

WHOLE SCHOOL CURRICULUM MAP -TEACH IT COMPUTING/ PROJECT EVOLVE 2023 - 24

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Long term	Systems and searching	Video production	Selection in physical computing	Flat-file databases	Vector graphics	Selection in quizzes
plan	Copyright and Ownership	Managing Online Information	Managing Online Information	Online Bullying:	Copyright and Ownership	Online Reputation
	Online Relationships	Self-Image and Identity			Health, Well-being and	Health, Well-being and Lifestyle
	Online Relationships	ben-image and identity			Lifestyle	nealth, Well-being and Lifestyle
Year 5	Copyright and Ownership:	Managing Online Information	Managing Online Information	Online Bullying	Copyright and Ownership	Online Reputation
Project evolve	I can assess and justify when it is acceptable to use the work of others.	I can explain the benefits and limitations of using different types of search technologies e.g., voice-activation	I can identify ways the internet can draw us to information for different agendas, e.g., website	I can recognise online bullying can be different to bullying in the physical world and can describe	I can give examples of content that is permitted to be reused and know how this content	I can search for information about an individual online and summarise the information found.
	Online Relationships:	search engine.	notifications, pop-ups, targeted ads.	some of those differences.	can be found online.	I can describe ways that information
	I can give examples of technology-specific forms of communication (e.g., emojis, memes and GIFS).	I can explain how some technology can limit the information I am presented with.	I can describe ways of identifying when online content has been commercially sponsored or	I can describe how what one person perceives as playful joking and teasing (including 'banter') might be experienced by others as	Privacy and Security I can explain what a strong password is and demonstrate	about anyone online can be used by others to make judgements about an individual and why these may be incorrect.
	I can explain that there are some people	I can explain what is meant by 'being sceptical'; I can give examples of when	boosted (e.g., by commercial companies or by vloggers,	bullying.	how to create one.	Health, Well-being and Lifestyle
	I communicate with online who may want to do me or my friends harm.	and why it is important to be 'sceptical'.	content creators, influencers).	I can explain how anyone can get help if they are being bullied online	I can explain how many free apps or services may read and	I can describe ways technology can
	I can recognize that this is not my / our fault.	I can evaluate digital content and can explain how to make choices about what is trustworthy e.g., differentiating between adverts and search results.	I can explain what is meant by the term 'stereotype', how 'stereotypes' are amplified and reinforced online, and why	and identify when to tell a trusted adult. I can identify a range of ways to	share private information (e.g., friends, contacts, likes, images, videos, voice, messages, geolocation) with	affect health and wellbeing both positively (e.g., mindfulness apps) and negatively.
	I can describe some of the ways people may be involved in online communities and describe how they might collaborate constructively with others and make	I can explain key concepts including: information, reviews, fact, opinion, belief, validity, reliability and evidence.	accepting 'stereotypes' may influence how people think about others.	report concerns and access support both in school and at home about online bullying.	others. I can explain what app permissions are and can give	I can describe some strategies, tips or advice to promote health and well-being with regards to technology.
	positive contributions (e.g., gaming communities or social media groups).	Self-Image and Identity	I can describe how fake news may affect someone's emotions	I can explain how to block abusive users.	some examples.	I recognise the benefits and risks of accessing information about health and
	I can explain how someone can get help if they are having problems and identify when to tell a trusted adult.	I can explain how identity online can be copied, modified or altered. I can demonstrate how to make responsible	and behaviour and explain why this may be harmful. I can explain what is meant by a 'hoax'.	I can describe the helpline services which can help people experiencing bullying, and how to access them		well-being online and how we should balance this with talking to trusted adults and professionals.
	I can demonstrate how to support others (including those who are having difficulties online).	choices about having an online identity, depending on context	I can explain why someone would need to think carefully before they share.	(e.g., Childline or The Mix).		I can explain how and why some apps and games may request or take payment for additional content (e.g., in-app purchases, loot boxes) and explain the importance of seeking permission from a trusted adult before purchasing.
Year 5	Computer Systems and Networks – Sharing Information	Creating Media – Video Editing Learners will learn how to create short videos by working in pairs or	Programming A – Selection in Physical Computing	Data and Information – Flat- file Databases	Creating Media – Vector Drawing	Programming B – Selection in Quizzes



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Teach Computing

Learners develop their understanding of computer systems and how information is transferred between systems and devices. Learners consider small-scale systems as well as large-scale systems. They explain the input, output, and process aspects of a variety of different real-world systems. Learners discover how information is found on the World Wide Web, through learning how search engines work (including how they select and rank results) and what influences searching, and through comparing different search engines.

groups. As they progress through this unit, they will be exposed to topic-based language and develop the skills of capturing, editing, and manipulating video. Learners are guided with step-by-step support to take their idea from conception to completion. At the conclusion of the unit, learners have the opportunity to reflect on and assess their progress in creating a video.

In this unit, learners will use physical computing to explore the concept of selection in programming through the use of the Crumble programming environment. Learners will be introduced to a microcontroller (Crumble controller) and learn how to connect and program it to control components (including output devices -LEDs and motors). Learners will be introduced to conditions as a means of controlling the flow of actions in a program. Learners will make use of their knowledge of repetition and conditions when introduced to the concept of selection (through the 'if...then...' structure) and write algorithms and programs that utilise this concept. To conclude the unit, learners will design and make a working model of a fairground carousel that will demonstrate their understanding of how the microcontroller and its components are connected, and how selection can be used to control the operation of the model. Throughout this unit, learners will apply the stages of programming design.

This unit looks at how a flat-file database can be used to organise data in records.

Learners will use tools within a database to order and answer questions about data. They will create graphs and charts from their data to help solve problems. They will also use a real-life database to answer a question and present their work to others.

In this unit, learners start to create vector drawings. They learn how to use different drawing tools to help them create images. Learners recognise that images in vector drawings are created using shapes and lines, and each individual element in the drawing is called an object. Learners layer their objects and begin grouping and duplicating them to support the creation of more complex pieces of work.

Learners will develop their knowledge of 'selection' by revisiting how 'conditions' can be used in programming, and then learning how the 'if... then... else...' structure can be used to select different outcomes depending on whether a condition is 'true' or 'false'. They represent this understanding in algorithms, and then by constructing programs in the Scratch programming environment. They learn how to write programs that ask questions and use selection to control the outcomes based on the answers given. They use this knowledge to design a quiz in response to a given task and implement it as a program. To conclude the unit, learners evaluate their program by identifying how it meets the requirements of the task, the ways they have improved it, and further ways it could be improved.