

Rothwell St. Mary's Whole School Intentions for Computing

Intent: the school's curriculum sets out the knowledge and skills that pupils will gain at each stage

Implementation: the way that the curriculum developed or adopted by the school is taught and assessed in order to support pupils to build their knowledge and to apply that knowledge as skills

Impact : the outcomes that pupils achieve as a result of the education they have received



The Computing National Curriculum : Subject Leader: Mrs S Sweeney & Miss O Drury

	Autumn One	Autumn Two	Spring One	Spring Two	Summer One	Summer Two	Clearly defined end point
Reception	Understanding the World – Technology will be taught throughout the year through purposeful interactions with children in the following way: <i>A Unique Child</i> (through 1:1 observations): <ul style="list-style-type: none"> • Completes a simple program on a computer. • Uses ICT hardware to interact with age-appropriate computer software. <i>Positive Relationships</i> (working alongside children within the environment): <ul style="list-style-type: none"> • Encourage children to speculate on the reasons why things happen or how things work. • Support children to coordinate actions to use technology, for example, call a telephone number. • Teach and encourage children to click on different icons to cause things to happen in a computer program. <i>Enabled Environments</i> (what the adult will enhance the learning environment with): <ul style="list-style-type: none"> • Provide a range of materials and objects to play with that work in different ways for different purposes, for example, egg whisk, torch, other household implements, pulleys, construction kits and tape recorder. • Provide a range of programmable toys, as well as equipment involving ICT, such as computers. 						Early Learning Goal: Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for purposes.

Key Stage One National Curriculum Overview:
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

<p>Year One</p>	<p>E-Safety: introduction, what is safety? Gain insight into what children know about how technology can be dangerous and strangers can be on our devices as well as in person.</p> <p>Safe use of technology: electronic devices</p> <p>Using Technology: what is technology – not just using computers!</p> <p>NC Objectives: 1)Recognise common uses of information technology beyond school 2) Use technology safely and respectfully</p>	<p>E-Safety: PSHE - Keeping safe and managing risk: Feeling safe</p> <p>Using the internet: E-safety – keeping safe, conducting a safe search for pictures and information to create our own Home Sweet Home images.</p> <p>Programming and control: toys and devices – beebots (sequencing and instructions)</p> <p>NC Objectives: 1)Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions</p>	<p>Digital Media: taking photographs, begin to record video, begin to record sounds to create own Kings and Queens videos using movie maker app with adult support. Use the set programme to add a photo or add a sound click where instructed.</p> <p>E-Safety: sharing images/videos. How and were do we did this? Link the two and show children how the photos and videos they have taken can be shared on our school website.</p> <p>NC Objectives: 1)Understand what algorithms are; how they are implemented as programs on digital</p>	<p>Creating and Publishing: add text to photos, graphics, drawings and sounds. Linked to Geography work on Great Britain, children will find and image and add text to this using iPad software.</p> <p>E-Safety: Cyber-bullying (as part of PSHE, scenario based)</p> <p>NC Objectives: 1)Use technology purposefully to create, organise, store, manipulate and retrieve digital content 2) Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns</p>	<p>Using Data: sort objects into groups using a given or chosen criteria. Following maths WRH unit for statistics, children will categorise their objects and take photographs, with a heading, to show their data.</p> <p>NC Objectives: 1)Use technology purposefully to create, organise, store, manipulate and retrieve digital content 2) 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</p>	<p>E-Safety: D:Side</p> <p>Communicating and collaborating online: class email and respond to messages</p> <p>E-Safety: cyber-bullying, sharing personal information (as part of PSHE, scenario based)</p> <p>Modelling and simulations – relate to fire of London.</p> <p>NC Objectives: 1)Use logical reasoning to predict the behaviour of simple programs 2)Use technology purposefully to create, organise, store, manipulate and retrieve digital content 3)Recognise common uses of information</p>	<p>Recognise common uses of technology in the home and school environment. Use technology purposefully to create digital content. Understand where to go for help and support when he/she has concerns about content or contact on the internet or other online technologies. Predict behaviour of simple programs. Understand what algorithms are and how they are implemented on digital devices.</p>
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		2) 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	devices; and that programs execute by following precise and unambiguous instructions 2) 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	about content or contact on the internet or other online technologies	internet or other online technologies	technology beyond school 4) 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 Two	<p>E-safety : develop understanding (as part of PSHE, scenario based)</p> <p>Using technology: develop keyboard skills, typing speed using programmes and games. Children to use BBC Dance Mat Typing to follow simple algorithms and develop two hand typing skills.</p> <p>Safe use of technology : posture</p>	<p>Programming and control: Scratch Understand algorithms</p> <p>Create and debug simple programs</p> <p>Children to work on Scratch software to follow simple instructions to find the bug in the programme and debug it.</p>	<p>Digit media: develop use of video, create basic images, continue to take photographs. Children to conduct a safe search to find an image or take an image of something from their royalty project and edit the image, combining images and adding text to improve the information shared.</p> <p>E-Safety: sharing images/videos (as part of PSHE, scenario based)</p>	<p>Using data: graphs, pictograms, branching databases. Children to use data from their historical topic on Florence Nightingale and display this using one of the data sets given.</p> <p>Using the internet: link to topic – how can this be used to help us research Mary Seacole or Florence Nightingale?</p> <p>E-safety: safe searching (as above). What to do if we see something that shouldn't be there.</p>	<p>E:Safety: PSHE - Keeping safe and managing risk: Feeling safe</p> <p>Modelling and simulations: exploring changing variables. Basic introduction to Stop Motion.</p> <p>Communicating and collaborating online: looking at different ways messages can be sent.</p>	<p>E-Safety: D:Side</p> <p>Communicating and collaboration: continue to contribute to class email, incorporate postcards – write to Year 2 children in another school.</p> <p>E-Safety : cyber-bullying, sharing personal information (as part of PSHE, scenario based)</p>	<p>Recognise common uses of information technology beyond school. Use technology purposefully to create, organise, store, manipulate and retrieve digital content. Use technology purposefully to create digital content comparing the benefits of different programs. Use technology safely and keep personal information private. Use logical reasoning to predict the behaviour of simple programs. Create and debug simple programs.</p>

				Creating and publishing: word processing (changing font, colour, adding images etc) saving and loading work			Understand that programs execute by following precise and unambiguous instructions.
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Key Stage Two National Curriculum Overview:

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.

Computing in KS2 is taught by Junior Jam. This is taught on a 2 year cycle and below identifies where this would take place.

NC objectives are repeated and built upon across the two year cycle. This ensures knowledge is revisited and retained. Children learn skills across a variety of scenarios, devices, software and across subjects.

As identified levels overlap across year groups to ensure children have full coverage.

	Year One		Year Two				
Year Three	iJam (level 1) iSong: Introduction to basic song writing on a programme, 'GarageBand'. Skills: -Use and select software - Capture video for a purpose.	E-Safety – PSHE: Keeping safe and managing risk: Bullying – see it, say it, stop it iJam (level 2) iDance: Through their composition children will use the concept of 'Audio Spectrum' participants will	iProgram (level 1) iLogic: Student with use games to learn key coding skills. They will use steps, loops, basic logic and functions such as 'if statements. This will progress into using code to create 'Spyrograph' style artwork.	iProgram (level 2) Advances iFunction: iFunction looks at creating programs to solve real world problems. Learners will create games, control solutions and other problems mimicking real application of programming. Skills:	iAnimate (level 1) iStop Motion: Students will create their own cartoon strip using the app 'iStopMotion'. Skills: -Use images that they have sourced / captured / manipulated as part of a bigger project	E-Safety: D:Side iAnimate (level 2) Advances iFX: Learners will be taught how to create an animation using chroma key and how to record and edit their own sound effects ready to be included in their finished animations.	Recognise familiar forms of input and output devices and how they are used. Make efficient use of familiar forms of input and output. Understand that computers networks enable the sharing of data.

	<p>-Choose which clips to keep and which to discard.</p> <p>NC Objectives: 1)Use technology safely, respectfully and responsibly; know a range of ways to report concerns and inappropriate behaviour. 2)Select, use and combine a variety of software (including internet services) on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information.</p>	<p>begin to use stereo-panning and level controls to improve their music's balance and texture.</p> <p>Skills: -Capture video for a purpose. -Choose which clips to keep and which to discard. -Trim and arrange clips to convey meaning.</p> <p>NC Objectives: 1) Use technology safely, respectfully and responsibly; know a range of ways to report concerns and inappropriate behaviour. 2)Select, use and combine a variety of software (including internet services) on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information.</p>	<p>Skills: -Create simple functions -Write code in a simple sequence to produce a desired product</p> <p>NC Objectives: 1)Design, write and debug programmes that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. 2)Use sequence, selection and repetition in programmes; work with variables and various forms of input and output. 3)Use logical reasoning to explain how some algorithms work and to detect and correct errors in algorithms and programs.</p>	<p>-Create simple functions -Write code in a simple sequence to produce a desired product</p> <p>NC Objectives: 1)Design, write and debug programmes that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. 2)Use sequence, selection and repetition in programmes; work with variables and various forms of input and output. 3)Use logical reasoning to explain how some algorithms work and to detect and correct errors in algorithms and programs.</p>	<p>NC Objectives: 1)Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. 2)Use technology safely, respectfully and responsibly; know a range of ways to report concerns and inappropriate behaviour. 3) Select, use and combine a variety of software (including internet services) on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information.</p>	<p>Skills: -Use images that they have sourced / captured / manipulated as part of a bigger project. Begin to edit these where appropriate.</p> <p>NC Objectives: 1)Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. 2)Use technology safely, respectfully and responsibly; know a range of ways to report concerns and inappropriate behaviour. 3) Select, use and combine a variety of software (including internet services) on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information.</p>	<p>Understand that the internet is a large network of computers and that information can be shared. With support, select and use software.</p> <p>Use technology safely and respectfully, keeping personal information private, and recognising acceptable and unacceptable behaviour.</p> <p>Use simple search technologies and recognise some sources are more reliable.</p> <p>Design, write and debug programs that control or simulate virtual events.</p>
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<p>Year Four</p>	<p>iJam (level 2)</p> <p>iDance: Through their composition children will use the concept of 'Audio Spectrum' participants will use stereo-panning and level controls to improve their music's balance and texture.</p> <p>Skill: -Capture video for a purpose. -Choose which clips to keep and which to discard. -Trim and arrange clips to convey meaning. -Add titles, credits, slide transitions, special effects.</p> <p>NC Objectives: 1) Use technology safely, respectfully and responsibly; know a range of ways to report concerns and inappropriate behaviour. 2)Select, use and combine a variety of software (including internet services) on a range of digital devices to accomplish given goals, including</p>	<p>iJam (level 3)</p> <p>iHip-Hop Throughout iHip-Hop children will become more independent programming 'GarageBand' but also begin to incorporate other apps to add sound sampling, loops and drum rhythms.</p> <p>Skill: -Capture video for a purpose. -Choose which clips to keep and which to discard. -Trim and arrange clips to convey meaning. -Add titles, credits, slide transitions, special effects.</p> <p>NC objectives: 1) Use technology safely, respectfully and responsibly; know a range of ways to report concerns and inappropriate behaviour. 2)Select, use and combine a variety of software (including internet services) on a range of digital devices to</p>	<p>iProgram (level 2)</p> <p>Advances iFunction: iFunction looks at creating programs to solve real world problems. Learners will create games, control solutions and other problems mimicking real application of programming.</p> <p>Skills: -Create simple functions -Write code in a simple sequence to produce a desired end product.</p> <p>NC Objectives: 1)Design, write and debug programmes that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. 2)Use sequence, selection and repetition in programmes; work with variables and various forms of input and output. 3)Use logical reasoning to explain how some algorithms</p>	<p>E-Safety – PSHE: Keeping safe and managing risk: Playing safe</p> <p>iProgram (level 3)</p> <p>iDebug: Children will search through a broken programme and repair mistakes to make the programme function correctly.</p> <p>Skills: -Write simple functions -Find errors in programming -Develop own programming -Run, test, evaluate, resolve</p> <p>NC Objectives: 1)Design, write and debug programmes that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. 2)Use sequence, selection and repetition in programmes; work with variables and</p>	<p>iAnimate (level 2)</p> <p>Advances iFX: Learners will be taught how to create an animation using chroma key and how to record and edit their own sound effects ready to be included in their finished animations.</p> <p>Skills: -Use images that they have sourced / captured / manipulated as part of a bigger project. Begin to edit these where appropriate.</p> <p>NC Objectives: 1)Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. 2)Use technology safely, respectfully and responsibly; know a range of ways to report concerns and inappropriate behaviour. 3)Select, use and combine a variety</p>	<p>E-Safety: D:Side</p> <p>iAnimate (level 3)</p> <p>Advanced i2D: Students will learn about vector animation and need to think about creating an animation that not only looks at the design and story but how characters move and interact.</p> <p>Skills: -Use vector animation and design for 2D animation -Assign motion paths and layering vectors.</p> <p>NC Objectives: 1)Select, use and combine a variety of software (including internet services) on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information. 2) Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in</p>	<p>Use other input devices such as cameras or sensors.</p> <p>Understand what servers are and how they provide services to a network.</p> <p>With support, select and use a variety of software on a range of digital devices.</p> <p>With support, select use and combine a variety of software on a range of digital devices to accomplish given goals.</p> <p>Use technology responsibly and understand that communication online may be seen by others.</p> <p>Understand how results are selected and ranked by search engines.</p> <p>Decompose programs into smaller parts.</p> <p>Use logical reasoning to detect and correct errors in algorithms and programs.</p>
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	collecting, analysing, evaluating and presenting data and information.	accomplish given goals, including collecting, analysing, evaluating and presenting data and information.	work and to detect and correct errors in algorithms and programs.	various forms of input and output. 3)Use logical reasoning to explain how some algorithms work and to detect and correct errors in algorithms and programs.	of software (including internet services) on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information.	evaluating digital content.	Select, use and combine a variety of software, systems and content that accomplish a given goal.
Year Five	<p>iJam (level 3)</p> <p>iHip-Hop Throughout iHip-Hop children will become more independent programming 'GarageBand' but also begin to incorporate other apps to add sound sampling, loops and drum rhythms.</p> <p>Skills: -Collect audio from a variety of resources including own recordings and internet clips. -Create a multi-track recording using effects.</p> <p>NC objectives: 1) Use technology safely, respectfully and responsibly; know a range of ways to report concerns and</p>	<p>iJam (level 4)</p> <p>iRemix Throughout iRemix pupils will learn about remixing and sampling using different techniques and software.</p> <p>Skills -Collect audio from a variety of resources including own recordings and internet clips. -Create a multi-track recording using effects. -Edit and refine their work to improve outcomes.</p> <p>NC Objectives: 1)Use technology safely, respectfully and responsibly; know a range of ways to report concerns and</p>	<p>E-Safety – PSHE: Keeping safe and managing risk: When things go wrong</p> <p>iProgram (level 3)</p> <p>iDebug: Children will search through a broken programme and repair mistakes to make the programme function correctly. They will then progress to create programs of their own design.</p> <p>Skills: -Write simple functions -Find errors in programming -Develop own programming -Run, test, evaluate, resolve</p> <p>NC Objectives:</p>	<p>iProgram (level 4)</p> <p>iDevelop : After learning main programming skills pupils will apply these skills in new software : 'Swift'. Chd will learn how to manipulate written code and give the students the opportunity to create a final project and demonstrate their abilities.</p> <p>Skills : -Independent create sequences of commands to control devices in response to sensing (i.e. use inputs as well as outputs). -Design, build, test, evaluate and modify the system; ensuring that it is fit for purpose.</p>	<p>iAnimate (level 3)</p> <p>Advanced i2D: Students will learn about vector animation and need to think about creating an animation that not only looks at the design and story but how characters move and interact.</p> <p>Skills: -Use vector animation and design for 2D animation -Assign motion paths and layering vectors.</p> <p>NC Objectives: 1)Select, use and combine a variety of software (including internet services) on a range of digital devices to accomplish given</p>	<p>E-Safety: D:Side</p> <p>iAnimate (level 4)</p> <p>iFinance iFinance is an advanced course to Excel and data processing. Students are tasked with producing a movie. Using the software they must input data to make important production decisions for their movie.</p> <p>Skills: -Use advanced functions within Excel.</p> <p>NC Objectives: 1)Design, write and debug programmes that accomplish specific goals, including controlling or simulating physical systems; solve problems by</p>	<p>Begin to use internet services to share and transfer data to a third party.</p> <p>Independently select and use appropriate software for a task.</p> <p>Independently select, use and combine a variety of software to design and create content for a given audience.</p> <p>Understand the need to only select age appropriate content.</p> <p>Use filters to search.</p> <p>Design, input and test and increasingly complex set of instructions.</p> <p>Design, write and test simple programs that follow a sequence of instructions.</p>

	<p>inappropriate behaviour.</p> <p>2) Select, use and combine a variety of software (including internet services) on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information.</p>	<p>inappropriate behaviour.</p> <p>2) Recognise common uses of information technology beyond school.</p>	<p>1) Design, write and debug programmes that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.</p> <p>2) Use sequence, selection and repetition in programmes; work with variables and various forms of input and output.</p> <p>3) Use logical reasoning to explain how some algorithms work and to detect and correct errors in algorithms and programs.</p>	<p>NC Objectives :</p> <p>1) Use sequence, selection and repetition in programmes; work with variables and various forms of input and output.</p> <p>2) 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.</p>	<p>goals, including collecting, analysing, evaluating and presenting data and information.</p> <p>2) Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.</p>	<p>decomposing them into smaller parts.</p> <p>2) Use sequence, selection, and repetition in programmes; work with variables and various forms of input and output</p> <p>3) Use technology safely, respectfully and responsibly; know a range of ways to report concerns and inappropriate behaviour.</p> <p>4) 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</p>	<p>Design, write and test simple programs with opportunities for selection, where a particular result will happen.</p> <p>Use logical reasoning to explain how increasingly complex algorithms work to ensure a program's efficiency.</p>
Year Six	<p>iJam (level 4)</p> <p>iRemix: Throughout iRemix pupils will learn about remixing and sampling using different techniques and software.</p> <p>Skills:</p>	<p>iJam skill rehearsal</p> <p>iRemix: Children to develop all their learning throughout 4 levels of iJam to put this together into something independent using software, devices,</p>	<p>iProgram (level 4)</p> <p>iDevelop : After learning main programming skills pupils will apply these skills in new software : 'Swift'. Chd will learn how to manipulate written code and give the</p>	<p>iProgram skill rehearsal</p> <p>iDevelop: Students have the opportunity to create a final project and demonstrate their abilities.</p>	<p>iAnimate (level 4)</p> <p>iFinance iFinance is an advanced course to Excel and data processing. Students are tasked with producing a movie. Using the software they must input</p>	<p>E-Safety: D:Side</p> <p>iAnimate skill rehearsal</p> <p>iFinance Students have the opportunity to create a final project and</p>	<p>Understand how computer networks enable computers to communicate and collaborate.</p> <p>Design and create a range of programs, systems and content for a given audience.</p>

	<p>-Create and edit variables. -Design their own song including loops, backgrounds, scoring and/or timers. Use conditional statements, loops, variables and broadcast messages in the remix.</p> <p>NC Objectives: 1)Use technology safely, respectfully and responsibly; know a range of ways to report concerns and inappropriate behaviour. 2)Recognise common uses of information technology beyond school.</p>	<p>skills and techniques used.</p> <p>Skills: -Create and edit variables. -Design their own song including loops, backgrounds, scoring and/or timers. Use conditional statements, loops, variables and broadcast messages in the remix.</p> <p>NC Objectives: 1)Use technology safely, respectfully and responsibly; know a range of ways to report concerns and inappropriate behaviour. 2)Recognise common uses of information technology beyond school.</p>	<p>students the opportunity to create a final project and demonstrate their abilities.</p> <p>Skills : -Independent create sequences of commands to control devices in response to sensing (i.e. use inputs as well as outputs). -Design, build, test, evaluate and modify the system; ensuring that it is fit for purpose.</p> <p>NC Objectives : 1)Use sequence, selection and repetition in programmes; work with variables and various forms of input and output. 2)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.</p>	<p>Skills : -Independent create sequences of commands to control devices in response to sensing (i.e. use inputs as well as outputs). -Design, build, test, evaluate and modify the system; ensuring that it is fit for purpose.</p> <p>NC Objectives : 1)Use sequence, selection and repetition in programmes; work with variables and various forms of input and output. 2)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.</p>	<p>data to make important production decisions for their movie.</p> <p>Skills: -Use advanced functions within Excel.</p> <p>NC Objectives: 1)Design, write and debug programmes that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. 2) Use sequence, selection, and repetition in programs; work with variables and various forms of input and output 3) Use technology safely, respectfully and responsibly; know a range of ways to report concerns and inappropriate behaviour. 4) Select, use and combine a variety of software (including internet services) on a range</p>	<p>demonstrate their abilities.</p> <p>Skills: -Use advanced functions within Excel.</p> <p>NC Objectives: 1)Design, write and debug programmes that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. 2) Use sequence, selection, and repetition in programs; work with variables and various forms of input and output 3) Use technology safely, respectfully and responsibly; know a range of ways to report concerns and inappropriate behaviour. 4) 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</p>	<p>Use technology respectfully and responsibly.</p> <p>Identify a range of ways to report concerns about content and contact in and out of school.</p> <p>Be discerning when evaluating digital content.</p> <p>Include use of sequences, selection and repetition with the hardware used to explore real world systems.</p> <p>Solve problems by decomposing them into smaller parts.</p> <p>Create programs which use variables.</p> <p>Use logical reasoning to explain how increasingly complex algorithms work and to detect and correct errors in algorithms and programs efficiently.</p>
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