



Curriculum Computing - Whole School

CARE **ACHIEVE** **BELIEVE**





Curriculum Computing Rationale

Intent:

At Peover Superior School, we provide a high-quality Computing curriculum that equips children with the knowledge, skills and understanding needed to thrive in an increasingly digital world. Through a carefully sequenced curriculum, pupils develop their understanding of Computer Science, Information Technology and Digital Literacy, enabling them to become confident, creative and responsible users of technology. Using the Purple Mash Computing Scheme of Work, alongside a range of high-quality software and resources, children learn how digital systems work, how to create and evaluate digital content, and how to solve problems through computational thinking. As technology continues to evolve, children are also introduced to contemporary themes, including artificial intelligence, networks and physical computing, preparing them for future learning and employment. Online safety is at the heart of our curriculum. Through regular teaching and dedicated 2BeSafe units, pupils learn how to navigate the online world safely and respectfully, understand their digital footprint, recognise risks associated with content, contact, conduct and commerce, and know how to seek support when concerns arise. We make purposeful links between Computing and other curriculum areas, including Mathematics, Science, Design Technology and English, enabling children to apply their knowledge in meaningful contexts. Through high-quality Computing provision from EYFS to Year 6, we aim to develop resilient, independent learners who can think logically, solve problems creatively and use technology effectively in modern society.

Implementation:

Computing is taught through a progressive, knowledge-rich curriculum based on the Purple Mash Computing Scheme of Work. Weekly lessons build children's understanding across the three strands of Computing: Computer Science, Information Technology and Digital Literacy. Learning is carefully sequenced so that new knowledge builds upon prior learning, while regular opportunities for retrieval and application ensure knowledge is retained over time. In EYFS and Key Stage 1, pupils develop foundational skills in using technology, creating digital content, understanding algorithms and communicating safely online. As they move through Key Stage 2, they deepen their understanding through units covering coding, data handling, digital media, networks, physical computing and emerging technologies, including artificial intelligence. Online safety is woven throughout all Computing units and further enhanced through the 2BeSafe programme. These dedicated learning opportunities enable pupils to explore current online issues, develop critical thinking skills and become informed digital citizens. In addition, participation in national events such as Safer Internet Day and Anti-Bullying Week helps to maintain a strong culture of online safety across the school. Children are encouraged to apply their Computing skills across the wider curriculum, using technology purposefully to communicate, research, create and present their learning. This cross-curricular approach strengthens both digital competency and subject knowledge.

Impact:

The impact of our Computing curriculum is evident in pupils who are confident, capable and responsible users of technology. Children demonstrate increasing independence in applying computational thinking, problem-solving strategies and digital skills across a range of contexts. Assessment is integrated throughout each unit through retrieval activities, teacher observation, practical outcomes and Purple Mash assessment tools. Pre-unit assessments help teachers identify existing knowledge and misconceptions, while ongoing and end-of-unit assessments provide evidence of progress and attainment. Pupil outcomes, work samples and assessment data are used to inform future teaching and ensure progression across year groups. Staff judgements are moderated through professional dialogue, curriculum review and collaboration with the Computing Lead to maintain consistency and high expectations. As a result, pupils leave Peover Superior with the knowledge, skills and confidence needed to participate safely, responsibly and successfully in an ever-changing digital world.



Curriculum Map

Computing - Whole School

Cycle A

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer
EYFS	Online Safety (EYFS) Self-Image and Identity	Programming with Toys (EYFS) Online Safety (EYFS) Online Relationships	Digital Music & Sound (EYFS) Online Safety (EYFS) Privacy and Security	Sorting & Grouping (EYFS) Online Safety (EYFS) Online Bullying	Creating Digital Content (EYFS) Online Safety (EYFS) Managing Online Information	Digital Showcase (EYFS) Online Safety (EYFS) Health, Well-being and Lifestyle & Online Reputation
KS1 Yr1/2	Online Safety (Year 2) Self-Image and Identity Online Safety (Year2) Online Relationships	Coding (Year 2) Online Safety (Year2) Online Bullying	Animated Story Books (Year 1) Online Safety (Year2) Managing Online Information	Pictograms (Year 1) Online Safety (Year2) Health, Well-being & Lifestyle	Effective Searching (Year 2) Online Safety (Year2) Privacy & Security	Making Music (Year 2) Online Safety (Year2) Online Reputation and Copyright & Ownership
LKS2 Yr3/4	Online Safety (Year 4) Self-Image and Identity	Coding (Year 3) Online Safety (Year4) Online Reputation	Logo (Year 4) Online Safety (Year4) Privacy & Security	Simulations (Year 3) Online Safety (Year4) Managing Online Information	Presenting (Year 3) Online Safety (Year4) Online Bullying	Writing for Different Audiences (Year 4) Online Safety (Year4) Health, well-being and lifestyle
UKS2 Yr5/6	Online Safety (Year 6) Self-Image and Identity	Coding (Year 5) Online Safety (Year6) Online Relationships	3D Modelling (Year 5) Online Safety (Year6) Online Reputation	Text Adventures (Year 6) Online Safety (Year6) Online Bullying	Concept Maps (Year 5) Online Safety (Year6) Health, well-being and lifestyle	Quizzing (Year 6) Online Safety (Year6) Privacy & Security and Managing Information Online



Curriculum Map

Computing - Overview EYFS

Cycle A

Autumn 1 Online Safety (EYFS)	Autumn 2 Programming with Toys (EYFS)	Spring 1 Digital Music & Sound (EYFS)	Spring 2 Sorting & Grouping (EYFS)	Summer 1 Creating Digital Content (EYFS)	Summer 2 Digital Showcase (EYFS)
Composite Children understand that technology should be used safely and know who to ask for help if they are worried or unsure when using a digital device.	Composite Children use programmable toys to follow and create simple sequences of instructions to solve problems..	Composite Children use digital tools to create, explore and respond to music and sounds.	Composite Children use digital technology to sort and group objects using simple criteria.	Composite Children use digital tools to create pictures, text, sounds or other media to communicate their ideas.	Composite Children combine their digital skills to create and share a piece of work that reflects their learning and creativity.
Components - Know how to use digital devices safely and carefully. - Know how to follow simple rules when using technology. - Know how to recognise when they need help while using a device. - Know how to ask a trusted adult for help. - Know how to take turns and share technology respectfully. - Know how to make safe choices when using technology.	Components - Know how to give simple instructions to a programmable toy. - Know how to put instructions in the correct order. - Know how to predict where a programmable toy will move. - Know how to change instructions if the toy does not reach its destination. - Know how to explore direction and movement through play. - Know how to work with others to solve simple programming challenges.	Components - Know how to use a digital device to make and play sounds. - Know how to select different sounds and instruments. - Know how to create simple patterns using sound. - Know how to record and listen to sounds. - Know how to change sounds by exploring different options. - Know how to use digital music to express ideas and feelings.	Components - Know how to sort objects into groups. - Know how to identify similarities and differences. - Know how to group objects using simple criteria. - Know how to explain why objects belong in a group. - Know how to use digital tools to organise information. - Know how to answer simple questions about sorted objects	Components - Know how to use different digital tools to create content. - Know how to add pictures, marks, sounds or words to their work. - Know how to choose appropriate tools for their ideas. - Know how to save and revisit their work with support. - Know how to make simple changes to improve their creations. - Know how to talk about what they have created.	Components - Know how to choose digital tools for a purpose. - Know how to combine pictures, sounds or recordings in one piece of work. - Know how to review and improve their digital creations. - Know how to share their work with others - Know how to explain how they created their digital project. - Know how to use technology confidently and responsibly.
Key Vocabulary: technology, device, computer, tablet, safe, unsafe, rules, trusted adult, help, share, screen, internet	Key Vocabulary: programmable toy, robot, instruction, command, sequence, algorithm, forward, backward, left, right, turn, predict	Key Vocabulary: sound, music, record, play, stop, volume, instrument, rhythm, beat, loud, quiet, digital	Key Vocabulary: sort, group, classify, same, different, category, object, information, criteria, compare, organise	Key Vocabulary: create, digital, picture, text, sound, image, draw, record, save, edit, tool, media	Key Vocabulary: showcase, create, share, digital, project, picture, sound, record, explain, improve, technology, presentation



Curriculum Map

Computing - Overview KS1

Cycle A

Autumn 1 Online Safety (Year 2)	Autumn 2 Coding (Year 2)	Spring 1 Animated Story Books (Year 1)	Spring 2 Pictograms (Year 1)	Summer 1 Effective Searching (Year 2)	Summer 2 Making Music (Year 2)
Composite Children understand how to use the internet safely and responsibly by protecting personal information, recognising online risks and making sensible choices when using technology.	Composite Children create, test and debug simple programs by using sequences, repetition and logical thinking to solve problems.	Composite Children create a simple animated story by combining pictures, text and movement to communicate ideas.	Composite Children collect, organise and present data using pictograms to answer simple questions.	Composite Children use search tools safely and effectively to find, select and use information from the internet.	Composite Children use digital tools to create, edit and perform simple pieces of music by combining sounds and rhythms.
Components - Know how to keep personal information private when using the internet. - Know how to recognise safe and unsafe online behaviour. - Know how to identify trusted adults who can help with online concerns. - Know how to explain why passwords should be kept secure. - Know how to recognise that not everything online is true. - Know how to make responsible choices when using technology.	Components - Know how to design a simple algorithm to solve a problem. - Know how to create programs using a sequence of commands. - Know how to use repetition (repeat) to make code more efficient. - Know how to predict what a program will do before running it. - Know how to find and fix errors by debugging. - Know how to improve a program after testing it.	Components - Know how to create pages for a digital story. - Know how to add pictures and text to a story. - Know how to animate characters and objects. - Know how to record or add narration where appropriate. - Know how to organise a story with a beginning, middle and end. - Know how to review and improve a digital story.	Components - Know how to collect simple data. - Know how to organise data into categories. - Know how to create a pictogram using digital tools. - Know how to read information from a pictogram. - Know how to compare data using a pictogram. - Know how to answer questions using the information shown.	Components - Know how to use appropriate keywords when searching online. - Know how to choose useful information from search results. - Know how to recognise that some websites are more reliable than others. - Know how to navigate websites safely. - Know how to explain why information found online should be checked - Know how to search responsibly and safely.	Components - Know how to select and play digital musical instruments. - Know how to create simple rhythmic patterns. - Know how to combine different sounds to make music. - Know how to edit and improve a digital composition. - Know how to save and play back their music - Know how to explain the choices they made when creating music.
Key Vocabulary: internet, online, personal information, private, password, username, trusted adult, safe, unsafe, website, digital footprint, report	Key Vocabulary: algorithm, code, program, command, sequence, repeat, debug, predict, run, sprite, object, instruction	Key Vocabulary: animation, story, page, character, background, text, image, sound, narration, sequence, scene, animate	Key Vocabulary: data, pictogram, chart, graph, category, count, tally, compare, information, results, most, least	Key Vocabulary: search, search engine, keyword, website, internet, results, information, reliable, browser, link, online, source	Key Vocabulary: music, sound, rhythm, beat, tempo, melody, instrument, compose, record, playback, digital, pattern



Curriculum Map

Computing - Overview LKS2

Cycle A

Autumn 1 Online Safety (Year 4)	Autumn 2 Coding (Year 3)	Spring 1 Logo (Year 4)	Spring 2 Simulations (Year 3)	Summer 1 Presenting (Year 3)	Summer 2 Writing for Different Audiences (Year 4)
Composite Children understand how to use technology safely and responsibly by managing their online identity, recognising online risks and making informed choices when communicating and sharing information.	Composite Children understand how to use technology safely and responsibly by managing their online identity, recognising online risks and making informed choices when communicating and sharing information.	Composite Children create geometric shapes and patterns by programming sequences of commands using Logo.	Composite Children use simulations to explore real-life situations, make predictions and explain outcomes..	Composite Children create well-organised digital presentations that communicate information clearly for a specific audience.	Composite Children create digital documents that are appropriate for different audiences by adapting language, layout and presentation.
Components - Know how to create and manage secure passwords. - Know how to protect personal information and digital identity online. - Know how to recognise unsafe online behaviour and inappropriate content. - Know how to identify reliable and unreliable online information. - Know how to communicate respectfully and responsibly online. - Know how to report concerns and seek support if something online makes them feel uncomfortable.	Components - Know how to design an algorithm to achieve a specific outcome. - Know how to create programs using sequence and repetition. - Know how to use selection to make decisions in a program. - Know how to predict what a program will do before running it. - Know how to test and debug programs systematically. - Know how to evaluate and improve a program.	Components - Know how to control a turtle using Logo commands. - Know how to use angles and turns to create shapes. - Know how to use repetition to write efficient code. - Know how to predict the outcome of Logo commands. - Know how to debug Logo programs when they do not work as expected. - Know how to create increasingly complex geometric patterns.	Components - Know how to use a simulation to investigate different scenarios. - Know how to change variables within a simulation - Know how to make predictions before testing ideas. - Know how to observe and record the results of a simulation. - Know how to explain how changing one factor affects the outcome. - Know how to evaluate what they have learned from a simulation.	Components - Know how to plan a presentation for a purpose. - Know how to organise information across slides or pages. - Know how to combine text, images and other media effectively. - Know how to edit and improve the layout and appearance of a presentation. - Know how to present information clearly to an audience. - Know how to evaluate the effectiveness of a presentation.	Components - Know how to identify the purpose and audience of a document. - Know how to adapt language and presentation for different audiences. - Know how to use formatting tools to improve the appearance of a document. - Know how to combine text and images effectively. - Know how to edit and proofread digital work - Know how to evaluate whether a document meets its intended purpose.
Key Vocabulary: online safety, digital identity, password, privacy, personal information, cyberbullying, trusted adult, reliable, unreliable, digital footprint, report, communicate	Key Vocabulary: algorithm, code, program, sequence, repetition, selection, command, debug, predict, event, input, output	Key Vocabulary: Logo, turtle, command, forward, turn, angle, degrees, repeat, sequence, procedure, shape, pattern	Key Vocabulary: simulation, model, predict, variable, scenario, outcome, investigate, observe, result, change, evaluate	Key Vocabulary: presentation, slide, audience, purpose, layout, text, image, multimedia, font, transition, edit, communicate	Key Vocabulary: audience, purpose, format, font, layout, document, heading, paragraph, proofreading, edit, publish, communication



Curriculum Map

Computing - Overview UKS2

Cycle A

Autumn 1 Online Safety (Year 6)	Autumn 2 Coding (Year 5)	Spring 1 3D Modelling (Year 5)	Spring 2 Text Adventures (Year 6)	Summer 1 Concept Maps (Year 5)	Summer 2 Quizzing (Year 6)
Composite Children understand how to use digital technologies safely, respectfully and responsibly by managing their online presence, evaluating online content and responding appropriately to online risks.	Composite Children design, create and debug increasingly complex programs using algorithms, variables, selection and repetition to solve problems.	Composite Children create and refine 3D digital models by using modelling tools to design objects for a specific purpose...	Composite Children create interactive text-based adventures by designing algorithms, writing code and using logical thinking to control outcomes.	Composite Children create digital concept maps to organise, connect and communicate ideas clearly..	Composite Children design and create interactive quizzes by combining questions, multimedia and programming features to assess knowledge.
Components - Know how to protect their online identity and personal information - Know how to recognise and respond to online risks, including scams, phishing and inappropriate content. - Know how to evaluate whether online information is reliable and trustworthy. - Know how to understand the impact of their digital footprint. - Know how to communicate respectfully and responsibly online. - Know how to report concerns and support others when using digital technologies.	Components - Know how to design algorithms to solve a problem. - Know how to use sequence, selection and repetition in programs. - Know how to use variables to store and change information. - Know how to use functions and procedures to organise code. - Know how to test and debug programs systematically. - Know how to evaluate and improve programs based on their purpose.	Components - Know how to explore and use 3D modelling tools. - Know how to create and manipulate 3D shapes. - Know how to resize, rotate and move objects within a 3D space. - Know how to combine shapes to create more complex models. - Know how to evaluate and improve a 3D design. - Know how to explain how digital models can be used in real-world situations.	Components - Know how to plan a text adventure using a storyboard or flowchart. - Know how to create choices that affect the outcome of a story. - Know how to use variables to store information within a program. - Know how to use selection to create different pathways. - Know how to test and debug interactive stories. - Know how to evaluate how effectively a text adventure engages the user.	Components - Know how to identify key ideas and information. - Know how to organise ideas into groups and categories. - Know how to create links between related concepts. - Know how to use digital tools to create concept maps. - Know how to improve the structure and presentation of a concept map. - Know how to use concept maps to explain understanding.	Components - Know how to plan a quiz for a specific audience and purpose. - Know how to write clear questions and suitable answers. - Know how to create different question types using digital tools. - Know how to add multimedia elements to enhance a quiz. - Know how to use programming features such as scoring and feedback. - Know how to test and improve a quiz based on user feedback.
Key Vocabulary: online safety, digital footprint, identity, privacy, phishing, scam, malware, misinformation, reliability, cyberbullying, report, responsibility	Key Vocabulary: algorithm, code, program, variable, function, procedure, selection, repetition, sequence, debug, test, evaluate	Key Vocabulary: 3D model, object, shape, dimension, rotate, resize, move, view, perspective, design, modify, render	Key Vocabulary: text adventure, interactive, algorithm, variable, selection, branching, input, output, choice, command, debug, flowchart	Key Vocabulary: concept map, idea, node, link, connection, organise, category, information, hierarchy, relationship, structure	Key Vocabulary: quiz, question, answer, score, feedback, audience, multimedia, interactive, evaluate, test, hyperlink, design



Curriculum Map

Computing - Whole School

Cycle B

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
EYFS	Online Safety (EYFS) Self-Image and Identity	Technology Around Us (EYFS) Online Safety (EYFS) Online Relationships	Digital Painting & Creating (EYFS) Online Safety (EYFS) Privacy and Security	Programming & Robots (EYFS) Online Safety (EYFS) Online Bullying	Digital Stories (EYFS) Online Safety (EYFS) Managing Online Information	Digital Creativity Project (EYFS) Online Safety (EYFS) Health, Well-being and Lifestyle & Online Reputation
KS1 Yr1/2	Online Safety (Year 1) Self-Image & Identity Online Safety (Year1) Online Relationships	Coding (Year 1) Online Safety (Year1) Online Bullying	Creating Pictures (Year 2) Online Safety (Year1) Managing Online Information	Questioning (Year 2) Online Safety (Year1) Health, well-being & Lifestyle	Technology Outside School (Year 1) Online Safety (Year1) Privacy & Security	Presenting Ideas (Year 2) Online Safety (Year1) Online Reputation & Copyright & Ownership
LKS2 Yr3/4	Online Safety (Year 3) Self-Image and Identity (Year 3)	Coding (Year 4) Online Safety (Year3) Online Relationships	Email (Year 3) Online Safety (Year3) Online Reputation	Branching Databases (Year 3) Online Safety (Year3) Privacy & Security	Animation (Year 4) Online Safety (Year3) Online Bullying	Hardware Investigators (Year 4) Online Safety (Year3) Health, Wellbeing and Lifestyle
UKS2 Yr5/6	Online Safety (Year 5) Self-Image and Identity (Year 5) Online Safety (Year5) Online Relationships	Coding (Year 6) Online Safety (Year5) Online Reputation	Databases (Year 5) Online Safety (Year5) Online Bullying	Game Creator (Year 5) Online Safety (Year5) Health, well-being and lifestyle	Blogging (Year 6) Online Safety (Year5) Privacy & Security	Networks (Year 6) Online Safety (Year5) Managing Information Online



Curriculum Map

Computing - Overview EYFS

Cycle B

Autumn 1 Online Safety (EYFS)	Autumn 2 Technology Around Us (EYFS)	Spring 1 Digital Painting & Creating (EYFS)	Spring 2 Programming & Robots (EYFS)	Summer 1 Digital Stories (EYFS)	Summer 2 Digital Creativity Project (EYFS)
Composite Children understand that technology can be used safely and know who to ask for help when using digital devices.	Composite Children recognise technology in their everyday environment and understand that different devices are used for different purposes.	Composite Children use digital tools to create pictures and express ideas using colour, shapes and creative choices..	Composite Children explore early programming concepts by giving instructions, predicting outcomes and controlling simple programmable devices.	Composite Children use digital tools to create, communicate and share stories using images, sounds and spoken words..	Composite Children apply their digital skills to create a digital project that communicates their ideas and demonstrates creativity..
Components - Know how to use digital devices safely and carefully. - Know how to ask a trusted adult for help when using technology. - Know how to recognise when something online or on a device does not feel safe. - Know how to follow simple rules when using technology. - Know how to take turns and share digital devices respectfully. - Know how to make safe choices when using technology.	Components - Know how to identify technology they see at home, school and in the wider world. - Know how to describe what different devices are used for. - Know how to use everyday technology with support. - Know how to recognise that technology helps people complete tasks. - Know how to talk about how technology is used in their lives. - Know how to care for and handle technology appropriately.	Components - Know how to use simple digital drawing tools. - Know how to select colours and tools to create pictures. - Know how to make marks and patterns using digital technology. - Know how to create pictures to represent ideas and experiences. - Know how to explore different digital creative tools. - Know how to talk about and share their digital creations.	Components - Know how to give simple instructions to achieve a goal. - Know how to put instructions in the correct order. - Know how to control a programmable toy or robot. - Know how to predict what might happen when instructions are followed. - Know how to change instructions when something does not work - Know how to explore patterns, movement and sequences.	Components - Know how to use digital tools to create a simple story. - Know how to combine pictures, sounds and words to communicate ideas. - Know how to record their voice to enhance a digital story. - Know how to sequence events in a story. - Know how to share digital creations with others. - Know how to talk about their choices when creating a story.	Components - Know how to choose appropriate digital tools for a purpose. - Know how to combine different digital skills to create something new. - Know how to explore and experiment with technology. - Know how to plan simple ideas before creating. - Know how to make changes and improve their digital work. - Know how to share and explain their creations to others.
Key Vocabulary: online, offline, internet, personal information, private, trusted adult, username, password, login, logout, safe, unsafe, website	Key Vocabulary: algorithm, code, program, command, sequence, debug, predict, run, object, repeat, direction, instruction	Key Vocabulary: technology, device, computer, tablet, smartphone, barcode, scanner, camera, internet, digital, communication, transport	Key Vocabulary: digital art, brush, fill, shape, line, colour, texture, undo, resize, copy, pixel, image, pattern	Key Vocabulary: question, answer, database, branching database, yes/no, classify, sort, data, search, information, criteria, attribute	Key Vocabulary: presentation, audience, text, image, multimedia, slide, font, layout, edit, save, publish, communicate



Curriculum Map

Computing - Overview KS1

Cycle B

Autumn 1 Online Safety (Year 1)	Autumn 2 Coding (Year 1)	Spring 1 Creating Pictures (Year 2)	Spring 2 Questioning (Year 2)	Summer 1 Technology Outside School (Year 1)	Summer 2 Presenting Ideas (Year 2)
Composite Children understand how to use technology safely, know what personal information is and who trusted adults are if something online makes them uncomfortable.	Composite Children create and debug simple algorithms using 2Code by predicting, testing and improving programs.	Composite Children recognise technology used in everyday life and explain how it helps people.	Composite Children create digital artwork using different tools and explain how digital art differs from traditional art.	Composite Children create and use branching databases and questionnaires to organise and find information.	Composite Children organise and present information using digital media for an audience.
Components • Know how to log in and out safely • Know how to keep personal information private. • Know how to recognise information that should not be shared online • Know how to identify trusted adults who can help if something online worries them. • Know how to use websites and Purple Mash safely. • Know how to make safe choices when using technology.	Components • Know how to give instructions in the correct order. • Know how to create a simple program using commands. • Know how to predict what a program will do. • Know how to run a program and check the outcome • Know how to find and fix simple errors in code (debug). • Know how to improve a program by making changes.	Components • Know how to identify technology used in different places • Know how to explain what different types of technology are used for. • Know how to match technology to everyday jobs and tasks • Know how to recognise technology that connects to the internet. • Know how to compare technology used today with technology from the past. • Know how to use everyday technology responsibly.	Components • Know how to use a range of drawing and painting tools. • Know how to select appropriate colours, shapes and lines. • Know how to edit a picture using digital tools such as fill, undo, copy and resize. • Know how to create a picture in the style of another artist. • Know how to improve digital artwork by reviewing and editing it. • Know how to explain the differences between digital and non-digital art.	Components • Know how to ask questions that can be answered with yes or no. • Know how to sort objects using different characteristics. • Know how to create a simple branching database. • Know how to search for information using a branching database. • Know how to collect and organise information. • Know how to use data to answer questions.	Components • Know how to add text and images to a presentation. • Know how to organise information clearly on a page or slide. • Know how to edit and improve a presentation. • Know how to choose suitable fonts, colours and layouts. • Know how to create a presentation for a particular audience. • Know how to present information clearly using digital technology.
Key Vocabulary: technology, device, computer, tablet, screen, internet, safe, unsafe, rules, trusted adult, help, share	Key Vocabulary: technology, device, computer, tablet, phone, camera, keyboard, mouse, screen, digital, machine, equipment	Key Vocabulary: digital art, paint, draw, colour, brush, line, shape, mark, create, picture, design, edit	Key Vocabulary: robot, programmable, instruction, command, sequence, algorithm, direction, move, forward, backward, left, right, predict	Key Vocabulary: story, character, setting, sequence, beginning, middle, end, image, sound, record, voice, create	Key Vocabulary: create, digital, project, design, explore, experiment, idea, plan, improve, share, communicate, technology



Curriculum Map

Computing - Overview LKS2

Cycle B

Autumn 1 Online Safety (Year 3)	Autumn 2 Coding (Year 4)	Spring 1 Email (Year 3)	Spring 2 Branching Databases (Year 3)	Summer 1 Animation (Year 4)	Summer 2 Hardware Investigators (Year 4)
Composite Children understand how to use the internet safely and responsibly, recognise reliable and unreliable information, and know how to report concerns when using technology.	Composite Children design, create and debug programs using variables, timers and repetition to solve problems efficiently.	Composite Children use email safely and responsibly to communicate with others while understanding appropriate online behaviour.	Composite Children create and use branching databases to classify and retrieve information accurately.	Composite Children create animated sequences using digital tools to communicate ideas and tell stories.	Composite Children understand how computer hardware affects performance and investigate how different hardware components work together.
Components - Know how to create strong and secure passwords. - Know how to identify reliable and unreliable information online. - Know how to recognise risks when communicating online. - Know how to protect personal information when using the internet. - Know how to report inappropriate online content or behaviour. - Know how to make responsible choices when using online technologies.	Components - Know how to design an algorithm to solve a problem. - Know how to create programs using sequence, repetition and selection. - Know how to use variables in a program. - Know how to use timers and events within code. - Know how to test and debug programs systematically. - Know how to evaluate and improve a program.	Components - Know how to compose and send an email. - Know how to reply to and forward emails appropriately. - Know how to add and open attachments safely. - Know how to identify suspicious or unsafe emails. - Know how to communicate respectfully using email. - Know how to organise emails using folders.	Components - Know how to ask effective yes/no questions. - Know how to classify objects using shared characteristics. - Know how to create a branching database - Know how to search a branching database to identify objects. - Know how to improve a database by refining questions. - Know how to explain how branching databases organise information.	Components - Know how to plan an animation using a storyboard. - Know how to create animations by editing individual frames. - Know how to use onion skinning to improve movement. - Know how to adjust timing to create smooth animations. - Know how to add backgrounds and characters. - Know how to review and improve an animation.	Components - Know how to identify common hardware components. - Know how to explain the purpose of different hardware devices. - Know how to investigate how hardware affects computer performance. - Know how to compare different hardware configurations. - Know how to collect and interpret investigation results. - Know how to explain how hardware and software work together.
Key Vocabulary: internet, online, password, secure, personal information, privacy, digital footprint, reliable, unreliable, search engine, cyberbullying, report	Key Vocabulary: algorithm, program, code, variable, repeat, selection, timer, event, debug, flowchart, input, output	Key Vocabulary: email, inbox, compose, recipient, subject, attachment, reply, forward, draft, spam, phishing, folder	Key Vocabulary: branching database, classify, criteria, characteristic, attribute, question, yes/no, data, search, identify, organise	Key Vocabulary: animation, frame, frame rate, onion skinning, sequence, timeline, storyboard, movement, background, character, playback	Key Vocabulary: hardware, software, processor (CPU), memory (RAM), storage, monitor, keyboard, mouse, input, output, performance, device



Curriculum Map

Computing - Overview UKS2

Cycle B

Autumn 1 Online Safety (Year 5)	Autumn 2 Coding (Year 6)	Spring 1 Databases (Year 5)	Spring 2 Game Creator (Year 5)	Summer 1 Blogging (Year 6)	Summer 2 Networks (Year 6)
Composite Children understand how to use technology safely, respectfully and responsibly by evaluating online information, protecting their digital identity and recognising risks when communicating online.	Composite Children design, create, test and evaluate increasingly complex programs using a range of programming concepts to solve real-world problems.	Composite Children create, search and analyse databases to organise information and answer questions efficiently..	Composite Children design and create interactive computer games by applying programming skills and evaluating the user experience.	Composite Children create and publish blog posts responsibly, considering audience, purpose and online safety.	Composite Children understand how computer networks and the internet enable communication and the sharing of information securely..
Components - Know how to protect their digital identity and personal information online. - Know how to recognise trustworthy and untrustworthy online content. - Know how to identify and respond appropriately to online risks, including scams and phishing. - Know how to communicate respectfully and responsibly online. - Know how to manage their digital footprint. - Know how to report concerns and seek support when needed.	Components - Know how to design algorithms to solve complex problems. - Know how to use variables, selection and repetition effectively. - Know how to create procedures or functions to simplify code. - Know how to debug programs using logical reasoning. - Know how to test programs and identify improvements. - Know how to evaluate how well a program meets its intended purpose.	Components - Know how to create a database with appropriate fields and records. - Know how to enter, edit and organise data accurately. - Know how to search, sort and filter data. - Know how to interpret database results to answer questions. - Know how to identify patterns and trends in data. - Know how to explain why databases are useful for organising information.	Components - Know how to plan a game using a storyboard or design plan. - Know how to create interactive objects and characters. - Know how to program movement, scoring and events. - Know how to use variables to control gameplay. - Know how to test and debug a game. - Know how to evaluate and improve a game for the intended audience.	Components - Know how to create and publish a blog post. - Know how to write appropriately for a specific audience and purpose. - Know how to add images, hyperlinks and other media safely. - Know how to comment respectfully and respond appropriately to feedback. - Know how to identify risks when publishing content online. - Know how to evaluate the effectiveness of online communication.	Components - Know how to explain how devices connect through networks. - Know how to describe how the internet transfers information. - Know how to explain the purpose of servers and routers. - Know how to recognise the importance of network security. - Know how to explain the difference between the internet, the World Wide Web and websites. - Know how networks support communication and collaboration.
Key Vocabulary: digital footprint, identity, privacy, phishing, scam, malware, password, encryption, secure, reliable, misinformation, cyberbullying, report	Key Vocabulary: algorithm, program, variable, procedure, function, selection, repetition, input, output, debug, test, evaluate, flowchart	Key Vocabulary: database, field, record, search, sort, filter, query, criteria, data, information, spreadsheet, results	Key Vocabulary: game, sprite, event, variable, collision, timer, score, interaction, design, debug, algorithm, user	Key Vocabulary: blog, post, audience, purpose, publish, comment, hyperlink, media, copyright, plagiarism, moderation, digital footprint	Key Vocabulary: network, internet, World Wide Web, website, server, router, wireless, LAN, WAN, IP address, packet, browser, security