





Bleak Hill Primary School

Computing Long Term Plan and Progression



| Vision  | Intent  | Implementation  | Impact  |
|---|---|--|---|
| <p>At Bleak Hill Primary School, we understand that Technology is changing the lives of everyone. Through teaching Computing, we equip children to participate in a rapidly changing world where work and leisure activities are increasingly transformed by technology.</p> <p>'if we teach today as we taught yesterday, we rob our children of tomorrow' – John Dewey.</p> | <p>It is our intention to enable children to find, explore, analyse, exchange and present information. We also focus on developing the skills necessary for children to be able to use information in a discriminating and effective way. 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.</p> | <p>Computing is taught in discrete lessons following the National Curriculum as a basis, with statutory content being taught using the Purple Mash scheme of work. There are many opportunities to embed these skills through other areas of the curriculum through cross-curricular activities.</p> <p>The children have access to hardware (laptops, iPad, and Beebots) throughout the week.</p> | <p>Retrieval based learning techniques for every lesson in the sequence.</p> <p>Evaluations for each lesson to provide formative assessment and to inform planning for future sessions.</p> |

Bleak Hill Primary School

Computing Long Term Plan and Progression



| Computing | Computer Science | | | Information Technology | | | Digital Literacy | | |
|-----------|--|---|---------------------------------|--|--|---|-------------------------------------|---|--|
| EYFS | In Reception, children will begin to develop their technological understanding through a variety of planned and independent play based tasks. The EYFS aims for the children to develop the following: Recognise that a range of technology is used in places such as homes and schools. Select and use technology for particular purposes | | | | | | | | |
| YEAR 1 | Unit 1.1 Online Safety and Exploring Purple Mash (4 weeks) | Unit 1.2 Grouping and Sorting (2 weeks) | Unit 1.3 Pictograms (3 weeks) | Unit 1.4 Lego Builders (3 weeks) | Unit 1.5 Maze Explorers (3 weeks) | Unit 1.6 Animated Story Books (5 weeks) | Unit 1.7 Coding (6 weeks) | Unit 1.8 Spreadsheets (3 weeks) | Unit 1.9 Technology Outside School (2 weeks) |
| YEAR 2 | Unit 2.2 Online Safety (3 weeks) | Unit 2.1 Coding (5 weeks) | Unit 2.7 Making music (3 weeks) | Unit 2.3 Spreadsheets (4 weeks) | Unit 2.5 Effective Searching (3 weeks) | Unit 2.6 Creating pictures (5 weeks) | Unit 2.4 Questioning (5 weeks) | Unit 2.8 Presenting Ideas (5 weeks) | |
| YEAR 3 | Unit 3.2 Online Safety (3 weeks) | Unit 3.1 Coding (6 weeks) | Unit 3.3 Spreadsheets (3 weeks) | Unit 3.4 Touch Typing (4 weeks) | Unit 3.5 Email (inc. email safety) (6 weeks) | Unit 3.6 Branching Databases (4 weeks) | Unit 3.7 Simulations (3 weeks) | Unit 3.8 Graphing (3 weeks) | Unit 3.9 Presenting using Microsoft PowerPoint (5/6 weeks) |
| YEAR 4 | Unit 4.2 Online Safety (4 weeks) | Unit 4.1 Coding (6 weeks) | Unit 4.3 Spreadsheets (6 weeks) | Unit 4.4 Writing for Different Audiences (5 weeks) | Unit 4.5 Logo (4 weeks) | Unit 4.6 Animation (3 weeks) | Unit 4.7 Effective Search (3 weeks) | Unit 4.8 Hardware Investigators (2 weeks) | Unit 4.9 Making Music (4 weeks) |
| YEAR 5 | Unit 5.2 Online Safety (3 weeks) | Unit 5.1 Coding (6 weeks) | Unit 5.3 Spreadsheets (6 weeks) | Unit 5.4 Databases (4 weeks) | Unit 5.5 Game Creator (5 weeks) | Unit 5.6 3D Modelling (4 weeks) | Unit 5.7 Concept Maps (4 weeks) | Unit 5.8 Word Processing using Microsoft Word (8 weeks) | |
| YEAR 6 | Unit 6.2 Online Safety (2 weeks) | Unit 6.1 Coding (6 weeks) | Unit 6.3 Spreadsheets (5 weeks) | Unit 6.4 Blogging (4 weeks) | Unit 6.5 Text adventures (5 weeks) | Unit 6.6 Networks (3 weeks) | Unit 6.7 Quizzing (6 weeks) | Unit 6.8 Understanding Binary (4 weeks) | Unit 6.9 Spreadsheets using Microsoft Excel (8 weeks) |

Bleak Hill Primary School

Computing Long Term Plan and Progression



| | Computer Science | | | Information Technology | Digital Literacy | |
|--|---|---|---|---|--|---|
| Year 1 National Curriculum Statements | 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 | Use technology purposefully to create, organise, store, manipulate and retrieve digital content. | 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 |
| Year 1 Purple Mash outcomes | Children understand that an algorithm is a set of instructions used to solve a problem or achieve an objective. They know that an algorithm written for a computer is called a program. | Children can work out what is wrong with a simple algorithm when the steps are out of order, e.g. The Wrong Sandwich in Purple Mash and can write their own simple algorithm, e.g. Colouring in a Birdactivity. Children know that an unexpected outcome is due to the code they have created and | When looking at a program, children can read code online at a time and make good attempts to envision the bigger picture of the overall effect of the program. Children can, for example, interpret where the turtle in 2Go challenges will end up at the end of the program. | Children are able to sort, collate, edit and store simple digital content e.g. children can name, save and retrieve their work and follow simple instructions to access online resources, use Purple Mash 2Quiz example (sorting shapes), 2Code design mode (manipulating | Children understand what is meant by technology and can identify a variety of examples both in and out of school. They can make a distinction between objects that use modern technology and those that do | Children understand the importance of keeping information, such as their usernames and passwords, private and actively demonstrate this in lessons. Children take ownership of their work and save this in their own private space such as their My |

Bleak Hill Primary School

Computing Long Term Plan and Progression



| | | | | | | |
|-------------------|---|---|--|--|---|----------------------------|
| | | Can make logical attempts to fix the code, e.g. Bubbles activity in 2Code | | backgrounds) or using pictogram software such as 2Count. | not e.g. a microwave vs. a chair | Work folder on Purple Mash |
| Vocabulary | 1.2 sort, criteria 1.4 Instruction, algorithm. Computer program, debug 1.5 direction, Challenge, arrow, undo, rewind, forward, backwards, right turn, left turn, debug, instruction, algorithm 1.7 action, algorithm, background, character, code break, coding, command, design mode, debugging, event, input, object, output, program, properties, scale, stop command, scene when clicked sound | | | 1.3 pictogram, data collate 1.6 animation, E-book, font, file. sound effect, display board. 1.8 arrow keys, backspace key, cursor, columns, cells clip art, count tool, delete key, image tool, lock tool , move cell tool speak tool, spreadsheet, rows | 1.1 log in, Username, password, log out, my work, avatar, notification topics, tools, save, 1.9 Technology | |
| Curriculum Links | Maths | | | Maths | PSHE | |

Bleak Hill Primary School

Computing Long Term Plan and Progression



| | Computer Science | | | Information Technology | Digital Literacy | |
|----------------------------|--|---|---|---|---|--|
| Year 2 NC Statements | 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. | Use technology purposefully to create, organize, store, manipulate and retrieve digital content. | 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 |
| Year 2 PM outcomes | Children can explain that an algorithm is a set of instructions to complete a task. When designing simple programs, children show an awareness of the need to be precise with their algorithms so that they can be | Children can create a simple program that achieves a specific purpose. They can also identify and correct some errors, e.g. Debug Challenges: Chimp. Children's program designs display a growing awareness of the need | Children can identify the parts of a program that respond to specific events and initiate specific actions. For example, they can write a cause and effect sentence of what will happen in a program. | Children demonstrate an ability to organize data using, for example, a database such as 2Investigate and can retrieve specific data for conducting simple searches. Children are able to edit more complex digital data | Children can effectively retrieve relevant, purposeful digital content using a search engine. They can apply their learning of effective searching beyond the classroom. They can share this knowledge, e.g. 2Publish example | Children know the implications of inappropriate online searches. Children begin to understand how things are shared electronically such as posting work to the Purple Mash display board. They develop an understanding of |

Bleak Hill Primary School

Computing Long Term Plan and Progression



| | | | | | | |
|-------------------|---|----------------------------------|--|--|---|---|
| | successfully converted into code | for logical, programmable steps. | | such as music compositions within 2Sequence. Children are confident when creating, naming, saving and retrieving content. Children use a range of media in their digital content including photos, text and sound. | template. Children make links between technology they see around them, coding and multimedia work they do in school e.g. animations, interactive code and programs. | using email safely by using 2Respond activities on Purple Mash and know ways of reporting inappropriate behaviours and content to a trusted adult |
| Vocabulary | 2.1 action, algorithm, bug, button, character, code block, code design, command, design mode, debug/debugging, event, input, object, output, properties, scale, sequence, timer, when clicked/ swiped, when key | | | 2.3 Backspace key, copy and paste, columns cells, count tool, delete key, equals tool, image toolbox, lock tool, move cell tool, rows, speak tool, spreadsheet 2.4 pictogram, question, data, collate, binary tree, avatar, database 2.6 impressionism, palette pointillism, share, surrealism, template | 2.2 Search, display board, internet, sharing, email, attachment, digital footprint. 2.5 Internet, search, search engine | |

Bleak Hill Primary School

Computing Long Term Plan and Progression



| | | | |
|------------------|--|---|------|
| | | <p>2.7 BPM, composition, digitally, instrument, music, Sound effects SFX, soundtrack, tempo, volume</p> <p>2.8 Concept map, quiz, presentation, node, animated, Non-fiction, Narrative, audience.</p> | |
| Curriculum Links | | Art, Maths, Music, English | PHSE |

| | Computer Science | | | | Information Technology | | Digital Literacy |
|---|--|--|---|--|---|---|---|
| Year 3 NC Statements | 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 | 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 | Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concern about content and contact. |

Bleak Hill Primary School

Computing Long Term Plan and Progression



| | | | | | | | |
|---|--|--|---|---|---|---|---|
| | | | | communication and collaboration. | | goals, including collecting, analysing, evaluating and presenting data and information. | |
| Year 3 PM outcomes | <p>Children can turn a simple real-life situation into an algorithm for a program by deconstructing it into manageable parts. Their design shows that they are thinking of the desired task and how this translates into code.</p> <p>Children can identify an error within their program that prevents it following the desired algorithm and then fix it</p> | <p>Children demonstrate the ability to design and code a program that follows a simple sequence. They experiment with timers to achieve repetition effects in their programs.</p> <p>Children are beginning to understand the difference in the effect of using a timer command rather than a repeat command when creating repetition effects.</p> <p>Children</p> | <p>Children's designs for their programs show that they are thinking of the structure of a program in logical, achievable steps and absorbing some new knowledge of coding structures.</p> <p>For example, 'if' statements, repetition and variables. They make good attempts to 'step through' more complex code in order to identify errors in algorithms and can</p> | <p>Children can list a range of ways that the internet can be used to provide different methods of communication. They can use some of these methods of communication, e.g. being able to open, respond to and attach files to emails using 2Email. They can describe appropriate email conventions when communicating in this way.</p> | <p>Children can carry out simple searches to retrieve digital content. They understand that to do this, they are connecting to the internet and using a search engine such as Purple Mash search or internet-wide search engines.</p> | <p>Children can collect, analyse, evaluate and present data and information using a selection of software, e.g. using a branching database (2Question), using software such as 2Graph. Children can consider what software is most appropriate for a given task. They can create purposeful content to attach to emails, e.g. 2Respond.</p> | <p>Children demonstrate the importance of having a secure password and not sharing this with anyone else.</p> <p>Furthermore, Children can explain the negative implications of failure to keep passwords safe and secure. They understand the importance of staying safe and the importance of their conduct when using familiar communication</p> |

Bleak Hill Primary School

Computing Long Term Plan and Progression



| | | | | | | | |
|-------------------|--|---|--|--|--|--|--|
| | | understand how variables can be used to store information while a program is executing. | correct this. E.g. traffic light algorithm in 2Code. In programs such as Logo, they can 'read' programs with several steps and predict the outcome accurately. | | | | tools such as 2Email in Purple Mash. They know more than one way to report unacceptable content and contact. |
| Vocabulary | 3.1 action, algorithm, alert, bug, code block, code design, command, control, design mode, debug/debugging, event, flowchart, input, object, output, nesting, properties, sequence, timer, when clicked/ swiped, when key, computer simulation | | | 3.3 < > =, advanced mode, copy and paste, columns, cells, delete key, equals tool, spin tool, move cell tool, rows, spin tool, spreadsheet. 3.4 posture, top row keys, home row keys, bottom row keys, space bar. 3.6 Branching databases, data, database, question 3.7 simulations 3.8 graph, field, data, bar chart, block graph, line graph. 3.9 Animation, audio, design templates, entrance animation, font, media, presentation, presentation program, slide, slideshow, stock image, text box, text formatting, transition | | | 3.2 password, internet, blog, concept map, username, website, website, webpage, spoof website, PEGI rating 3.5 communication, email, compose, send, CC, attachment, formatting, report to the teacher, password, address book, save to draft. |

Bleak Hill Primary School

Computing Long Term Plan and Progression



| | | | |
|------------------|--|-------|------|
| Curriculum Links | | Maths | PHSE |
|------------------|--|-------|------|

| | Computer Science | | | | Information Technology | | Digital Literacy |
|---------------------------------------|---|--|---|--|---|---|---|
| Year 4 NC Statements | 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 | 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. | Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concern about content and contact. |
| PM outcomes | When turning a real life situation into an algorithm, | Children's use of timers to achieve repetition effects | Children's designs for their programs show that they are | Children recognise the main component parts of | Children understand the function, | Children are able to make improvements to | Children can explore key concepts relating |

Bleak Hill Primary School

Computing Long Term Plan and Progression



| | | | | | | | |
|--|--|--|---|--|--|--|--|
| | <p>the children's design shows that they are thinking of the required task and how to accomplish this in code using coding structures for selection and repetition. Children make more intuitive attempts to debug their own programs.</p> | <p>are becoming more logical and are integrated into their program designs. They understand 'if statements' for selection and attempt to combine these with other coding structures including variables to achieve the effects that they design in their programs. As well as understanding how variables can be used to store information while a program is executing, they are able to use and manipulate the value of variables. Children can make use of user inputs and outputs such</p> | <p>thinking of the structure of a program in logical, achievable steps and absorbing some new knowledge of coding structures. For example, 'if' statements, repetition and variables. They can trace code and use step-through methods to identify errors in code and make logical attempts to correct this. e.g. traffic light algorithm in 2Code. In programs such as Logo, they can 'read' programs with several steps and predict the outcome accurately.</p> | <p>hardware which allow computers to join and form a network. Their ability to understand the online safety implications associated with the ways the internet can be used to provide different methods of communication is improving.</p> | <p>features and layout of a search engine. They can appraise selected webpages for credibility and information at a basic level.</p> | <p>digital solutions based on feedback. Children make informed software choices when presenting information and data. They create linked content using a range of software such as 2Connect and 2Publish+. Children share digital content within their community, i.e. using Virtual Display Boards.</p> | <p>to online safety using concept mapping such as 2Connect. They can help others to understand the importance of online safety. Children know a range of ways of reporting inappropriate content and contact. Computing Progression N.C. Statements KS2 Year 4</p> |
|--|--|--|---|--|--|--|--|

Bleak Hill Primary School

Computing Long Term Plan and Progression



| | | | | | | | |
|-------------------|--|--------------------------------------|--|--|--|--|---|
| | | as 'print to screen'. e.g. 2Code. | | | | | |
| Vocabulary | 4.1 action, algorithm, alert, bug, code block, code design, coordinates, design mode, debug/debugging, event, flowchart, get input, object, output, If/else nesting, Prompt, sequence, timer, Variable. 4.5 LOGO, BK, FD, TR,LT, REPEAT, SETPC, SETPS, PU, PD 4.8 Motherboard, CPU, RAM, Graphics card, Network card, monitor, speakers, keyboard and mouse. | | | | 4.3 average, advance mod, copy and paste, columns, cells. Charts, equals tool, formula, formula wizard, move cell tool, random tool, rows, spin tool, spreadsheet, timer. 4.4 font, bold, italics, underline 4.5 animation, background, frame, flipbook, Onion skinning, stop motion, play, sound, video slip 4.7 Easter egg, internet, internet browser, search, search engine, spoof website, website 4.9 pitch, rhythm, pulse, tempo, dynamics, melody. Rippler, house music, texture | | 4.2 Computer virus, cookie, copyright, digital footprint, email, identity theft, malware, phishing, plagiarism, spam. |
| Curriculum Links | | | | | music | | PHSE |

| | | | |
|--|------------------|------------------------|------------------|
| | Computer Science | Information Technology | Digital Literacy |
|--|------------------|------------------------|------------------|

Bleak Hill Primary School

Computing Long Term Plan and Progression



| | | | | | | | |
|---|---|---|--|---|--|---|---|
| Year 5 NC Statements | 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. | 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. | Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concern about content and contact. |
| PM outcomes | Children may attempt to turn more complex real-life situations into algorithms for a program by deconstructing it into manageable parts. Children are able to test and | Children can translate algorithms that include sequence, selection and repetition into code with increasing ease and their own designs show that they are | When children code, they are beginning to think about their code structure in terms of the ability to debug and interpret the code later, e.g. the use of tabs to organise | Children understand the value of computer networks but are also aware of the main dangers. They recognise what personal information is and can explain how | Children search with greater complexity for digital content when using a search engine. They are able to explain in some detail how credible a | Children are able to make appropriate improvements to digital solutions based on feedback received and can confidently comment on the success of the | Children have a secure knowledge of common online safety rules and can apply this by demonstrating the safe and respectful use of a few different technologies and |

Bleak Hill Primary School

Computing Long Term Plan and Progression



| | | | | | | | |
|------------|---|---|-----------------------------------|--|---|---|--|
| | debug their programs as they go and can use logical methods to identify the approximate cause of any bug but may need some support identifying the specific line of code | thinking of how to accomplish the set task in code utilising such structures. They are combining sequence, selection and repetition with other coding structures to achieve their algorithm design. | code and the naming of variables. | this can be kept safe. Children can select the most appropriate form of online communications contingent on audience and digital content, e.g. 2Blog, 2Email, Display Boards | webpage is and the information it contains. | solution. e.g. Creating their own program to meet a design brief using 2Code. They objectively review solutions from others. Children are able to collaboratively create content and solutions using digital features within software such as collaborative mode. They are able to use several ways of sharing digital content, i.e. 2Blog, Display Boards and 2Email | online services. Children implicitly relate appropriate online behaviour to their right to personal privacy and mental wellbeing of themselves and others. |
| Vocabulary | 5.1 Action. Alert, Abstraction, Bug, Concatenation, Command, Control, Debug/Debugging, Design Mode, Event, Decomposition, If, Function, Get Input, Object, If/Else, Input, Physical System, Output, Repeat, Simulation, Selection, Sequence, String, Timer, Variable 5.5 animation, computer game, customise, evaluation, image, instructions, interactive, screenshot, texture, perspective, playability, | | | | 5.3, average, advanced mode, copy and paste, columns, cells, parts, equal, formula, formula wizard, equals tool, random tool, rows, spin tool, spreadsheet, timer | 5.2 online safety, smart rules, password, reputable, encryption, identify theft, | |

Bleak Hill Primary School

Computing Long Term Plan and Progression



| | | | |
|------------------|--|--|--|
| | | <p>5.4 avatar, binary tree(branching database), chart, collaborative, data, database, find, record, sort, group and arrange, statistics and reports, table.</p> <p>5.6 CAD, modelling, 3-D, viewpoint, polygon, 2-D, net, 3-D printing, points, template.</p> <p>5.7 audience, collaboratively, concept, concept map, connection, idea, node, thought, visual.</p> <p>5.8 copyright, cursor, document, font, inbuilt style, merge cells, paragraph formatting, readability, template, text formatting, text wrapping, word data, word processing tool.</p> | <p>shared image, plagiarism</p> <p>Citations, reference, bibliography.</p> |
| Curriculum Links | | maths | PHSE |

| | Computer Science | | | | Information Technology | | Digital Literacy |
|--------|----------------------------------|-----------------------------|-------------------------------------|-------------------------------|-------------------------|-----------------------------------|-------------------------------------|
| Year 6 | Design, write and debug programs | Use sequence, selection and | se logical reasoning to explain how | Understand computer networks, | Use search technologies | Select, use and combine a variety | Use technology safely, respectfully |

Bleak Hill Primary School

Computing Long Term Plan and Progression



| | | | | | | | |
|----------------------|---|--|--|---|--|---|--|
| NC Statements | that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. | repetition in programs; work with variables and various forms of input and output. | some simple algorithms work and to detect and correct errors in algorithms and programs. | including the internet; how they can provide multiple services, such as the World Wide Web, and the opportunities they offer for communication and collaboration. | effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. | 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. | and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concern about content and contact. |
| PM outcomes | Children are able to turn a more complex programming task into an algorithm by identifying the important aspects of the task (abstraction) and then decomposing them in a logical way using their | Children translate algorithms that include sequence, selection and repetition into code and their own designs show that they are thinking of how to accomplish the set task in code utilising such | Children are able to interpret a program in parts and can make logical attempts to put the separate parts of a complex algorithm together to explain the program as a whole. | 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. | Children readily apply filters when searching for digital content. They are able to explain in detail how credible a webpage is and the information it contains. They compare a range of digital content | Children make clear connections to the audience when designing and creating digital content. The children design and create their own blogs to become a content creator on the internet, e.g. | Children demonstrate the safe and respectful use of a range of different technologies and online services. They identify more discreet inappropriate behaviours through developing |

Bleak Hill Primary School

Computing Long Term Plan and Progression



| | | | | | | | |
|------------|---|--|--|--|---|--|---|
| | knowledge of possible coding structures and applying skills from previous programs. Children test and debug their program as they go and use logical methods to identify the cause of bugs, demonstrating a systematic approach to try to identify a particular line of code causing a problem. | structures, including nesting structures within each other. Coding displays an improving understanding of variables in coding, outputs such as sound and movement, inputs from the user of the program such as button clicks and the value of functions. | | | sources and are able to rate them in terms of content quality and accuracy. Children use critical thinking skills in everyday use of online communication. | Blog. They are able to use criteria to evaluate the quality of digital solutions and are able to identify improvements, making some refinements. | critical thinking, e.g. Respond activities. They recognise the value in preserving their privacy when online for their own and other people's safety. |
| Vocabulary | 6.1 action, alert, algorithm, code design, command, control, debug/debugging, concatenation, function, decomposition, develop, get input, event, input, launch command, if/else, output, objects, procedure, repeat, simulation, selection, sequence, string, timer user input, Variable. 6.5 text based adventure, concept map, debug, sprite, function. 6.6 Internet, World Wide Web, network, router, local area network (LEN), wide area network (WEN), network cables, wireless. | | | | 6.3 Average, advanced mode, copy and paste, columns, sell, chart, count (how many) tool, dice formula, formula wizard, equals tool, random tool, rows, move cell tool, spreadsheet, timer, spin tool. 6.4 audience, blog, blog page, blog post, collaborative, icon. | 6.2 Digital footprint, password, PEG rating, phishing, screen time, spoof website. | |

Bleak Hill Primary School

Computing Long Term Plan and Progression



| | | | |
|------------------|---|--|------|
| | 6.8 Base 10, base 2, binary, bit, byte, denary, digit, gigabyte (GB), integer, kilobyte (KB) machine code, megabyte (MD), nibble, switch, terabyte (TBC), transistor, Variable. | 6.7 audience, collaboration, concept map, database, quiz. 6.9 alignment, calculate, cell, call reference, chart, column, formula(e), function, range, row, spreadsheet, style, sum, value, workbook, text wrapping, | |
| Curriculum Links | | maths | PHSE |