



Computing Curriculum Overview

June 2023

Zoe Illingworth

Contents

National Curriculum	3
Curriculum Intent	5
Strands within the Computing Curriculum	6
Curriculum long-term overviews	
Early Years Foundation Stage	7
Year 1	8
Year 2	9
Year 3	10
Year 4	11
Year 5	12
Year 6	13

Computing programmes of study: key stages 1 and 2

National curriculum in England

Purpose of study

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.

Aims

The national curriculum for computing aims to ensure that all pupils:

- can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation
- can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems
- can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems
- are responsible, competent, confident and creative users of information and communication technology.

Attainment targets

By the end of each key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study.

Subject content

Key stage 1

Pupils should be taught to:

- 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.

Key stage 2

Pupils should be taught to:

- 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 concerns about content and contact.

Curriculum Intent for Computing

At Masefield we reflect the National Curriculum's belief that high-quality Computing education provides the foundations for understanding the world through the specific disciplines of Computer Science, Information Technology and Digital Literacy. Technology has changed our lives and is vital to the world's future prosperity, and all pupils should be taught essential aspects of the knowledge, methods, processes and uses of science. Through building up a body of key foundational knowledge and concepts, pupils should be encouraged to recognise the power of rational explanation and develop a sense of excitement and curiosity about natural phenomena and the world.

The school's long term plan for Computing sets out the content of teaching within in each year group. This is supported by the school's Computing progression document which demonstrates learning outcomes within each strand of development within a Computing unit. Short term planning details how this content is developed over a series of lessons within the unit of work.

At Masefield computing is an integral part of our school and our aim is that:

- Children will enjoy computing and will tackle applications with confidence and a sense of achievement;
- Children will develop independence and use computing skills in a purposeful way;
- It will be valued through adequate provision of resources, a long term vision set out in the School Improvement & Development Plan, along with appropriate Continuing Professional Development for all staff;
- Computing will take a cross-curricular approach;
- Children will develop practical skills and the ability to solve problems using computational thinking;
- Subject co-ordinators will familiarise themselves with relevant software and provide computing resources for their subject.

- **DC.EYFS.1** I can talk about my digital footprint
- Self-image and identity
- **DC.EYFS.2** I can recognise, online or offline, that anyone can say ‘no’ / ‘please stop’ / ‘I’ll tell’ / ‘I’ll ask’ to somebody who makes them feel sad, uncomfortable, embarrassed or upset
- Online Relationships
- **DC.EYFS.3** I can recognise some ways in which the internet can be used to communicate
 - **DC.EYFS.4** I can give examples of how I (might) use technology to communicate with people I know
- Online Reputation
- **DC.EYFS.5** I can identify ways that I can put information on the internet
- Online Bullying
- **DC.EYFS.6** I can describe ways that some people can be unkind online
 - **DC.EYFS.7** I can offer examples of how this can make others feel
- Health, wellbeing and lifestyle
- **DC.EYFS.8** I can identify rules that help keep us safe and healthy in and beyond the home when using technology
 - **DC.EYFS.9** I can give some simple examples of these rules

- **CS.EYFS.1** I can name items we control in the everyday environment
- **CS.EYFS.2** I can use every day technology
- **CS.EYFS.3** I can explore on screen activities – by clicking (cause and effect)
- **CS.EYFS.4** I know that an algorithm is a set of instruction that can solve a problem
- **CS.EYFS.5** create a simple algorithm for a BeeBot/Blue-Bots or remote control toy

- Managing on
- **IT.EYFS.1** finding in
 - **IT.EYFS.2** the intern
- Privacy and S
- **IT.EYFS.3** informati
 - **IT.EYFS.4** informati
- Copyright and
- **IT.EYFS.5**
 - **IT.EYFS.6**

Resources:
[Project Evolve](#) for Early Years Foundation Stage

Resources:
 Small world/real life resources throughout continuous provision (phones, scanner, microphones, cameras etc)
 BeeBots and mats
 Remote control toys
 Unplugged activities

Resources:
[Project Evolve](#)

Vocabulary:
 Digital citizen, world wide web, health and wellbeing.

Vocabulary:
 Algorithm.

Vocabulary:
 Internet, wor

Linked text:
 Webster’s Friend – Hannah Whaley

Linked text:
 Winnie and W

<p>Objectives:</p> <ul style="list-style-type: none"> • DC1.1 I can talk about my digital footprint <p><u>Self-image and identity</u></p> <ul style="list-style-type: none"> • DC1.2 I can recognise that there may be people online who could make me feel sad, embarrassed or upset • DC1.3 If something happens that makes me feel sad, worried, uncomfortable or frightened I can give examples of when and how to speak to an adult I can trust. <p><u>Online relationships</u></p> <ul style="list-style-type: none"> • DC1.4 I can give examples of when I should ask permission to do something online and explain why this is important. • DC1.5 I can explain why it is important to be considerate and kind to people online and to respect their choices <p><u>Online reputation</u></p> <ul style="list-style-type: none"> • DC1.6 I recognise that information can stay online and could be copied <p><u>Online bullying</u></p> <ul style="list-style-type: none"> • DC1.7 I can describe how to behave online in ways that do not upset others and can give examples <p><u>Health, wellbeing and lifestyle</u></p> <ul style="list-style-type: none"> • DC1.8 I can explain rules to keep us safe when we are using technology both in and beyond the home 	<p>Objectives:</p> <ul style="list-style-type: none"> • DL1.1 I can input text and images using a simple publishing program • DL1.2 I can type a simple sentence on the screen, making use of a word bank • DL1.3 I can format my typing in a number of ways (size, colour, font) • DL1.4 I know the main keys for typing e.g. shift, space bar, full stop • DL1.5 I can type simple sentences using the correct format (Capital letters, space and full stop) • DL1.6 I know how to make text bold/ italics / text alignment etc. • DL1.7 I can use simple keyboard shortcuts (Ctrl + B, I, U to edit my text style) • DL1.8 I can move to different places in the text using the arrow keys or mouse • DL1.9 I can use the ‘undo’ icon to fix a mistake 	<p>Objectives:</p> <ul style="list-style-type: none"> • CS.EYFS.1 I can name items we control in the everyday environment • CS.EYFS.2 I can use every day technology • CS.EYFS.3 I can explore on screen activities – by clicking (cause and effect) • CS.EYFS.4 I know that an algorithm is a set of instructions that can solve a problem • CS.EYFS.5 I can create a simple algorithm for a BeeBot/Blue-Bots or remote control toy 	<p>Focus: Algorithms</p> <p>Objectives:</p> <ul style="list-style-type: none"> • CS1.1 I can tell you what an algorithm is • CS1.2 I can plan a simple algorithm • CS1.3 I can give and follow commands, which include straight / turning commands – one at a time • CS1.4 I can debug a simple algorithm that is causing an unexpected outcome. • CS1.5 I can break an algorithm down into smaller parts (decomposing / chunking) • CS1.6 I can predict if a simple algorithm will work 	<p>Focus: Using the Internet</p> <p>Computing Pioneer</p> <p>Objectives:</p> <p><u>Managing online information</u></p> <ul style="list-style-type: none"> • IT1.1 I can give examples of how to find information using browsers, voice search etc. • IT1.2 I know how to use an adult if we see something sad, uncomfortable or worrying <p><u>Privacy and security</u></p> <ul style="list-style-type: none"> • IT1.3 I can explain how passwords are used to protect information • IT1.4 I can recognise how information is shared (e.g. where I live, my name, go to school) • IT1.5 I can explain why we should always ask a trusted adult for personal information and not myself or other people <p><u>Copyright and ownership</u></p> <ul style="list-style-type: none"> • IT1.6 I can explain how technology is used or ‘I designed it’ • IT1.7 I can save files with a name so that others can find them (e.g. filename, extension)
<p>Resources:</p> <p>Project Evolve for complete lesson plans on above objectives</p>	<p>Resources:</p> <p>Microsoft Word PurpleMash 2Type</p>	<p>Resources:</p> <p>Small world/real life resources throughout (phones, scanner, microphones, cameras etc) BeeBots and mats Remote control toys Unplugged activities</p>	<p>Resources:</p> <p>BeeBots and mats Remote control toys Unplugged activities</p>	<p>Resources:</p> <p>Project Evolve for complete lesson plans on above objectives</p>
<p>Vocabulary:</p> <p>Digital citizen, world wide web, health and wellbeing, digital footprint, identity, online bullying.</p>	<p>Vocabulary:</p> <p>Digital literacy, keyboard, caps lock, shift, space bar, document, cursor, insert.</p>	<p>Vocabulary:</p> <p>Algorithm.</p>	<p>Vocabulary:</p> <p>Algorithm, debugging, computer science, computational thinking.</p>	<p>Vocabulary:</p> <p>Personal information, information technology.</p>
<p>Linked text: Dot – Randi Zuckerberg</p>				<p>Linked text: Winnie Valerie Thomas and</p>

Autumn 1 – Digital Citizenship	Autumn 2 – Digital Literacy	Spring 1 – Consolidation of Computer Science from previous year	Spring 2 – New Computer Science Learning	Summer 1 – IT
<p>Objectives:</p> <ul style="list-style-type: none"> DC2.1 I can talk about my digital footprint <p><u>Self-image and identity</u></p> <ul style="list-style-type: none"> DC2.2 I can explain how other people may look and act differently online and offline DC2.3 I can give examples of issues online that might make me feel sad, worried, uncomfortable or frightened; I can give examples of how I might get help. <p><u>Online relationships</u></p> <ul style="list-style-type: none"> DL2.4 I can give examples of how someone might use technology to communicate with others they don't also know offline and explain why this might be risky. (e.g. email, online gaming, a pen-pal in another school / country) DL2.5 I can explain why I have a right to say 'no' or 'I will have to ask someone'. DL2.6 I can explain why I should always ask a trusted adult before clicking 'yes', 'agree' or 'accept' online <p><u>Online reputation</u></p> <ul style="list-style-type: none"> DL2.7 I can explain how information put online about me can last for a long time <p><u>Online bullying</u></p> <ul style="list-style-type: none"> DL2.8 I can explain what bullying is, how people may bully others and how bullying can make someone feel DL2.9 I can give examples of bullying behaviour and how it could look online <p><u>Health, wellbeing and lifestyle</u></p> <ul style="list-style-type: none"> DL2.10 I can explain simple guidance for using technology in different environments and settings, e.g. accessing online technologies in public places and the home environment. 	<p>Objectives:</p> <ul style="list-style-type: none"> DL2.1 I can use spell checker to check my work DL2.2 I can use the return/enter key to insert relevant line breaks DL2.3 I can save an image from the internet rather than using copy & paste DL2.4 I can add a page border DL2.5 I can insert a basic table DL2.6 I can select the page orientation that would best suit my work. e.g. portrait to landscape DL2.7 I can transfer these skills into PowerPoint 	<p>Focus: Algorithms</p> <p>Objectives:</p> <ul style="list-style-type: none"> CS1.1 I can tell you what an algorithm is CS1.2 I can plan a simple algorithm CS1.3 I can give and follow commands, which include straight / turning commands – one at a time CS1.4 I can debug a simple algorithm that is causing an unexpected outcome. CS1.5 I can break an algorithm down into smaller parts (decomposing / chunking) CS1.6 I can predict if a simple algorithm will work 	<p>Focus: Programs and Events</p> <p>Objectives:</p> <ul style="list-style-type: none"> CS2.1 I can tell you what a program is CS2.2 I can tell you what an event is CS2.3 I know programs need an event to begin CS2.4 I can give and follow instructions, which include direction and turning command – several in order CS2.5 I know that computers need precise instructions CS2.6 I can plan use logical reasoning to predict outcomes CS2.7 I can create a program that contains several commands for a device or software programme CS2.8 I can debug a program independently that has caused an unexpected outcome CS2.9 I can use different events to start my programs – timing / on click / on button press 	<p>Focus: Effective Sea</p> <p>Computing Pioneer</p> <p>Objectives:</p> <p><u>Managing online inf</u></p> <ul style="list-style-type: none"> IT2.1 I can use IT2.2 I can den IT2.3 I can exp IT2.4 I can exp IT2.5 I can exp IT2.6 I can exp <p><u>Privacy and security</u></p> <ul style="list-style-type: none"> IT2.4 I can exp IT2.5 I can exp IT2.6 I can exp <p><u>Copyright and owne</u></p> <ul style="list-style-type: none"> IT2.7 I can rec
<p>Resources:</p> <p>Project Evolve for complete lesson plans on above objectives</p>	<p>Resources:</p> <p>Microsoft Word Microsoft PowerPoint</p>	<p>Resources:</p> <p>BeeBots and mats Remote control toys Unplugged activities</p>	<p>Resources:</p> <p>BeeBots and mats Remote control toys Unplugged activities</p>	<p>Resources:</p> <p>Project Evolve for co objectives</p>
<p>Vocabulary:</p> <p>Digital citizen, world wide web, health and wellbeing, digital footprint, identity, online bullying, online reputation.</p>	<p>Vocabulary:</p> <p>Digital literacy, keyboard, caps lock, shift, space bar, document, cursor, insert, document, exclamation mark, question mark, table, row, column, border.</p>	<p>Vocabulary:</p> <p>Algorithm, debugging, computer science, computational thinking.</p>	<p>Vocabulary:</p> <p>Algorithm, debugging, computer science, computational thinking, decompose, program, event blocks.</p>	<p>Vocabulary:</p> <p>Personal informatio information technolo communication, priv</p>

<p>Objectives:</p> <ul style="list-style-type: none"> • DC3.1 I can talk about my digital footprint <p><u>Self-image and identity</u></p> <ul style="list-style-type: none"> • DC3.2 I can explain what is meant by the term ‘identity’ • DC3.3 I can explain how people can represent themselves in different ways online <p><u>Online relationships</u></p> <ul style="list-style-type: none"> • DC3.4 I can explain what is meant by ‘trusting someone online’, why this is different from ‘liking someone online’, and why it is important to be careful about who to trust online including what information and content they are trusted with • DC3.5 I can explain how someone’s feelings can be hurt by what is said or written online <p><u>Online reputation</u></p> <ul style="list-style-type: none"> • DC3.6 I can give examples of what anyone may or may not be willing to share about themselves online • DC3.7 I can explain the need to be careful before sharing anything personal <p><u>Online bullying</u></p> <ul style="list-style-type: none"> • DC3.8 I can describe appropriate ways to behave towards other people online and why this is important. • DC3.9 I can give examples of how bullying behaviour could appear online and how someone can get support. <p><u>Health, wellbeing and lifestyle</u></p> <ul style="list-style-type: none"> • DC3.10 I can explain why spending too much time using technology can sometimes have a negative impact on anyone, e.g. mood, sleep, body, relationships. 	<p>Objectives:</p> <ul style="list-style-type: none"> • DL3.1 I can type a number of sentences using the keyboard • DL3.2 I can use tab to indent paragraphs • DL3.3 I can use cut, copy and paste to re-order text • DL3.4 I can use keyboard shortcuts e.g. Ctrl + V, X, C to re-order text. • DL3.5 I can use bullet points, speech bubbles, auto shapes and text boxes • DL3.6 I can format wrapping/layout of text boxes and images in word • DL3.7 I can format images - move, rotate and re-size shapes • DL3.8 I can use the format tab to alter word art to enhance my work • DL3.9 I can use a variety of table tools (merge cells, fill, columns etc.) • DL3.10 I can explain the difference between save and save as • DL3.11 I can create a folder to save my work in • DL3.12 I can give a file a name to identify it • DL3.13 I can transfer these skills into PowerPoint 	<p>Focus: Programs and Events</p> <p>Objectives:</p> <ul style="list-style-type: none"> • CS2.1 I can tell you what a program is • CS2.2 I can tell you what an event is • CS2.3 I know programs need an event to begin • CS2.4 I can give and follow instructions, which include direction and turning command – several in order • CS2.5 I know that computers need precise instructions • CS2.6 I can plan use logical reasoning to predict outcomes • CS2.7 I can create a program that contains several commands for a device or software programme • CS2.8 I can debug a program independently that has caused an unexpected outcome • CS2.9 I can use different events to start my programs – timing / on click / on button press 	<p>Focus: Sequence</p> <p>Objectives:</p> <ul style="list-style-type: none"> • CS3.1 I know that a sequence is a list of instructions in a particular order • CS3.2 I know that if I change the sequence I may change the outcome of the program • CS3.3 I can sequence a simple program on Logo to produce a line drawing of a 2D shape • CS3.4 I can solve problems by decomposing them into smaller parts • CS3.5 I can detect and debug errors in my sequence • CS3.6 I can use and edit a pre-written program to achieve a specific outcome • CS3.7 I can use logical reasoning to explain what will happen next • CS3.8 I can predict how a change in a sequence may impact on the outcome of a program 	<p>Focus: Online Communication</p> <p>Computing Pioneer: Babbage</p> <p>Objectives:</p> <p><u>Managing online information</u></p> <ul style="list-style-type: none"> • IT3.1 I can describe phrases in search information on the internet • IT3.2 I can explain ‘belief’, an ‘opinion’ and give examples of how information is shared online, news stories <p><u>Privacy and security</u></p> <ul style="list-style-type: none"> • IT3.3 I can describe creating and keeping a password • IT3.4 I can give examples of how to only share information and choose to and not to share • IT3.5 I can explain how to not feel pressured by an adult. <p><u>Copyright and ownership</u></p> <ul style="list-style-type: none"> • IT3.6 I can explain how to not use someone else’s work from the internet without permission and how to solve problems this
<p>Resources:</p> <p>Project Evolve for complete lesson plans on above objectives</p>	<p>Resources:</p> <p>Microsoft Word Microsoft PowerPoint</p>	<p>Resources:</p> <p>BeeBots and mats Remote control toys Unplugged activities</p>	<p>Resources:</p> <p>CS First</p>	<p>Resources:</p> <p>Project Evolve for complete lesson plans on above objectives</p>
<p>Vocabulary:</p> <p>Digital citizen, world wide web, health and wellbeing, digital footprint, identity, online bullying, online reputation, self-image.</p>	<p>Vocabulary:</p> <p>Digital literacy, insert, cursor, border, layout, audience, background, animation, transition, shortcut, formatting.</p>	<p>Vocabulary:</p> <p>Algorithm, debugging, computer science, computational thinking, decompose, program, event blocks.</p>	<p>Vocabulary:</p> <p>Algorithm, debugging, computer science, computational thinking, decompose, program, event blocks, sequence, input, output.</p>	<p>Vocabulary:</p> <p>Personal information, information technology, communication, privacy, collaboration.</p>
<p>Linked text: Tek: The Modern Cave Boy – Patrick McDonnell</p>				<p>Linked text: Little Pea Lovelace – Maria Isaacs</p>

<p>Objectives:</p> <ul style="list-style-type: none"> • DC4.1 I can talk about my digital footprint <p><u>Self-image and identity</u></p> <ul style="list-style-type: none"> • DC4.2 I can explain how my online identity can be different to my offline identity • DC4.3 I can explain that others online can pretend to be someone else, including my friends, and can suggest reasons why they might do this <p><u>Online relationships</u></p> <ul style="list-style-type: none"> • DC4.4 I can give examples of how to be respectful to others online and describe how to recognise healthy and unhealthy online behaviours • DC4.5 I can explain how content shared online may feel unimportant to one person but may be important to other people’s thoughts feelings and beliefs <p><u>Online reputation</u></p> <ul style="list-style-type: none"> • DC4.6 I can describe how to find out information about others by searching online <p><u>Online bullying</u></p> <ul style="list-style-type: none"> • DC4.7 I can describe ways people can be bullied through a range of media (e.g. image, video, text, chat) • DC4.8 I can explain why people need to think carefully about how content they post might affect others, their feelings and how it may affect how others feel about them (their reputation) <p><u>Health, wellbeing and lifestyle</u></p> <ul style="list-style-type: none"> • DC4.9 I can explain how using technology can be a distraction from other things, in both a positive and negative way 	<p>Objectives:</p> <ul style="list-style-type: none"> • DL4.1 I can transfer my word processing skills into other multimedia packages e.g. PowerPoint • DL4.2 I can include importing images, hyperlinks and the use of sounds recorded • DL4.3 I can enter a basic mathematical formula into Excel • DL4.4 I can add basic mathematical formulas • DL4.5 I can use SUM to calculate the total of a set of numbers in a range of cells • DL4.6 I can change the look of a spreadsheet by using different formats e.g. text styles, colour, number format inc, currency and date, row and column heights • DL4.7 I can insert and delete columns and rows in a spreadsheet • DL4.8 I can use spreadsheets to create a graph • DL4.9 I can decide on the most appropriate form of graph for a data set and give reasons for my choice • DL4.10 I can interpret graphs of data collected from sensors 	<p>Focus: Sequence</p> <p>Objectives:</p> <ul style="list-style-type: none"> • CS3.1 I know that a sequence is a list of instructions in a particular order • CS3.2 I know that if I change the sequence I may change the outcome of the program • CS3.3 I can sequence a simple program on Logo to produce a line drawing of a 2D shape • CS3.4 I can solve problems by decomposing them into smaller parts • CS3.5 I can detect and debug errors in my sequence • CS3.6 I can use and edit a pre-written program to achieve a specific outcome • CS3.7 I can use logical reasoning to explain what will happen next • CS3.8 I can predict how a change in a sequence may impact on the outcome of a program 	<p>Focus: Repeats and loops</p> <p>Objectives:</p> <ul style="list-style-type: none"> • CS4.1 I know what a repeat is • CS4.2 I know that a repeat is used to repeat a set of instructions • CS4.3 I can use repeats in programs confidently • CS4.4 I can independently select repeat and sequence code to make my own program • CS4.5 I can detect and debug errors in algorithms and programs. • CS4.6 I can transfer my coding skills between software • CS4.7 I can explain why it is important to use the repeat function in a particular place in my sequence 	<p>Focus: Computer Networks</p> <p>Computing Pioneer</p> <p>Perlman</p> <p>Objectives:</p> <p><u>Managing online information</u></p> <ul style="list-style-type: none"> • IT4.1 I can analyse information and make judgements about it • IT4.2 I can describe how information technologies are used to understand what is going on and make decisions • IT4.3 I can explain how information technologies are used to make decisions and how to make decisions <p><u>Privacy and security</u></p> <ul style="list-style-type: none"> • IT4.4 I can describe how personal information is used in different contexts • IT4.5 I know how to use information technologies and the impact of their use, including asking for consent <p><u>Copyright and ownership</u></p> <ul style="list-style-type: none"> • IT4.6 When using content to use information technologies, consider who owns the content and the right to reuse it • IT4.7 I can give permission to use content which has been given permission from music, images, etc. • IT4.8 I can explain how information technologies are used to set standards (e.g. safety, security, etc.)
<p>Resources:</p> <p>Project Evolve for complete lesson plans on above objectives</p>	<p>Resources:</p> <p>Microsoft Word Microsoft PowerPoint Microsoft Excel</p>	<p>Resources:</p> <p>CS First</p>	<p>Resources:</p> <p>CS First</p>	<p>Resources:</p> <p>Project Evolve for complete lesson plans on above objectives</p>
<p>Vocabulary:</p> <p>Digital citizen, digital footprint, world wide web, self-Image and identity, online relationships, online reputation, online bullying, health and wellbeing.</p>	<p>Vocabulary:</p> <p>Digital literacy, layout, border, insert, formatting, spreadsheet, formula, SUM, AutoSum, sort, filter.</p>	<p>Vocabulary:</p> <p>Algorithm, debugging, computer science, computational thinking, decompose, program, event blocks, sequence, input, output.</p>	<p>Vocabulary:</p> <p>Algorithm, debugging, computer science, computational thinking, decompose, program, event blocks, sequence, input, output, repeat, loops, abstraction.</p>	<p>Vocabulary:</p> <p>Personal information, information technology, information communication, privacy, collaboration, network, sensor.</p>

<p>Objectives:</p> <ul style="list-style-type: none"> • DC5.1 I can talk about my digital footprint <p><u>Self-image and identity</u></p> <ul style="list-style-type: none"> • DC5.2 I can demonstrate responsible choices about my online identity, depending on context • DC5.3 I can explain how identity online can be copied, modified or altered <p><u>Online relationships</u></p> <ul style="list-style-type: none"> • DC5.4 I can explain how someone can get help if they are having problems and identify when to tell a trusted adult <p><u>Online reputation</u></p> <ul style="list-style-type: none"> • DC5.5 I can describe ways that information about anyone online can be used by others to make judgments about an individual and why these may be incorrect <p><u>Online bullying</u></p> <ul style="list-style-type: none"> • DC5.6 I can recognise online bullying can be different to bullying in the physical world and can describe some of those differences • DC5.7 I can describe the helpline services which can help people experiencing bullying, and how to access them (e.g. Childline/CEOP/ The Mix) <p><u>Health, wellbeing and lifestyle</u></p> <ul style="list-style-type: none"> • DC5.8 I can describe ways technology can affect health and well-being both positively (e.g. mindfulness apps) and negatively • DC5.9 I can describe some strategies, tips or advice to promote health and well-being with regards to technology • DC5.10 I recognise the benefits and risks of accessing information about health and well-being online and how we should balance this with talking to trusted adults and professionals 	<p>Objectives:</p> <ul style="list-style-type: none"> • DL5.1 I can select appropriate tools to add emphasis and effect to my work • DL5.2 I can explain why I have chosen my layout and formatting • DL5.3 I can review and edit my work and talk about the changes I made • DL5.4 I can explain why my work is suitable for the audience • DL5.5 I can create a database structure of my own and enter the data • DL5.6 I can prepare a data collection form and collect quality information • DL5.7 I can use databases to create a graph • DL5.8 I can select the most appropriate form of graph for a data set giving reasons for my choice • DL5.9 I can interpret graphs of data collected from a variety of sources 	<p>Focus: Repeats and loops</p> <p>Objectives:</p> <ul style="list-style-type: none"> • CS4.1 I know what a repeat is • CS4.2 I know that a repeat is used to repeat a set of instructions • CS4.3 I can use repeats in programs confidently • CS4.4 I can independently select repeat and sequence code to make my own program • CS4.5 I can detect and debug errors in algorithms and programs. • CS4.6 I can transfer my coding skills between software • CS4.7 I can explain why it is important to use the repeat function in a particular place in my sequence 	<p>Focus: Conditional/Selection</p> <p>Objectives:</p> <ul style="list-style-type: none"> • CS5.1 I can tell you what a conditional / selection is • CS5.2 I can plan algorithm and the write a program using the following: commands, sequence, repetition and selection / condition ('if...then') • CS5.3 I can detect and debug errors in more complex algorithms and programs • CS5.4 I can use selection to create games in which the user must make a choice • CS5.5 I can use my skills and understanding of conditional / selection in more than 2 programs 	<p>Focus: Evaluation</p> <p>Computing Pioneer Steve Wozniak</p> <p>Objectives:</p> <ul style="list-style-type: none"> • IT5.1 I know why it is important why it is important • IT5.2 I can identify components of a computer – RAM, motherboard and does <p><u>Managing online information</u></p> <ul style="list-style-type: none"> • IT5.3 I can explain why it is important why it is important • IT5.4 I can evaluate why it is important explain how to trustworthiness, adverts and search engines • IT5.5 I can explain information, reliability, validity, reliability <p><u>Privacy and security</u></p> <ul style="list-style-type: none"> • IT5.6 I can explain and demonstrate • IT5.7 I can explain and can give security <p><u>Copyright and ownership</u></p> <ul style="list-style-type: none"> • IT5.8 I can assess acceptable to • IT5.9 I can give permitted to be content can be
<p>Resources: Project Evolve for complete lesson plans on above objectives</p>	<p>Resources: Microsoft Word Microsoft PowerPoint Microsoft Excel</p>	<p>Resources: CS First</p>	<p>Resources: CS First</p>	<p>Resources: Project Evolve for complete lesson plans on above objectives</p>
<p>Vocabulary: Digital citizen, digital footprint, world wide web, self-image and identity, online relationships, online reputation, online bullying, health and wellbeing.</p>	<p>Vocabulary: Digital literacy, layout, border, insert, formatting, spreadsheet, formula, SUM, AutoSum, sort, filter, database, record, field, abstraction.</p>	<p>Vocabulary: Algorithm, debugging, computer science, computational thinking, decompose, program, event blocks, sequence, input, output, repeat, loops, abstraction.</p>	<p>Vocabulary: Algorithm, debugging, computer science, computational thinking, decompose, program, event blocks, sequence, input, output, repeat, loops, abstraction, selection, conditional.</p>	<p>Vocabulary: Information technology, internet, world wide web, collaboration, online, copyright, ownership, engine.</p>
<p>Linked text: Troll Stinks – leanne Willis</p>				<p>Linked text: The Bill</p>

<p>Objectives:</p> <ul style="list-style-type: none"> • DC6.1 I can talk about my digital footprint <p><u>Self-image and identity</u></p> <ul style="list-style-type: none"> • DC6.2 I can talk about the importance of asking until I get the help needed • DC6.3 I can describe issues online that could make anyone feel sad, worried, uncomfortable or frightened and explain how to get help if this happens. • DC6.4 I can identify and critically evaluate online content relating to gender, race, religion, disability, culture and other groups, and explain why it is important to challenge and reject inappropriate representations online. <p><u>Online relationships</u></p> <ul style="list-style-type: none"> • DC6.5 I can explain how sharing something online may have an impact either positively or negatively • DC6.6 I can describe how to be kind and show respect for others online including the importance of respecting boundaries regarding what is shared about them online and how to support them if others do not <p><u>Online reputation</u></p> <ul style="list-style-type: none"> • DC6.7 I can explain strategies anyone can use to protect their 'digital personality' and online reputation, including degrees of anonymity <p><u>Online bullying</u></p> <ul style="list-style-type: none"> • DC6.8 I can describe how to capture bullying content as evidence (e.g. screen-grab, URL, profile) to share with others who can help me <p><u>Health, wellbeing and lifestyle</u></p> <ul style="list-style-type: none"> • DC6.9 I can describe common systems that regulate age-related content (e.g. PEGI, BBFC, parental warnings) and describe their purpose • DC6.10 I can assess and action different strategies to limit the impact of technology on health (e.g. night-shift mode, regular breaks, correct posture, sleep, diet and exercise) 	<p>I can use skills I have learnt across multiple application programs, including:</p> <ul style="list-style-type: none"> • DL6.1 I can choose, select and use a combination of software to present my work • DL6.2 I can select appropriate tools to add emphasis and effect to my work • DL6.3 I can explain why I have chosen my layout and formatting • DL6.4 I can review and edit my work and talk about the changes I made • DL6.5 I can consider whether my work is suitable for the audience • DL6.6 I can draft and redraft my work by deleting, inserting and replacing text • DL6.7 I can interpret graphs of data collected from a variety of sources 	<p>Focus: Conditional/Selection</p> <p>Objectives:</p> <ul style="list-style-type: none"> • CS5.1 I can tell you what a conditional / selection is • CS5.2 I can plan algorithm and the write a program using the following: commands, sequence, repetition and selection / condition ('if...then') • CS5.3 I can detect and debug errors in more complex algorithms and programs • CS5.4 I can use selection to create games in which the user must make a choice • CS5.5 I can use my skills and understanding of conditional / selection in more than 2 programs 	<p>Focus: Variable</p> <p>Objectives:</p> <ul style="list-style-type: none"> • CS6.1 I can explain what a variable is • CS6.2 I can confidently use events, repeats, selection and variables • CS6.3 I can use a variable in a variety of programming software • CS6.4 I can confidently decompose a problem and methodically create a program to solve it, testing and adapting as I go • CS6.5 I can evaluate the effectiveness of my programming and suggest improvements • CS6.6 I confidently use the Blockly programming language 	<p>Focus: History and Computing Pioneers</p> <p>Objectives:</p> <p><u>Managing online information</u></p> <ul style="list-style-type: none"> • IT6.1 I can explain how information is stored and how results are retrieved • IT6.2 I can explain how different technologies are used to store and retrieve information • IT6.3 I can explain how information may present 'different faces' and the popularity of a product or service of those promoted • IT6.4 I can describe how to make it true, false or misleading information can be used in examples • IT6.5 I can define 'manipulation' and how someone can be manipulated (e.g. advertising, targeting for false information) <p><u>Privacy and security</u></p> <ul style="list-style-type: none"> • IT6.6 I can describe what should keep the data safe, e.g. auto-update, password • IT6.7 I can describe how to set privacy on applications and privacy settings • IT6.8 I can describe how to protect online content and information and strategies to handle information (e.g. scams, phishing) <p><u>Copyright and ownership</u></p> <ul style="list-style-type: none"> • IT6.9 I can describe how references to a product or service have used from
<p>Resources:</p> <p>Project Evolve for complete lesson plans on above objectives</p>	<p>Resources:</p> <p>Microsoft Word Microsoft PowerPoint Microsoft Excel</p>	<p>Resources:</p> <p>CS First</p>	<p>Resources:</p> <p>CS First</p>	<p>Resources:</p> <p>Project Evolve for complete lesson plans on above objectives</p>
<p>Vocabulary:</p> <p>Digital citizen, digital footprint, world wide web, self-Image and identity, online relationships, online reputation, online bullying, health and wellbeing</p>	<p>Vocabulary:</p> <p>Digital literacy, layout, border, insert, formatting, spreadsheet, formula, SUM, AutoSum, sort, filter, database, record, field, abstraction.</p>	<p>Vocabulary:</p> <p>Algorithm, debugging, computer science, computational thinking, decompose, program, event blocks, sequence, input, output, repeat, loops, abstraction, selection, conditional.</p>	<p>Vocabulary:</p> <p>Algorithm, debugging, computer science, computational thinking, decompose, program, event blocks, sequence, input, output, repeat, loops, abstraction, selection, conditional, variables.</p>	<p>Vocabulary:</p> <p>Information technology, internet, world wide web, collaboration, online, copyright, ownership, engine, cyber-crime</p>