LONG TERM FORI	ECAST Key Stage 1	. Computing	
	Autumn	Spring	Summer

Pupils should be taught to:

- A understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions
- **B** create and debug simple programs
- **C** use logical reasoning to predict the behaviour of simple programs
- D use technology purposefully to create, organise, store, manipulate and retrieve digital content
- E use technology safely and respectfully, keeping personal information private; know where to go for help and support when they have concerns about material on the internet
- **F** recognise common uses of information technology beyond school.

Golden Thread	Programming/Coding - Equality	Using technology data & writing - Acceptance	Modelling & Simulation – Community Education
Year 1	1.1 Online Safety and Exploring Purple Mash E 1.2 Grouping and Sorting (Maths) D 1.3 Pictograms (Maths) D 1.4 Lego Builders A, B	1.5 Maze Explorers A, C 1.6 Animated Story Books (Literacy/ Art) D	1.7 Coding A, B, C, D 1.8 Spreadsheets (Maths) D 1.9 Technology Outside School E, F
Year 2	1.1 Coding A, B, C, F 1.2 Online Safety E, F 1.3 Spreadsheets (Maths) D	1.4 Questioning D 1.5 Effective Searching D , E	1.6 Creating Pictures (Art) D 1.7 Making Music (Music) D 1.8 Presenting Ideas (Literacy) D

LONG TERM FORECAST	Key Stage	e 2 Computing	
	Autumn	Spring	Summer

Pupils should be taught to:

- **G** design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts
- H use sequence, selection, and repetition in programs; work with variables and various forms of input and output
- I use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs
- J 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
- K use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content
- L use technology safely, respectfully and responsibly; know a range of ways to report concerns and inappropriate behaviour
- M select, use and combine a variety of software (including internet services) on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information

Golden Thread	Programming/Coding - Equality	Using technology data & writing - Acceptance	Modelling & Simulation – Community Education
Year 3	3.1 Coding G, H, I 3.2 Online Safety L 3.3 Spreadsheets (Maths) K, M	3.4 Touch Typing K 3.5 Email (Literacy) J, K, M, L	3.6 Branching Databases K, M 3.7 Simulations K, M 3.8 Graphing (Maths) K, M
Year 4	4.1 Coding G, H, I, M 4.2 Online Safety J, L, M 4.3 Spreadsheets (Maths) M	4.4 Writing for Different Audiences (Literacy) M 4.11 micro:bits G, H, I	4.6 Animation (Art/D&T) M 4.10 Artificial Intelligence K, L 4.8 Hardware Investigators J, M
Year 5	5.1 Coding G, M 5.2 Online Safety J, K, L, M 5.3 Spreadsheets (Maths) M	5.5 Databases G, M 5.6 Game Creator (Art/D&T) M	5.7 3D Modelling (Art/D&T) M 5.8 Concept Maps (Literacy) M
Year 6	6.1 Coding G, H, I, K, M 6.2 Online Safety J, L 6.3 Spreadsheets (Maths) K, M	6.4 Blogging (Literacy) J, K, L, M 6.5 Text Adventures (Literacy) K, M	6.6 Networks J 6.7 Quizzing K, M