Year 6 Computing Coverage

As coders we identify how we can make things happen and solve problems when they arise

As digital creators we learn how to use and make content to share our ideas safely

As online users we learn how to stay safe and act appropriately when using technology.

	Autumn Term 1 Computing lessons – We are Artists	Autumn Term 2 Computing lessons – Code.org – Course F Lesson 6-20	Spring Term 1 Computing lessons – We are game developers (Y5 book)	Spring Term 2 Computing lessons – Composing music using Soundation/Incredibox	Summer Term 1 Computing lessons – We are bloggers – Using MS Teams	Summer Term 2 Computing lessons – We are web developers - Creating a website about cyber bullying/online safety (Y5 book)
			←Linked units→			
National Curriculum	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

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 | design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts

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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. | 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

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| Subject Focus | In this unit pupils use vector and turtle graphics to explore geometric art, taking inspiration from the work of Escher, Riley and traditional Islamic artists, as well as experimenting with complex 'fractal' landscapes. | In this unit children will begin to understand what a variable is before they begin to create their own variable. Children will introduced to for and counter loops within repeats ie. Repeat for… times. | In this unit the children plan their own simple computer game They design characters, backgrounds and create a working prototype which they develop based on feedback they receive. They will compose appropriate music and sounds Create appropriate sounds/background music for their game. Incorporate sound and scoring using if blocks. Discussion – Playability vs becoming addicted – what to watch out for | | In this unit children create a media-rich blog, comment on blogs of others and respond to comments. Discussion – Is it always OK to say what I think? | In this unit children work together to create a website explaining internet safety and responsible online behaviour.

In this unit children choose the method that they think will be best to teach younger children about internet safety. It will be introduced as the Y6's |

						digital legacy. What is most important to teach?
Top Ten / Fab Five	1 Apply mathematical knowledge of turns, angles and shapes to create tessellated patterns 2 Experiment with digital tessellation 3 Make a block in scratch to simplify coding 4 Apply the new block to create a pattern	1 Create variables 2 Create variables where the value is not static 3 Create variables that increase or decrease 4 Create a counter	1 Create their own backdrop and characters 2 Create different costumes for a character 3 Create code to control movement using arrow keys 4 Create sounds using different tools 5 Export sounds from one application/piece of software and import them into a different one 5 Create a game with more than one level 6 Write a set of instructions for a game		1 Identify what makes a good blog 2 Write a blog 3 Insert media into a blog 4 Comment on someone's blog 5 Insert a video/audio clip into a blog 6 Understand what live blogging is	1 Plan the website and distribute tasks 2 Work to agreed fonts/colours etc. to allow uniformity 3 Collaboratively create content 4 Combine paired content with that of others 5 Share my website with others 6 Take feedback and adapt/improve
Unit specific Vocabulary	Tessellation, turns, angles, edges, corners, vector, graphics	Variable, counter, for repeat loops	Variables, counter, random	Repeat, phrase, rhythm,	Blog, follow, comment	Website, pagelink, unlink, hyperlink, embed
Software Knowledge	Scratch, PPT, Inkscape	Code.org	Scratch, Soundation, Incredibox		MS Teams	MS SharePoint/ education.weebly.com

	Autumn Term Class Lessons - Application	Spring Term Class Lessons - Application	Summer Term Class Lessons - Application
National Curriculum	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 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 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
	- Internet Research linked to WW1 - Using Word to publish stories involving a range of text types (Billy books)	- Internet Research and validity linked to Everest and George Mallory - Book Creator to create a poetry anthology	- Internet Research and validity linked to London and its attractions - Green Screen Shakespeare Plays - I Can Animate – animated bus tour around London map, incorporating adverts using iMovie - Comic Life – create a graphic novel based around Shakespeare plays.
		use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact	
		Looking at age rating for different websites and games. Discussions about PEGI ratings and why sites have age restrictions and what happens to their data in the public domain. April Fool's Day, Critical thinking skills to the test about what can be trusted online - UKSIC's Trust me resource	
	We also invite PCSOs into school at various points in the year to address issues and pass on key messages. This tends to reflect what is happening and needs at the time.		