

## **ACE Curriculum Concepts: Computing.**

At Cavendish Close Junior Academy, children learn through a concept-based curriculum. Concepts allow children to make connections between their learning and in turn gain a deeper understanding allowing them to make sense of the facts and the world around them. As part of our conceptual curriculum, key concepts of each curriculum area are revisited throughout each year group, allowing children to build on learning and to ensure children have a clear understanding, enabling their learning to be held within their long-term memory.

Concept	What is this concept?	Where is this concept covered in the Computing Curriculum?
To Communicate	This concept involves using a range of apps and software to communicate one's ideas.  We believe that being digitally literate is vital for children and the knowledge and skills taught throughout their time at Cavendish Close will be applied using different software and technology.  Everything that the children will create will be in direct response and consideration of their audience. A good understanding of reliability of information is vital when using the internet. Children will explore fake news, websites and how social media cannot always be taken as reliable; whilst recognising the benefits of information being readily available on the internet, this is an ever growing problem that children need to be able to recognise. Children will also learn how to check who owns photographs, text and clip art and apply their knowledge of copyright.  Children will leave Cavendish Close being able to articulate and explain why they have used particular tools and how they have decided to share their work.  Everything that children create and use will be evaluated for its quality and reliability. This knowledge and rigor is vital to ensure they become digitally literate, preparing them for Key Stage 3 and their adult life.	Desktop Publishing (Y3) Animation y3) Audio Editing (Podcasts) (Y4) Photo Editing (Y4) Sharing Information and Communication (Y5) Video Editing and Green Screen (Y5) 3D Modelling (TinkerCAD) (Y5) Web Page Creation (Y6) End Of Year Performance Unit. (Y6)
To Code	This concept involves developing an understanding of instructions, logic and sequences. Children will be taught coding throughout their time at Cavendish Close due to the ever changing digital world that we live in.  Children will explore the idea that lots of things in our daily lives require programming and code to work; children will have had many different experiences of coding, from appliances at home such as washing machines, to physical computing resources in school such as Micro:Bits and software such as Scratch. We believe that it is vital that t children understand how things work and can apply this knowledge across the curriculum.	Events and Actions in Programming (Y3) Sequencing Sounds (Y3) Repetition In Shape (Y4) Repetition in games (Y4) Data Handling/Sensing (Micro:Bits) (Y5) Chatbot Selection (Y5) Variables in Games (Y6)

To Collect	This concept involves developing an understanding of databases and their uses. Children need to understand how to collect, understand and evaluate data, in order to prepare them for their daily lives.  Throughout their time at Cavendish Close, children will become more independent in selecting tools to collect data; they will confidently interpret data and check it for accuracy and plausibility and apply this to real life situations.  During their time at Cavendish Close, children have the opportunity to explore a range of software and programs related to collecting and analysing data this includes using programs and apps such as Microsoft Excel, J2E Databases, Audrino Science Journal and physical equipment such as Data Loggers.	Branching Databases (Y3) Data Logging (Y4) Flat File Databases (Y5) Spreadsheets (Y6)
To Connect	This concept involves developing an understanding of how to safely connect with others. Due to the advances in technology it is imperative that children know how to keep themselves safe online.  As children have more access to the internet through the use of technology, it is vital that they understand and can choose websites and games that are appropriate for their age; children will explore why to choose and where to find appropriate games and websites.	Connecting Computers (Y3) The Internet (Y4) Sharing Information and Communication (Y5) Chatbot Selection (Y5)
	In addition, children will learn about online bullying and how to behave when accessing social media as a tool to communicate; exploring the benefits as well as how to stay safe.  We strive to actively prepare children to be competent in explaining the consequences of different actions in relation to keeping safe online.	
	Children will leave Cavendish Close with a secure understanding of the need to act within the law and with moral and ethical integrity; this knowledge is vital when thinking about their daily lives and transition into Key Stage 3. children will build on the	
	Throughout Key Stage 2, children will build on the knowledge they learnt during Key Stage 1 to explore parts of a computer, networks, the internet and how it works.	



## Cavendish Close Junior Academy ACE Curriculum Concepts: Computing.

List of all		
concepts		
over KS2		

To communicate, code, collect and connect.

Year group	Units of work	Concepts for unit
Year 3	Desktop Publishing	To Communicate
	Events and Actions in	To Code
	Programming	
	Connecting Computers	To Connect
	Animation	To Communicate
	Sequencing Sounds	To Code
	Branching Databases	To Collect
Year 4	Audio Editing (Podcasts)	To Communicate
	Repetition In Shape	To Code
	The Internet	To Connect
	Photo Editing	To Communicate
	Repetition in	To Code
	games	
	Data Logging	To Collect
Year 5	Flat File Databases	To Collect
	Sharing Information and Communication	To Connect
		To Communicate
	Data Handling	To Code
	(Micro:Bits)	
	Video Editing	To Communicate
	and Green	
	Screen	
	Chatbot	To Code
	Selection	To Connect
	3D Modelling	To Communicate
	(TinkerCAD)	
Year 6	Spreadsheets	To Collect
	Web Page Creation	To Communicate
	Variables in Games	To Code
	End Of Year Performance Unit	To Communicate