide
Copyright & Ownership – Privacy & Security – Summer Term 2	Copyright & Ownership – Privacy & Security – Summer Term 2
Search for information using appropriate websites and advanced search functions within Google	Search for information using appropriate websites and advanced search functions within Google

Use strategies to check the reliability of information (cross-check with another source such as books)	Use strategies to check the reliability of information (cross-check with another source such as books)
Talk about the way search results are selected and ranked	Talk about the way search results are selected and ranked
Check the reliability of a website, including the photos on site	Check the reliability of a website, including the photos on site
Tell you about copyright and acknowledge the sources of information	Tell you about copyright and acknowledge the sources of information
Use key vocabulary to demonstrate knowledge and understanding in this strand: world wide web, search, search engine, advanced search, results, Google, browser, terms of use, bias, authority, citation, plagiarism, source, website, secure, https, site, domain, website, browser, address bar.	Use key vocabulary to demonstrate knowledge and understanding in this strand: world wide web, search, search engine, advanced search, results, Google, browser, terms of use, bias, authority, citation, plagiarism, source, website, secure, https, site, domain, website, browser, address bar.
Programming - Music Programming – Summer Term 2	Programming - Music Programming – Summer Term 2
Use external triggers and infinite loops to demonstrate control	Use external triggers and infinite loops to demonstrate control
Follow a sequence of instructions, e.g. in a flowchart and modify a flowchart using symbols	Follow a sequence of instructions, e.g. in a flowchart and modify a flowchart using symbols
Use conditional statements and edit variables	Use conditional statements and edit variables
Decompose a problem into smaller parts to design an algorithm for a specific outcome and use this to write a program	Decompose a problem into smaller parts to design an algorithm for a specific outcome and use this to write a program
keep testing a program and recognise when it needs to be debugged	keep testing a program and recognise when it needs to be debugged
Use key vocabulary to demonstrate knowledge and understanding in this strand: flowchart, algorithm, control, output, symbol, start, stop, delay, process, decision, loop, backdrop, script, block, repeat, commentary, sequence, consequence, debug, program, Kodu, world, object, tool palette, program environment, smooth, flatten, raise	Use key vocabulary to demonstrate knowledge and understanding in this strand: flowchart, algorithm, control, output, symbol, start, stop, delay, process, decision, loop, backdrop, script, block, repeat, commentary, sequence, consequence, debug, program, Kodu, world, object, tool palette, program environment, smooth, flatten, raise

VOCABULARY

Year 5 – as Year 4 plus:

Computer Science: - algorithm, block, language, command, control, collaboration, debug, decomposition, encrypted, execute, HTTP, input, output, loops, manipulate, organise, program, repetition, scripted, selection, sequence, simulation, sprite, software, store, packets of data, program, physical system, repetition, retrieve, reverse, engineer, URL, variables

Information Technology: - cached, collecting data, digital content, digital devices, evaluating, network, safe search, mode search, technologies, server software

Digital Literacy: - acceptable/unacceptable behaviours, command, encryption, evaluating, digital content, password, personal information, private, world wide web

Year 6 – as Year 5 plus:

Computer Science: - algorithm, block, language, command, control, collaboration, debug, decomposition, encrypted, execute, hardware, HTTP, input, IP address
output, loops, manipulate, organise, program, repetition, scripted, selection, sequence, simulation, sprite, software, store packets of data, program, physical system,
repetition, retrieve, reverse, engineer, URL, variables

Information Technology: -

Digital Literacy:- acceptable/unacceptable behaviours, command, detect, encryption, evaluating, digital content, password, personal information, private,
responsibility, world wide web