COMPUTING CURRICULUM PROGRESSION

Curriculum Intent
Computing is an essential part of the curriculum, both as a stand-alone subject and as an integral part of all learning. Computers and technology are, in general, a significant part of everyone's daily life and children need to be equipped to take part in a rapidly changing world. Computing skills are a major factor in enabling children to be confident, creative and independent learners and it is our intention that children have every opportunity available to allow them to achieve this. They should be taught to find, explore, analyse and present information and when they leave school they should be computer literate.
Computing
Purpose: A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science, and design and technology, and provides insights into both natural and artificial systems. The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content. Computing also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world. (National Curriculum 2014)

EYFS		
Purple Mash programs and activities:		Associated hardware:
Listening and Attention		
• Simple City, Slideshows, 2Create a story, Mashcams, Talking Stories		• microphone, laptop, tablet, digital camera, IWB
Speaking		
• Mashcams, 2CreateaStory, Slideshows, Simple City		• microphone, camera, IWB
Understanding		
• 2Go, Simple City, 2CreataStory, Slideshow Creator		• microphone, laptop, tablet, Beebot
Making Relationships		
• 2Beat, 2Explore, Mashcams, Topic resources PINS – All About Me and Feelings	• microphone, musical keyboard, stereo / cds, headphones	Key skills: • log in independently, turn taking, mouse and trackpad skills, drag and drop, painting and drawing tools
Self-confidence and awareness		
• Explore new environments in Mini-Mash, Painting and drawing tools, Talk about observations and experiences, Develop 'buddies' to support one another		• IWB, laptop / PC, tablet, stylus / digital pen
Health and self-care		
• Mini Mash PIN – Grocers, 2Count, Outdoor area of Mini Mash discussion and reflection		• timers, laptop, tablet, camera / video recorder
Reading		
• Mashcams, 2CreateaStory, Alphabet slideshows, 2Email / 2Respond, Talking Stories		• IWB, laptop / PC, tablet, camera / video recorder, microphone

Writing	
• Mashcams, 2Connect – concept mapping, 2CreateaStory, 2Publish, 2Email / 2Respond	• laptop / PC, IWB, tablet, camera / video recorder

Numbers	
• Maths City 1, A-fish-metic, Number paint projects, 2Count, 2Quiz	• IWB, laptop / PC, tablet, stylus / digital pen

Shape, Space and Measure	
• Maths City 1, Maths City 2, Shapes PIN in Mini Mash, 2DIY, 2DesignandMake	• IWB, laptop / PC, tablet, stylus / digital pen

People and Communities	
• Mini Mash PINS – All About Me, Feelings	• IWB, laptop / PC, tablet

The World	
• Mini Mash PINS – Minibeasts, Garden, Growing, Seasons, Baby Animals, SimpleCity, Slideshow creator, 2Connect	• IWB, laptop / PC, tablet, stylus / digital pen

Technology	
• Simple City, Access to Purple Mash and Mini Mash	• IWB, laptop / PC, tablet, stylus / digital pen

Exploring and Understanding Media	
• 2Beat, 2Explore, 2DesignandMake, 2PaintaPicture, Paint pojects	• IWB, laptop / PC, tablet, stylus / digital pen, camera / video recorder

Being Imaginative	
• 2PaintaPicture, 2PaintaProject, 2CreateaStory, Mashcams, 2Beat, 2Explore, 2DesignandMake	• IWB, laptop / PC, tablet, stylus / digital pen, camera / video recorder, musical keyboard, headphones, stereo

Directed teaching and continuous provision

Online safety

Ourselves and Our Families	Repeating Rhythms and Patterns	Traditional tales	Monsters and Aliens	Space	Christmas	Winter, Snow, Ice and Dark Nights	Chinese New Year and Dragons	Food	People Who Help Us	Superheroes	Life Cycles	On the Farm	Dinosaurs
• Look at photos • Print photos • Take photos of self and others • PIN – All About Me, Feelings	• Take photos of objects • Delete and edit photos by adding clip art • Make and record music – 2Beat/2Explore	• Record seasonal changes with camera and video recorder • Listen to audio stories • 2Connect – mapping stories	• Program Beebot to follow a route • **Going places safely**	• Mashcams - astronaut • **Use search engine safely – Kiddle** • Paint space pictures using finger and stylus / digital pen	• Design a route for a Beebot • Make and record music – 2Beat, 2Explore • Use stereo to listen to music on CD	• **Personal passwords and usernames** • Record singing with microphone • MINI Mash PIN - Seasons	• Make and record music and performances • 2PaintaPicture • 2PaintaProject • **Sharing creative work**	• Record instructions using microphone • Use PC / laptop to watch videos • MiniMash PIN - Grocers	• **Sending messages** to people who help us – 2email/2Respond • Interact in video communication with people who help us	• Mashcams – superhero • Publish a superhero story - 2CreateaStory	• Record changes in nature using camera and video recorder • Mini Mash PINS – Garden, Minibeasts	• Record key events – reip to farm using camera and video recorder • Mini Mash PINS – Baby Animal, Seasons	• Publish a dinosaur story - 2CreateaStory • Use a camera and video recorder to gather evidence

Key Stage 1

Theme Key:							
🟥 Coding and Computational thinking	🟦 Spreadsheets	🟩 Internet and Email	🟧 Art and Design	🟨 Music	🟪 Databases and graphing	🟪 Writing and Presenting	⬜ Communication and networks

Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31

YEAR 1

| Unit 1.1 Online Safety & Exploring Purple Mash — Weeks – 4 — Programs – Various | Unit 1.2 Grouping & Sorting — Weeks – 2 — Programs – 2DIY | Unit 1.3 Pictograms — Weeks – 3 — Programs – 2Count | Unit 1.4 Lego Builders — Weeks – 3 — Programs – 2DIY | Unit 1.5 Maze Explorers — Weeks – 3 — Programs – 2Go | Unit 1.6 Animated Story Books — Weeks – 5 — Programs – 2Create A Story | Unit 1.7 Coding — Weeks – 6 — Programs – 2Code | Unit 1.8 Spreadsheets — Weeks – 3 — Programs – 2Calculate | Unit 1.9 Technology outside school — Weeks – 2 — Programs – Various |

Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32

YEAR 2

| Unit 2.1 Coding — Weeks – 5 — Programs – 2Code | Unit 2.2 Online Safety — Weeks – 3 — Programs – Various | Unit 2.3 Spreadsheets — Weeks – 4 — Programs – 2Calculate | Unit 2.4 Questioning — Weeks – 5 — Programs – 2Question, 2Investigate | Unit 2.5 Effective Searching — Weeks – 3 — Programs – Browser | Unit 2.6 Creating Pictures — Weeks – 5 — Programs – 2PaintAPicture | Unit 2.7 Making Music — Weeks – 3 — Programs – 2Sequence | Unit 2.8 Presenting Ideas — Weeks – 4 — Programs – Various |

Key Stage 2

YEAR 3

Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32

| Unit 3.1 Coding — Number of Weeks – 6, Main Programs – 2Code (Weeks 1–6) | Unit 3.2 Online safety — Weeks – 3, Programs – Various (Weeks 7–9) | Unit 3.3 Spreadsheets — Weeks – 3, Programs – 2Calculate (Weeks 10–12) | Unit 3.4 Touch Typing — Weeks – 4, Programs – 2Type (Weeks 13–16) | Unit 3.5 Email (including email safety) — Weeks – 6, Programs – 2Email, 2Connect, 2DIY (Weeks 17–22) | Unit 3.6 Branching Databases — Weeks – 4, Programs – 2Question (Weeks 23–26) | Unit 3.7 Simulations — Weeks – 3, Programs – 2Simulate, 2Publish (Weeks 27–29) | Unit 3.8 Graphing — Weeks – 3, Programs – 2Graph (Weeks 30–32) |

YEAR 4

Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33

| Unit 4.1 Coding — Number of Weeks – 6, Main Programs – 2Code (Weeks 1–6) | Unit 4.2 Online safety — Weeks – 4, Programs – Various (Weeks 7–10) | Unit 4.3 Spreadsheets — Weeks – 6, Programs – 2Calculate (Weeks 11–16) | Unit 4.4 Writing for different audiences — Weeks – 5, Programs – 2Email, 2Connect, 2DIY (Weeks 17–21) | Unit 4.5 Logo — Weeks – 4, Programs – Logo (Weeks 22–25) | Unit 4.6 Animation — Weeks – 3, Programs – 2Animate (Weeks 26–28) | Unit 4.7 Effective Search — Weeks – 3, Programs – Browser (Weeks 29–31) | Unit 4.8 Hardware Investigators — Weeks – 2 (Weeks 32–33) |

YEAR 5

Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32

| Unit 5.1 Coding — Number of Weeks – 6, Main Programs – 2Code (Weeks 1–6) | Unit 5.2 Online safety — Weeks – 3, Programs - Various (Weeks 7–9) | Unit 5.3 Spreadsheets — Weeks – 6, Programs – 2Calculate (Weeks 10–15) | Unit 5.4 Databases — Weeks – 4, Programs – 2Question, 2Investigate (Weeks 16–19) | Unit 5.5 Game Creator — Weeks – 5, Programs – 2DIY 3D (Weeks 20–24) | Unit 5.6 3D Modelling — Weeks – 4, Programs – 2Design and Make (Weeks 25–28) | Unit 5.7 Concept Maps — Weeks – 4, Programs – 2Connect (Weeks 29–32) |

Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
YEAR 6*	Unit 6.1 Coding Number of Weeks – 6 Main Programs – 2Code						Unit 6.2 Online safety Weeks – 2 Programs - Various			Unit 6.3 Spreadsheets Weeks – 5 Programs – 2Calculate					Unit 6.4 Blogging Weeks – 5 Programs – 2Blog					Unit 6.5 Text Adventures Weeks – 5 Programs – 2Code, 2Connect					Unit 6.6 Networks Weeks – 3			Unit 6.7 Quizzing Weeks – 6 Programs – 2Quiz, 2DIY, Text Toolkit, 2Investigate				