Computing	Progression	Intent			Implementation		Impact	
Year group	Skills knowledge the children should already have	Autumn 1/2	Spring 1/2	Summer 1/2	How will this be taught?	What skills/knowledge will children have acquired?	Key vocabulary	Key Questions
1	Basic use of a computer – mouse, trackpad, launching and closing applications	Term 1a: Logging on, creating digital images *Use technology purposefully to create digital content* Term 1b: Using Word to create sentences, some tinkering with font, brief mention of password *Use technology purposefully to create digital content*	Term2a: Internet safety and safe searching **Use technology safely and respectfully; common uses of IT beyond school** Term2b:IT outside of school – discussions around supermarkets and home uses; beginning to tinker with word processing **Recognise common uses of Information Technology outside of school; using technology purposefully**	Term 3a: Algorithms, tinkering and debugging algorithms, use of Beebots and Roamer. ***Understand what algorithms are, create and debug simple programs; predicting behaviour*** Term3b: Designing and making cards *Use technology purposefully, common uses of IT beyond school,*	• Using Paint to create digital images and digital cameras to take photos • Using Word to develop typing skills • Use of Google Chrome to understand searching • Developing software skills to take information from one program to another • Class discussions about familiar locations and uses of information technology • Using Word to begin to become familiar with simple processes	• Use of unfamiliar technology • Understanding how to remain safe online and safe searching • Tinkering skills with unfamiliar technology • Beginning to understand the internet and its uses • Understanding algorithms • Creating and debugging simple algorithms • Beginning to understand uses of IT outside of school	Software, internet, safe, digital, font, click, mouse, left, right, login, password, image, save, close, log off, debug, algorithm, tinker, predict, beebot, roamer, design, print, create, edit, load, local based vocabulary.	What do we use the internet for? What is the internet? Why do we need to login? How can we stay safe when using the internet? What should we do when we don't feel safe? How can you change the font in Word? How can we change an algorithm if it doesn't work? What is an algorithm? How can we edit an image? What IT would you find in a supermarket? Why would they have this technology? What is technology?

Year group	Skills knowledge the children should already have	Autumn 1/2	Spring 1/2	Summer 1/2	How will this be taught?	What skills/knowledge will children have acquired?	Key vocabulary	Key Questions
2	Use of unfamiliar technology, understanding how to remain safe online and safe searching, Tinkering skills with unfamiliar technology, beginning to understand the internet and its uses, understanding algorithms, creating and debugging simple algorithms	Term1a: Researching – using search to find information *Organise digital content, use technology respectfully, common uses of IT outside school.* Term1b: Games testing *Understanding algorithms, predicting, looking into programmes, using IT safely*	Term2a: Using digital media and managing content *Manage and organise digital content* Term2b: Same as Autumn 1	Term 3a – Using email communications *Use technology safely and retrieve information* Term 3b – Using Scratch to develop sprites and backgrounds and begin to understand how to code *Implement algorithms on digital devices, debug simple programs*	• "Switched On" programme – looking at safe search and secure web information • "Switched On" programme – looking at games testing and picking up how to develop algorithm understanding, predicting and developing ideas • "Switched On" – using digital cameras to take pictures and manipulate these to make them better, storing images on secure platforms • "Switched On" – using email account and safe use of sending and receiving emails • "Switched On" using Scratch to develop sprites and begin code understanding	• Using safe searching • Creating information that can be used to inform others • Understanding how games work and how algorithms give computers instructions to complete • How to use a digital device • How to store pictures safely • Whether some picture technology is useful • Using email accounts • Sending and receiving emails • Using emails safely	Algorithm, testing, research, Google, Wikipedia, search engine, results, tinkering, develop, directory, file, folder, server, email, phising, sending receiving, authentic, attachment, reply, @, Scratch, module, code, sprite, background, command, prompt, go, stop, debug, change, develop, improve	• How can you use a search engine safely? • What is the internet? • How can we tell if a site is safe and accurate? • What makes a game work? • Why does a game do a certain thing? • What makes a good photo? • Is facial recognition software a good idea? • How can we make sure our emails are appropriate? • What can we do about emails we think are fake?

Year group	Skills knowledge the children should already have	Autumn 1/2	Spring 1/2	Summer 1/2	How will this be taught?	What skills/knowledge will children have acquired?	Key vocabulary	Key Questions
3	Improving skills in internet using, safe searching, understanding the concept of online safety and how we can stay safe online. What to do when we need help online, developing skills in basic use of software, some coding knowledge, beginning to understand e-comms and how this works, how to use tech safely and appropriately. Be able to tinker with a programme to find out how it works	Term 1a – Animation using Scratch **Design and debug programs that accomplish specific goals including controlling or stimulating physical systems; solve problems by decomposing them into smaller parts** Term 1b – Fixing Bugs- **Design and debug programs that accomplish specific goals including controlling or stimulating physical systems; solve problems by decomposing them into smaller parts**	Term 2a – Presenting information and Online safety -**Select, use and combine a variety of software to design and create content that accomplishes given goals including presenting information** Term 2b - Understanding computers networks *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*	Term 3a – Using and understanding Word - **Select, use and combine a variety of software to design and create content that accomplishes given goals including presenting information** Term 3b – Using pervious WP skills to create holiday brochure - **Select, use and combine a variety of software to design and create content that accomplishes given goals including presenting information**	• "Switched On" We are animators. Implementing and controlling physical systems • "Switched On" We are bug fixers. Implementing, controlling and debugging physical systems • Revisiting online safety and using Comic Life to create information for others • Series of lessons learning to use areas of Word to begin to understand word processing. • "We are network engineers" – Rising Stars • Using previous skills taught to create an interesting and vivid Italian holiday brochure	• Using familiar and unknown software to develop and create ideas. • Planning, designing , implementing, improving and debugging • Analysing unfamiliar and familiar software to locate problems and suggest fixes • Refining understanding of online safety • Planning and creating ideas using unfamiliar software • Exploring basic computer networks and how they work • Understanding network protection • Furthering WP skills and using technology to design, edit and create.	Animation, movement, sound, design, develop, produce, debug, character/sprite, soundtrack, record, debug, analyse, check, software, fix, logic, method, online safety, comic strip, develop, modify, adjust, create, language, click, right click, network, DNS, data, cable, wired, wireless, LAN, domain, connections, send, receive	What is animation? How can you make a clear design? Why have you chosen your particular design? What sounds fit with the character you have designed? How could you improve you animation? What is software? What is debugging? How do you debug in everyday life? Why do we need to debug software? What is a network? Why do we need them? How is data sent and received? How can we protect out network? Why does a brochure need to be colourful? How can we use features of Word to make our brochure stand out from others?

Year group	Skills knowledge the children should already have	Autumn 1/2	Spring 1/2	Summer 1/2	How will this be taught?	What skills/knowledge will children have acquired?	Key vocabulary	Key Questions
4	Online safety awareness regarding safe searching and how to report inappropriate images/sites etc. Basic use of software including MS products, basic coding knowledge, how to use tech safely and appropriately, tinkering with programmes, planning ideas, debugging problems, basic understanding of networking and how data is sent and received	Term 1 a- Understanding computers and networks - *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* Term 1 b – Explore algorithms, tinkering with software and using software to produce output - *use logical reasoning to explain how some simple algorithms work, 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*	Term 2a – Designing and creating - *design, write and debug programmes that accomplish specific controls including controlling or simulating systems; solve programs by decomposing them into smaller parts* Term 2b – Google Internet Legends – *using technology safely and responsibly; recognising acceptable and unacceptable behaviour and how to report concerns*	Term 3a – We are meteorologists - *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, system and content that accomplish given goals, including collecting, analysing, evaluating and presenting a range of data and information* Term 3b – Purple Mash syllabus TBC	• Using school networking equipment to investigate how networks and computer work. Understanding the job of each device, debugging potential issues. Understanding how WWW and Internet are different • Using Word to explore algorithms and tinkering to produce a written set on instructions. • Using Scratch to create a maze game on 2 levels. Creating ideas and designs, editing ideas, developing backgrounds and use of sprite and coding the maze • Using the Google Internet Legends program of work – using the 4 domains to teach a variety of online safety topics. • Rising Stars – We are meteorologists. Using technology to view, record and analyse weather data obtained from a variety of sources.	• Understanding computer networks • Understanding how the WWWs and how information travels • Components are needed to create a network • Using familiar software to produce output • Tinkering skills based on previous knowledge • Furthering understanding of algorithms • Designing, debugging and coding skills using Scratch • Furthering online safety skills to include phising and social media • Be able to find and access a variety of weather information sources • Use different meteorological instruments to record weather information • Use software to record the information and present	Network, server, domain, RAM, hard drive, memory, Gigabytes, service, password, www, internet, communication, tinker, algorithm, design ,debug, edit, code, phishing, password, complexity, symbols, personal data, meterological, instruments, record, climate, weather, precipitation, USB, data, collate,	What is a computer? What is inside? What jobs do each components do? What is a network? What is a server? Why do we need passwords to protect our network? What is the internet? How does it work? Why do computers need algorithms? How can we ensure we are responsible users of technology? Why do programmers need to debug?

Year group	Skills knowledge the children should already have	Autumn 1/2	Spring 1/2	Summer 1/2	How will this be taught?	What skills/knowledge will children have acquired?	Key vocabulary	Key Questions
5	Secure Online safety awareness regarding safe searching and how to report inappropriate images/sites etc. Progressing in the use of software including MS products, progressing coding knowledge, how to use tech safely and appropriately, tinkering with programmes, planning ideas, debugging problems, basic understanding of networking and how data is sent and received, secure understanding of algorithms and why computers use them.	Term 1 a – Explore algorithms, tinkering with software and using software to produce output - *use logical reasoning to explain how some simple algorithms work, 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* Term 1a/b - Designing and creating - *design, write and debug programmes that accomplish specific controls including controlling or simulating systems; solve programs by decomposing them into smaller parts*	Term 2a – Creating information pages linked to topic. **Select, use and combine a variety of software to design and create content that accomplishes given goals including presenting, analysing and collecting information** Term 2b – Using software to create art. **Select, use and combine a variety of software to design and create content that accomplishes given goals including presenting, analysing and collecting information**	Term 3a – Creating simple blogs. **Select, use and combine a variety of software to design and create content that accomplishes given goals including presenting, analysing and collecting information** *also using technology safely and responsibly; recognising acceptable and unacceptable behaviour and how to report concerns* Term 3b – Designing and creating sculptures, displaying virtually - **Select, use and combine a variety of software to design and create content that accomplishes given goals including presenting, analysing and collecting information**	• Assessing WP skills and using researched information to create a poster • Using Scratch to design and create a game; inc debugging and assessing own work and others • Researching information for topic related poster. Designing and creating using Office. • Using unfamiliar software to create art pieces • Investigating blogs and creating pieces for class blog, understanding safe use of blogging • Designing and creating sculptures to place in a virtual Art gallery, creating Morris wallpaper using repetition patterns	• Using unfamiliar software • Designing, creating and displaying ideas • Researching information • Putting opinions online • Creating and uploading blogs inc media	Blog, blogger, blogging, research, google, debug, code, design, analyse, present, collect, virtual, detail, extracting 3d, 2d, media, upload,	Why are search results ordered? Are all results good results? What makes an informative poster? How can we use technology to create a piece that people will notice and read? What is a blog? Why do we need to be careful about our blog content? How can we ensure that comments are appropriate? What would we do if we encountered inappropriate content? How many ways can you think of that technology creates art? What kind of algorithms are in place in art software? How could you work out how to use a piece of software that you`ve never used before? What does virtual mean? How can someone in another country see your virtual gallery?

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6	Coming into Y6 children should have a good awareness of technology; its uses and dangers. Good understanding of coding and how to manipulate systems using Scratch. Chd should be able to tinker with a range of unfamiliar software and solve problems using logical steps. Chd should be able to browse the internet safely and know how to report inappropriate content or comments; they should be beginning to be selective in the source they trust for information	Term 1a/b - tinkering with software and using software to produce output *and* designing and creating presentation *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*	Term 2a – Online safety when searching. **Use search technologies effectively, appreciate how results are selected and ranked, and be discerning about digital content** Term 2b – Spag.com work for SAT`s	Term 3a/b – Work for Y6 production, using previous skills to create posters and programmes for the production - *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*	• Recapping and extending knowledge of Word processing and typing • Creating presentations and giving these to the class • Researching search engines – how do they work, how are results produced, how to they work • Investigating passwords, why are they needed and why does complexity make a password harder to crack?	• Basic computational skills in word processing; the ability to produce a document, edit and export. • Selecting appropriate materials for presentations – being selective on content • Deeper understanding of how search engines work and how to choose trusted sources	Search engines, data, web pages, results, embed, metadata, selective, trusted, server, network,	How can we features of Word/PowerPoint to edit and improve out work? What makes a presentation appealing to the viewer? What is the purpose of creating an attractive programme? How can technology help to put on a production?