GREEN PARK

Green Park Community Primary School

Computing Knowledge and Skills Progression Document

2026–2027 | Years 1 to 6

Purple Mash curriculum and 2BeSafe online safety

Purpose of this document

This document sets out the computing knowledge and skills taught from Year 1 to Year 6 at Green Park Community Primary School. It brings together the termly units, declarative knowledge, procedural knowledge, key vocabulary, online safety themes and curriculum links to support planning and continuity between year groups.

Knowledge describes what pupils should know. Skills describe what pupils should be able to do. Teachers can use the progression to identify prior learning, plan opportunities to revisit it and check how pupils apply their learning.

Using the progression

Each year group is presented across two landscape pages. Terms 1 to 3 appear first, followed by Terms 4 to 6. The same categories are used throughout so that teachers can follow knowledge and skills across units and year groups.

Category	How to use it
Declarative knowledge I Know	The facts and concepts pupils learn in each unit.
Procedural knowledge I Can	The actions and processes pupils practise and apply.
Key vocabulary	The subject words to introduce, explain and revisit.
Online safety 2BeSafe	The online safety theme linked to each unit.
National Curriculum links	The curriculum summaries supplied in the source document. These are not verbatim statutory statements.

Document navigation

Year 1 pages 3–4 • Year 2 pages 5–6 • Year 3 pages 7–8
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The termly curriculum content and sequence are retained from the supplied Computing Progression Matrix 2026–2027.

Year 1

Terms 1 to 3 | Key Stage 1

Progression focus	Term 1	Term 2	Term 3
Declarative Knowledge (I Know)	Introduction to PurpleMash • Purple Mash is a secure learning platform. • Every user has a unique login. Creative Computing • Different digital tools have different purposes. • Digital artwork can be created using software.	Data Explorers • Data can be collected, sorted and grouped.	Animated Stories • Animations are made from a sequence of images.
Procedural Knowledge (I Can)	Introduction to PurpleMash • Log in independently. • Save and open work. Creative Computing • Create digital artwork using simple tools.	Data Explorers • Collect and sort simple data.	Animated Stories • Create a simple animated story.
Key Vocabulary	Introduction to PurpleMash • login, username, password Creative Computing • draw, paint, tool	Data Explorers • data, sort, group	Animated Stories • animation, frame, sequence
Online Safety (2BeSafe)	Introduction to PurpleMash • Privacy & Security Creative Computing • Self-image & Identity	Data Explorers • Managing Online Information	Animated Stories • Online Relationships
National Curriculum Links	Use technology purposefully and safely.	Organise digital content.	Create digital content.

Year 1

Terms 4 to 6 | Key Stage 1

Progression focus	Term 4	Term 5	Term 6
Declarative Knowledge (I Know)	Technology Around Us • Technology is used in everyday life at home and school.	Coding • Programs follow algorithms. • Errors are called bugs and can be fixed.	Creating and Following Instructions • Algorithms are clear sequences of instructions. Making Beats • Digital technology can create music and rhythm.
Procedural Knowledge (I Can)	Technology Around Us • Identify common technology.	Coding • Create and debug simple programs.	Creating and Following Instructions • Write and follow simple algorithms. Making Beats • Compose simple digital beats.
Key Vocabulary	Technology Around Us • technology, device	Coding • algorithm, code, debug	Creating and Following Instructions • instruction, sequence Making Beats • beat, rhythm
Online Safety (2BeSafe)	Technology Around Us • Health, Wellbeing & Lifestyle	Coding • Privacy & Security	Creating and Following Instructions • Managing Online Information Making Beats • Copyright & Ownership
National Curriculum Links	Recognise common uses of IT.	Understand algorithms; create/debug programs.	Understand algorithms and create digital content.

Year 2

Terms 1 to 3 | Key Stage 1

Progression focus	Term 1	Term 2	Term 3
Declarative Knowledge (I Know)	Route Explorers • Algorithms can be used to plan routes. • Directions must be followed in sequence. The Internet • The internet connects computers around the world. • Information can be shared online.	Creating Pictures • Digital art can be created using different techniques.	Spreadsheets • Spreadsheets organise data into rows and columns.
Procedural Knowledge (I Can)	Route Explorers • Create and test routes. The Internet • Use a browser to find information safely.	Creating Pictures • Create pictures using digital tools.	Spreadsheets • Enter data and use simple formulae.
Key Vocabulary	Route Explorers • algorithm, route, direction The Internet • internet, browser, website	Creating Pictures • pixel, shape, fill	Spreadsheets • cell, row, column
Online Safety (2BeSafe)	Route Explorers • Privacy & Security The Internet • Managing Online Information	Creating Pictures • Copyright & Ownership	Spreadsheets • Privacy & Security
National Curriculum Links	Route Explorers • Understand what algorithms are. The Internet • Use technology purposefully and safely.	Creating Pictures • Create digital content.	Spreadsheets • Organise and manipulate digital content.

Year 2

Terms 4 to 6 | Key Stage 1

Progression focus	Term 4	Term 5	Term 6
Declarative Knowledge (I Know)	Questioning • Questions can be answered using branching databases.	Coding • Programs use sequence and repetition.	Presenting Ideas • Digital presentations communicate information. Making Music • Digital tools can create and edit music.
Procedural Knowledge (I Can)	Questioning • Create and use simple databases.	Coding • Create, test and debug programs.	Presenting Ideas • Create and present multimedia work. Making Music • Compose and improve digital music.
Key Vocabulary	Questioning • question, database, branch	Coding • sequence, debug, repeat	Presenting Ideas • presentation, media Making Music • tempo, rhythm, melody
Online Safety (2BeSafe)	Questioning • Managing Online Information	Coding • Online Relationships	Presenting Ideas • Self-image & Identity Making Music • Health, Wellbeing & Lifestyle
National Curriculum Links	Questioning • Use logical reasoning.	Coding • Create and debug programs.	Presenting Ideas • Create digital content. Making Music • Use technology creatively.

Year 3

Terms 1 to 3 | Key Stage 2

Progression focus	Term 1	Term 2	Term 3
Declarative Knowledge (I Know)	Email • Email is a method of digital communication.	Route Planners • Algorithms solve navigation problems.	Spreadsheets • Formulae automate calculations.
Procedural Knowledge (I Can)	Email • Send and reply to emails safely.	Route Planners • Design and test routes.	Spreadsheets • Use formulae and charts.
Key Vocabulary	Email • email, inbox, attachment	Route Planners • algorithm, route, sequence	Spreadsheets • formula, cell, chart
Online Safety (2BeSafe)	Email • Online Relationships	Route Planners • Managing Online Information	Spreadsheets • Privacy & Security
National Curriculum Links	Email • Use technology safely and responsibly.	Route Planners • Design and debug programs.	Spreadsheets • Select and use software purposefully.

Year 3

Terms 4 to 6 | Key Stage 2

Progression focus	Term 4	Term 5	Term 6
Declarative Knowledge (I Know)	Branching Databases • Branching databases classify information.	Coding • Programs use sequence, repetition and selection.	Presentations • Multimedia presentations combine text, images and audio. Touch Typing • Typing accurately improves efficiency.
Procedural Knowledge (I Can)	Branching Databases • Create and use branching databases.	Coding • Create efficient programs and debug.	Presentations • Create effective presentations. Touch Typing • Use correct finger positions to type.
Key Vocabulary	Branching Databases • database, branch, classify	Coding • selection, repetition, debug	Presentations • slide, transition, media Touch Typing • keyboard, home row, posture
Online Safety (2BeSafe)	Branching Databases • Managing Online Information	Coding • Privacy & Security	Presentations • Copyright & Ownership Touch Typing • Health, Wellbeing & Lifestyle
National Curriculum Links	Branching Databases • Understand data organisation.	Coding • Write and debug programs with logical reasoning.	Presentations • Create digital content. Touch Typing • Use technology effectively.

Year 4

Terms 1 to 3 | Key Stage 2

Progression focus	Term 1	Term 2	Term 3
Declarative Knowledge (I Know)	Unpacking Hardware and Software • Hardware is the physical parts of a computer. • Software gives hardware instructions.	Animation • Animations use frames and timing to create movement.	Logo • Logo uses commands to draw shapes. Sound Stories • Sound enhances digital storytelling.
Procedural Knowledge (I Can)	Unpacking Hardware and Software • Identify hardware and software components.	Animation • Create and edit digital animations.	Logo • Write Logo procedures to create patterns. Sound Stories • Record and edit narration and sound effects.
Key Vocabulary	Unpacking Hardware and Software • hardware, software, input, output	Animation • frame, timeline, animation	Logo • Logo, procedure, repeat Sound Stories • audio, narration, sound effect
Online Safety (2BeSafe)	Unpacking Hardware and Software • Privacy & Security	Animation • Copyright & Ownership	Logo • Managing Online Information Sound Stories • Online Relationships
National Curriculum Links	Unpacking Hardware and Software • Understand computer networks and systems.	Animation • Select and use software to create content.	Logo • Design, write and debug programs. Sound Stories • Create digital content using multimedia.

Year 4

Terms 4 to 6 | Key Stage 2

Progression focus	Term 4	Term 5	Term 6
Declarative Knowledge (I Know)	Effective Searching • Search engines rank information differently. • Not all online information is reliable.	Coding • Programs use variables, selection and repetition.	Composing Beats • Digital tools can compose and edit music. Introduction to AI • Artificial intelligence can recognise patterns and make predictions.
Procedural Knowledge (I Can)	Effective Searching • Use effective search techniques and evaluate results.	Coding • Develop, test and debug increasingly complex programs.	Composing Beats • Create rhythmic musical compositions. Introduction to AI • Explore simple AI tools responsibly.
Key Vocabulary	Effective Searching • search engine, keyword, reliability	Coding • variable, selection, repetition	Composing Beats • tempo, loop, beat Introduction to AI • AI, model, prediction
Online Safety (2BeSafe)	Effective Searching • Managing Online Information	Coding • Privacy & Security	Composing Beats • Health, Wellbeing & Lifestyle Introduction to AI • Managing Online Information
National Curriculum Links	Effective Searching • Use search technologies effectively.	Coding • Control or simulate systems and solve problems.	Composing Beats • Create digital content. Introduction to AI • Understand opportunities and risks of digital technology.

Year 5

Terms 1 to 3 | Key Stage 2

Progression focus	Term 1	Term 2	Term 3
Declarative Knowledge (I Know)	Quizzing • Digital quizzes can test knowledge automatically. Databases • Databases store, organise and search information efficiently.	Game Creator • Games use rules, variables and user interaction.	Spreadsheets • Formulae and functions analyse data.
Procedural Knowledge (I Can)	Quizzing • Create interactive quizzes with different question types. Databases • Create and interrogate databases.	Game Creator • Design and build an interactive game.	Spreadsheets • Use formulae, graphs and calculations.
Key Vocabulary	Quizzing • quiz, question, answer Databases • database, field, record	Game Creator • sprite, event, variable	Spreadsheets • formula, function, graph
Online Safety (2BeSafe)	Quizzing • Online Relationships Databases • Managing Online Information	Game Creator • Privacy & Security	Spreadsheets • Privacy & Security
National Curriculum Links	Quizzing • Design digital content. Databases • Select and use software to analyse data.	Game Creator • Design, write and debug programs.	Spreadsheets • Use software to analyse and present data.

Year 5

Terms 4 to 6 | Key Stage 2

Progression focus	Term 4	Term 5	Term 6
Declarative Knowledge (I Know)	Concept Maps • Concept maps organise and connect ideas visually.	Coding • Programs combine sequence, selection, repetition and variables.	Word Processing • Word processors allow professional document creation and editing.
Procedural Knowledge (I Can)	Concept Maps • Create linked concept maps.	Coding • Develop increasingly complex programs and debug systematically.	Word Processing • Format documents using advanced tools.
Key Vocabulary	Concept Maps • concept, node, connection	Coding • variable, procedure, debug	Word Processing • formatting, style, header
Online Safety (2BeSafe)	Concept Maps • Managing Online Information	Coding • Privacy & Security	Word Processing • Copyright & Ownership
National Curriculum Links	Concept Maps • Use technology purposefully to organise information.	Coding • Write programs to accomplish specific goals.	Word Processing • Create and refine digital content.

Year 6

Terms 1 to 3 | Key Stage 2

Progression focus	Term 1	Term 2	Term 3
Declarative Knowledge (I Know)	Networks • Networks connect computers and share resources. Graphing • Data can be represented using graphs.	Blogging • Blogs publish content to an audience. Introduction to Python • Python is a text-based programming language.	Coding • Programs combine algorithms, variables, procedures and selection.
Procedural Knowledge (I Can)	Networks • Explain how networks communicate. Graphing • Create and interpret digital graphs.	Blogging • Create and edit blog posts responsibly. Introduction to Python • Write simple Python programs.	Coding • Develop, refine and debug complex programs.
Key Vocabulary	Networks • network, server, router Graphing • graph, axis, data	Blogging • blog, post, audience Introduction to Python • Python, syntax, variable	Coding • procedure, variable, algorithm
Online Safety (2BeSafe)	Networks • Privacy & Security Graphing • Managing Online Information	Blogging • Online Reputation Introduction to Python • Privacy & Security	Coding • Privacy & Security
National Curriculum Links	Networks • Understand computer networks. Graphing • Select and use software to analyse data.	Blogging • Create digital content responsibly. Introduction to Python • Design, write and debug programs.	Coding • Solve problems by decomposing into smaller parts.

Year 6

Terms 4 to 6 | Key Stage 2

Progression focus	Term 4	Term 5	Term 6
Declarative Knowledge (I Know)	Data Detectives • Data analysis identifies patterns and trends.	Spreadsheets • Advanced formulae model real-life situations.	3D Modelling • 3D models are built from digital shapes. Binary • Computers represent data using binary.
Procedural Knowledge (I Can)	Data Detectives • Collect, analyse and interpret data.	Spreadsheets • Use functions and formulae to solve problems.	3D Modelling • Design and manipulate 3D models. Binary • Convert simple denary numbers to binary.
Key Vocabulary	Data Detectives • dataset, analyse, pattern	Spreadsheets • formula, function, model	3D Modelling • vertex, face, model Binary • binary, bit, byte
Online Safety (2BeSafe)	Data Detectives • Managing Online Information	Spreadsheets • Privacy & Security	3D Modelling • Copyright & Ownership Binary • Managing Online Information
National Curriculum Links	Data Detectives • Select and use software to analyse data.	Spreadsheets • Use software to model and analyse data.	3D Modelling • Create digital content. Binary • Understand how digital systems represent information.