Frieth CEC School   **Computing Long Term Plan (Knowledge)**

Year	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Year 1	**Online Safety** -Using technology purposefully to create. Using technology purposefully to organise. -Using technology purposefully to store. Using technology purposefully to manipulate. -Using technology purposefully to retrieve. -Recognising common uses of information technology beyond school. -Using technology safely and respectfully.	**Programming Toys** -Algorithms and what they are. -How algorithms are implemented as programs on digital devices. -Programs and how they execute by following precise and unambiguous instructions. -Creating and debugging simple programs. -Using logical reasoning to predict the behaviour of simple programs. -Using technology purposefully to create. -Using technology purposefully to organise. -Using technology purposefully to retrieve.	**Painting** -Using logical reasoning to predict the behaviour of simple programs. -Using technology purposefully to create. -Using technology purposefully to manipulate.	**Computing Skills** -Using technology purposefully to manipulate. -Using technology purposefully to retrieve. -Using technology safely and respectfully.	**Word Processing Skills** -Using technology purposefully to create. -Using technology purposefully to organise. -Using technology purposefully to store. -Using technology purposefully to manipulate. -Using technology purposefully to retrieve. -Recognising common uses of information technology beyond school.	**Scratch Jr Programming** -Algorithms and what they are. -How algorithms are implemented as programs on digital devices -Programs and how they execute by following precise and unambiguous instructions. -Creating and debugging simple programs. -using logical reasoning to predict the behaviour of simple programs
Year 2	**Online Safety** Digital footprints Keywords You be the judge Rate and review Being kind online Cyber snakes and ladders	**Preparing for Turtle Logo** Moving forward and making turns Half and quarter turns Right 90 and left 90 Completing algorithms Command abbreviations From here to there	**Programming Turtle Logo and Scratch** Drawing shapes Repeat Movement and sound Repeat and say something Green flag Sprites	**Digital Artists** Pixel pointillism Mastering Mondrian Producing Picasso Matching Monet Perfecting pop art Magnificent masterpiece	**Presentation Skills** Folders What is a presentation? New slide and slide layout Add and format an image Reorder slides and present Searching and printing	**Technology Around Us** Technology in school Technology in the home A world of information technology What is the use of information technology? The story of information technology Information technology of the future
Year 3	**Online Safety** computer networks including the Internet;	**Programming Turtle Logo and Scratch** designing, writing and debugging programs that accomplish specific	**Word Processing** using technology safely, respectfully and responsibly	**Internet Research and Communication** computer networks including the Internet;	**Presentation Skills** selecting, using and combining a variety of software (including Internet services) on a	**Using and Applying** selecting, using and combining a variety of software (including Internet services) on a

	computer networks including the Internet; opportunities computer networks offer for communication and collaboration; using technology safely, respectfully and responsibly; how to recognise acceptable and unacceptable behaviour; how to identify a range of ways to report concerns about content and contact.	goals including controlling or simulating physical systems; solving problems by decomposing them into smaller parts; using sequence, selection and repetition in programs; work with variables and various forms of input and output; using logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs;	; how to recognise acceptable and unacceptable behaviour; how to identify a range of ways to report concerns about content and contact.	how computer networks can provide multiple services, such as the World Wide Web; opportunities computer networks offer for communication and collaboration;	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;	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; **Drawing and Desk Top Publishing** selecting, using and combining 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;
Year 4	**Online Safety** Using technology safely, respectfully and responsibly; how to recognise acceptable and unacceptable behaviour; how to identify a range of ways to report concerns about content and contact.	**Scratch: Questions and Quizzes** Designing, writing and debugging programs that accomplish specific goals including controlling or simulating systems; solving problems by decomposing into smaller parts; using sequence, selection and repetition in programs; work with variables and various forms of input and output.	**Programming Turtle Logo** Designing, writing and debugging programs that accomplish specific goals including controlling or simulating systems; solving problems by decomposing into smaller parts; using sequence, selection and repetition in programs; work with variables and various forms of input and output; using logical	**Animation** Selecting, using and combining 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.	**Word Processing** Selecting, using and combining 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.	**Using and Applying** Selecting, using and combining a variety of software to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information

			reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.			
Year 5	**Online Safety** Using search technologies effectively; how results are selected and ranked; how to be discerning in evaluating digital content; using technology safely, respectfully and responsibly; how to recognise acceptable and unacceptable behaviour; how to identify a range of ways to report concerns about content and contact.	**Scratch: Developing Games** Designing, writing and debugging programs that accomplish specifics goals including controlling or simulating physical systems; solve problems by decomposing into smaller parts; using sequence, selection and repetition in programs; work with variable and various forms of input and output; using logical reasoning to explain how some simple algorithms work and detect and correct errors in algorithms and programs.	**Flowol** Designing, writing and debugging programs that accomplish specifics goals including controlling or simulating physical systems; solve problems by decomposing into smaller parts; using sequence, selection and repetition in programs; work with variable and various forms of input and output; using logical reasoning to explain how some simple algorithms work and detect and correct errors in algorithms and programs.	**Radio Station** Selecting, using and combining 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.	**Strategic Searching Online** Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.	**Using and Applying** Selecting, using and combining a variety of software to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information
Year 6	Online Safety - using technology safely, respectfully and responsibly	Scratch: Animated stories - designing, writing and debugging programs that acomplish specific goals including controlling or simulating physical systems, - solving problems by decomposing into smaller parts; - using sequence, selection, and repetition in programs; work with variables and various	Kodu programming: - selecting, using and combining 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;	Spreadsheets: - selecting, using and combining 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;	Film making: -understand computer networks including the Internet; - how computer networks can provide multiple services, such as the world wide web; - opportunities computer networks offer for communication and collaboration; - using search technologies effectively; - how results are selected and ranked;	Using and Applying: Selecting, using and combining a variety of software to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information

| | | forms of input and output;
- using logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs; | - designing, writing and debugging programs that accomplish specific goals including controlling or simulating physical systems;
- solving problems by decomposing into smaller parts;
- using sequence, selection, and repetition in programs; work with variables and various forms of input and output;
- using logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs; | | - how to be discerning in evaluating digital content;
- selecting, using and combining 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; | |

Field Trips
Theme Days