The Craylands School KS1 Computing Progress

Aims
can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation
▪ can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems
▪ can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems
▪ are responsible, competent, confident and creative users of information and communication technology.

Skills
▪ 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
▪ 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.

	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	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 1	Follow an algorithm – obstacle course Programming a Beebot	What instructions do we need to give for….	Searching for images; inserting them into a document	What information should be kept private? What rules should we have for searching online?

	What if we make a mistake in our programming.			Recognise unkind comments
Year 2	Programming a Probot	What shapes will this algorithm create? How can we make the Probot do something over and over again.	Changing font Insert image to accompany text Collecting and representing data	Is everyone who they say they are online What should I type in when searching online What is private information

The Craylands School KS2 Computing Progress

Aims	
can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation	
▪ can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems	
▪ can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems	
▪ are responsible, competent, confident and creative users of information and communication technology.	
Skills 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 ▪ 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	**Knowledge** • 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 recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

	▪ use technology safely, respectfully and responsibly;			
	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	use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content
Year 3	Programme a Probot to make certain shapes What can we do with these Scratch blocks	Using repetition to programme a Probot to create shapes Sequence Sratch blocks – what will happen Using repeat in Scratch	How accurate do we need to be in our programming	What should I type into a search engine
Year 4	Create a quiz in Scratch	Use of 'if' block in Scratch	What happens if we make a mistake in our codes	
Year 5	Create a maze game in Scratch	Use of sensing in game	Flowcharts Debugging a flowchart	Bolean logic
Year 6				

	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;	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 recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.
Year 3	How has word processing been used to create these documents Change font Insert images Create a comic using text and images	To understand what a digital footprint is What to do if get unkind messages in email What happens if we accept	What can we do online?
Year 4	Use of powerpoint to create a presention; text, images, hyperlinks, slide transitions Speadsheets – Excel – tables and charts	Importance of passwords What does being respectful mean	What does being respectful mean
Year 5	Presenting in different ways e.g. podcasts, vlogs, blogs, presentations	Rules for good digital citizens Social media – what are you aware of?	Should we believe what everyone tells us online –how to report What is the internet; different between internet and world wide web
Year 6	Animation Excel – spreadsheets; finding averages	How to stay safe using social media Cyberbullying	Networks – how are computers connected across the world Role of online stereotypes