## East Tilbury Primary School's Computing Curriculum Map

	HT1	HT2	HT3	HT4	HT5	HT6
Year 1						
	Computing systems and networks — Technology around us  To identify technology  To identify a computer and its main parts  To use a mouse in different ways  To use a keyboard to type on a computer  To use the keyboard to edit text  To create rules for using technology responsibly	Creating media – Digital painting  To describe what different freehand tools do  To use the shape tool and the line tools  To make careful choices when painting a digital picture  To explain why I chose the tools I used  To use a computer on my own to paint a picture  To compare painting a picture on a computer and on paper	Programming A – Moving a robot  To explain what a given command will do  To act out a given word  To combine forwards and backwards commands to make a sequence  To combine four direction commands to make sequences  To plan a simple program  To find more than one solution to a problem	Data and information — Grouping data  To label objects  To identify that objects can be counted  To describe objects in different ways  To count objects with the same properties  To compare groups of objects  To answer questions about groups of objects	Creating media – Digital writing  To use a computer to write  To add and remove text on a computer  To identify that the look of text can be changed on a computer  To make careful choices when changing text  To explain why I used the tools that I chose  To compare typing on a computer to writing on paper	Programming B – Introduction to animation  To choose a command for a given purpose  To show that a series of commands can be joined together  To identify the effect of changing a value  To explain that each sprite has its own instructions  To design the parts of a project  To use my algorithm to create a program

Year 2						
	Computing systems and networks – IT around us  To recognise the uses and features of information technology  To identify the uses of information technology in the school  To identify information technology beyond school  To explain how information technology helps us  To explain how to use information technology safely  To recognise that choices are made when using information technology	Creating media — Digital photography  To use a digital device to take a photograph  To make choices when taking a photograph  To describe what makes a good photograph  To decide how photographs can be improved  To use tools to change an image  To recognise that photos can be changed	Programming A — Robot algorithms  To describe a series of instructions as a sequence  To explain what happens when we change the order of instructions  To use logical reasoning to predict the outcome of a program (series of commands)  To explain that programming projects can have code and artwork  To design an algorithm  To create and debug a program that I have written	Data and information — Pictograms  To recognise that we can count and compare objects using tally charts  To recognise that objects can be represented as pictures  To create a pictogram  To select objects by attribute and make comparisons  To recognise that people can be described by attributes  To explain that we can present information using a computer	Creating media –  Making music  To say how music can make us feel  To identify that there are patterns in music  To show how music is made from a series of notes  To show how music is made from a series of notes  To create music for a purpose  To review and refine our computer work	Programming B – An introduction to quizzes  To explain that a sequence of commands has a start  To explain that a sequence of commands has an outcome  To create a program using a given design  To change a given design  To create a program using my own design  To decide how my project can be improved

Year 3						
Year3	Computing systems and networks – Connecting computers  To explain how digital devices function  To identify input and output devices  To recognise how digital devices can change the way we work  To explain how a computer network can be used to share information  To explore how digital devices can be connected  To recognise the physical components of a network	Creating media – Animation  To explain that animation is a sequence of drawings or photographs  To relate animated movement with a sequence of images  To plan an animation  To identify the need to work consistently and carefully  To review and improve an animation  To evaluate the impact of adding other media to an animation	Programming A — Sequence in music  To explore a new programming environment  To identify that commands have an outcome  To explain that a program has a start  To recognise that a sequence of commands can have an order  To change the appearance of my project  To create a project from a task description	Data and information — Branching databases  To create questions with yes/no answers  To identify the object attributes needed to collect relevant data  To create a branching database  To explain why it is helpful for a database to be well structured  To identify objects using a branching database  To compare the information shown in a pictogram with a branching database	Creating media — Desktop publishing  To recognise how text and images convey information  To recognise that text and layout can be edited  To choose appropriate page settings  To add content to a desktop publishing publication  To consider how different layouts can suit different purposes  To consider the benefits of desktop publishing	Programming B — Events and actions  To explain how a sprite moves in an existing project  To create a program to move a sprite in four directions  To adapt a program to a new context  To develop my program by adding features  To identify and fix bugs in a program  To design and create a mazebased challenge

Year 4						
	Computing systems and networks – The Internet  To describe how networks physically connect to other networks  To recognise how networked devices make up the internet  To outline how websites can be shared via the World Wide Web (WWW)  To describe how content can be added and accessed on the World Wide Web (WWW)  To recognise how the content of the WWW is created by people  To evaluate the consequences of unreliable content	Creating media – Audio editing  To identify that sound can be digitally recorded  To use a digital device to record sound  To explain that a digital recording is stored as a file  To explain that audio can be changed through editing  To show that different types of audio can be combined and played together  To evaluate editing choices made	Programming A — Repetition in shapes  To identify that accuracy in programming is important  To create a program in a text-based language  To explain what 'repeat' means  To modify a count-controlled loop to produce a given outcome  To decompose a task into small steps  To create a program that uses count-controlled loops to produce a given outcome	Data and information – Data logging  To explain that data gathered over time can be used to answer questions  To use a digital device to collect data automatically  To explain that a data logger collects 'data points' from sensors over time  To use data collected over a long duration to find information  To identify the data needed to answer questions  To use collected data to answer questions	Creating media – Photo editing  To explain that digital images can be changed  To change the composition of an image  To describe how images can be changed for different uses  To make good choices when selecting different tools  To recognise that not all images are real  To evaluate how changes can improve an image	Programming B – Repetition in games  To develop the use of count-controlled loops in a different programming environment  To explain that in programming there are infinite loops and count controlled loops  To develop a design that includes two or more loops which run at the same time  To modify an infinite loop in a given program  To design a project that includes repetition  To create a project that includes repetition

Year 5						
	Computing systems	<u>Creating media –</u>	Programming A –	<u>Data and</u>	<u>Creating media –</u>	<u>Programming B – </u>
	and networks –	Video editing	Selection in physical	<u>information – Flat-</u>	Vector drawing	Selection in quizzes
	<b>Sharing information</b>	<ul> <li>To explain what</li> </ul>	computing	<u>file databases</u>	<ul> <li>To identify that</li> </ul>	<ul> <li>To explain how</li> </ul>
	<ul> <li>To explain that</li> </ul>	makes a video	<ul> <li>To control a</li> </ul>	<ul> <li>To use a form to</li> </ul>	drawing tools	selection is
	computers can	effective	simple circuit	record	can be used to	used in
	be connected	<ul> <li>To identify</li> </ul>	connected to a	information	produce	computer
	together to form	digital devices	computer	<ul> <li>To compare</li> </ul>	different	programs
	systems	that can record	<ul> <li>To write a</li> </ul>	paper and	outcomes	<ul> <li>To relate that a</li> </ul>
	<ul> <li>To recognise the</li> </ul>	video	program that	computer-based	<ul> <li>To create a</li> </ul>	conditional
	role of	<ul><li>To capture</li></ul>	includes count-	databases	vector drawing	statement
	computer	video using a	controlled loops	<ul> <li>To outline how</li> </ul>	by combining	connects a
	systems in our	range of	<ul> <li>To explain that a</li> </ul>	grouping and	shapes	condition to an
	lives	techniques	loop can stop	then sorting	<ul> <li>To use tools to</li> </ul>	outcome
	<ul> <li>To recognise</li> </ul>	<ul> <li>To create a</li> </ul>	when a	data allows us	achieve a	<ul> <li>To explain how</li> </ul>
	how information	storyboard	condition is met	to answer	desired effect	selection
	is transferred	<ul> <li>To identify that</li> </ul>	<ul> <li>To explain that a</li> </ul>	questions	<ul> <li>To recognise</li> </ul>	directs the flow
	over the	video can be	loop can be	<ul> <li>To explain that</li> </ul>	that vector	of a program
1	internet	improved	used to	tools can be	drawings consist	<ul> <li>To design a</li> </ul>
0	<ul> <li>To explain how</li> </ul>	through	repeatedly	used to select	of layers	program which
	sharing	reshooting and	check whether a	specific data	<ul> <li>To group objects</li> </ul>	uses selection
	information	editing	condition has	<ul> <li>To explain that</li> </ul>	to make them	<ul> <li>To create a</li> </ul>
	online lets	<ul> <li>To consider the</li> </ul>	been met	computer	easier to work	program which
	people in	impact of the	<ul> <li>To design a</li> </ul>	programs can be	with	uses selection
	different places	choices made	physical project	used to	<ul> <li>To evaluate my</li> </ul>	<ul> <li>To evaluate my</li> </ul>
	work together	when making	that includes	compare data	vector drawing	program
	<ul> <li>To contribute to</li> </ul>	and sharing a	selection	visually	F 4 "	
	a shared project	video	To create a	<ul> <li>To apply my</li> </ul>	J	
	online		program that	knowledge of a		
	<ul> <li>To evaluate</li> </ul>		controls a	database to ask		
	different ways	1	physical	and answer real-		
	of working	V Find we	computing	world questions		
	together online	1-17	project			
		' Y (	1 (2)	"		
		.,	1 1 7000			

Year 6						
	Computing systems	Creating media –	Programming A –	Data and	Creating media – 3D	Programming B –
	and networks –	Web page creation	Variables in games	<u>information –</u>	Modelling	Sensing
INC. THE STATE OF	<u>Communication</u>	<ul> <li>To review an</li> </ul>	<ul> <li>To define a</li> </ul>	<u>Spreadsheets</u>	<ul> <li>To use a</li> </ul>	<ul> <li>To create a</li> </ul>
	<ul> <li>To identify how</li> </ul>	existing website	'variable' as	<ul> <li>To identify</li> </ul>	computer to	program to ru
Rampberry P1	to use a search	and consider its	something that	questions which	create and	on a
#492172 os os	engine	structure	is changeable	can be	manipulate	controllable
	<ul> <li>To describe how</li> </ul>	<ul> <li>To plan the</li> </ul>	<ul> <li>To explain why a</li> </ul>	answered using	three-	device
	search engines	features of a	variable is used	data	dimensional	<ul> <li>To explain that</li> </ul>
	select results	web page	in a program	<ul> <li>To explain that</li> </ul>	(3D) digital	selection can
	<ul> <li>To explain how</li> </ul>	<ul><li>To consider the</li></ul>	<ul> <li>To choose how</li> </ul>	objects can be	objects	control the flo
	search results	ownership and	to improve a	described using	<ul> <li>To compare</li> </ul>	of a program
	are ranked	use of images	game by using	data	working digitally	<ul> <li>To update a</li> </ul>
	<ul> <li>To recognise</li> </ul>	(copyright)	variables	<ul> <li>To explain that</li> </ul>	with 2D and 3D	variable with
	why the order of	<ul> <li>To recognise the</li> </ul>	<ul> <li>To design a</li> </ul>	formulas can be	graphics	user input
	results is	need to preview	project that	used to produce	<ul> <li>To construct a</li> </ul>	<ul> <li>To use an</li> </ul>
	important, and	pages	builds on a given	calculated data	digital 3D model	conditional
	to whom	<ul> <li>To outline the</li> </ul>	example	<ul> <li>To apply</li> </ul>	of a physical	statement to
1	<ul> <li>To recognise</li> </ul>	need for a	<ul> <li>To use my</li> </ul>	formulas to	object	compare a
0	how we	navigation path	design to create	data, including	<ul> <li>To identify that</li> </ul>	variable to a
( )	communicate	<ul> <li>To recognise the</li> </ul>	a project	duplicating	physical objects	value
_	using	implications of	<ul> <li>To evaluate my</li> </ul>	<ul> <li>To create a</li> </ul>	can be broken	<ul> <li>To design a</li> </ul>
	technology	linking to	project	spreadsheet to	down into a	project that
	<ul> <li>To evaluate</li> </ul>	content owned	<b>(</b>	plan an event	collection of 3D	uses inputs a
	different	by other people		<ul> <li>To choose</li> </ul>	shapes	outputs on a
	methods of			suitable ways to	<ul> <li>To design a</li> </ul>	controllable
	online			present data	digital model by	device
	communication			1 1	combining 3D	<ul> <li>To develop a</li> </ul>
	/ 1 N			1/2	objects	program to u
	/~			. 1/2	<ul> <li>To develop and</li> </ul>	inputs and
		1.		14/14	improve a digital	outputs on a
	1960	VA	1	~ ( ) ,	3D model	controllable
		17/1	Land D	U'		device
		1 V(	) r fett [			