LONG TERM PLANNING CYCLE FOR COMPUTING (PURPLE MASH)

STRAND COMPUTER SCIENCE INFORMATION TECHNOLOGY DIGITAL LITERACY

GLYME CLASS (Reception and Year 1)

RECEPTION – EARLY YEARS FOUNDATION STAGE
Pupils in Reception will use and explore technology as part of their continuous provision. They may use devices such as BeeBots or Robo Mice, iPads, Chrome books, cameras, digital thermometers, toys with digital/electronic components, etc. Their experiences with computing technology will be linked to provision across all ELGs and allow for exploration, creativity and discovery, as well as learning about how computers and digital technology play an important role in our work and home lives.
YEAR 1 OBJECTIVES from the National Curriculum 2014 **Computer Science** 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. **Information Technology** Use technology purposefully to create, organise, store, manipulate and retrieve digital content. **Digital Literacy** Recognise common uses of 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.

YEAR 1 ANNUAL CYCLE		
AUTUMN TERM	**SPRING TERM**	**SUMMER TERM**
Online safety Grouping and Sorting	Maze Explorers (programming) Animated Story Books	Coding Technology Outside School

WINDRUSH CLASS (Years 2 and 3)

YEAR 2 OBJECTIVES from the National Curriculum 2014	YEAR 3 OBJECTIVES from the National Curriculum 2014
Computer Science 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. **Information Technology** Use technology purposefully to create, organise, store, manipulate and retrieve digital content. **Digital Literacy** 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.	**Computer Science** 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. **Information Technology** 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. **Digital Literacy** Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

MIXED YEAR CYCLE 1		
AUTUMN TERM	**SPRING TERM**	**SUMMER TERM**
Online Safety Coding	Effective Searches Email	Data bases Graphing
MIXED YEAR CYCLE 2		
AUTUMN TERM	**SPRING TERM**	**SUMMER TERM**
Online Safety Coding	Spreadsheets	Making Music Branching Databases

EVENLODE CLASS (Years 4, 5 and 6)

KEY STAGE 2 OBJECTIVES from the National Curriculum 2014

Computer Science

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.

Information Technology

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.

Digital Literacy

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

CYCLE 1		
AUTUMN TERM	**SPRING TERM**	**SUMMER TERM**
Online Safety Coding	Spreadsheets	Concept Maps
CYCLE 2		
AUTUMN TERM	**SPRING TERM**	**SUMMER TERM**
Online Safety Coding	Databases (4 weeks)	Game Creator
CYCLE 3		
AUTUMN TERM	**SPRING TERM**	**SUMMER TERM**
Online Safety Coding	3D Modelling	Blogging