Year		Autu	ımn 1	Aut	umn 2	Spr	ing 1	Spr	ing 2	Sun	nmer
EYFS	find out more al In EYFS, children play back record	oout their practice and behaviour. complete activities to learn and use	computational thinking, from Barel increasing control. They are encour	oot Computing - https://www.bard aged to explore ways of making an	efootcomputing.org/earlyyears. Cont d listening to sounds using simple pr	inuous provision includes common u	ses of control technology for children	nent of parents and carers at home. V n to explore through play. Pupils use r er at home and school (eg role play to	nultimedia equipment, including cam	neras and iPads, to capture still and m	noving images. With help, they
			omputing topics. Evidence f					o be completed, etc - is down ers, "real" class floor books, d			
		Summer term - Whole-sch	ool home learning activity. \	Vrite a recipe for an perfect	internet safety. Which ingre	·	method will make a safe into	org/#:~:text=As%20part%20o			
						everyone. Which ingredients compelt your recipe on one p		od will ensure that a safe inte	rnet is the outcome? Decorat	e your recipe beautifully.A sr	mall prize for one child in
	[1]	FOUNDA	ATIONS [2]	APPLICA	ATIONS [3]	APPLICA	TIONS [4]	FOUNDA	TIONS [5]	IMPLICA	TIONS [6]
	Inter	net safety, taught at the sta message is reir	oforced:	safe when using the Interne	t. They explore the positives ar	nd potential negatives of online	e communication and begin to	in order to have positive digital develop the skills to recognise etween the online and offline w	potential dangers and act acco	ordingly to keep themselves ar	
			0 , 1 0	WE ARE TECHNOLOGY USERS Understanding and usin computer technology purposefully		we are EDITORS - Typing and changing text - create, save and retrieve digital content		WE ARE ARTISTS - Creating digital artwork		WE ARE PRESENTERS Filming a sequence - sequencing, decomposition	
		Knowledge	Skills	Knowledge	Skills	Knowledge	Skills	Creating	Skills	Knowledge	Skills
		In this unit, pupils understand algorithms as a simple set of instructions, and learn that algorithms can be used to give	Use directional language to navigate a person or object.  Develop and record sequences of	TC Plans Learners' understanding of technology is developed and they learn how it can help them. They become	Name the main parts of a computer Switch on and log into a computer Use a mouse to click, drag and		Use technology skills learnt in previous unit more independently  Develop basic keyboard and	In this unit, pupils learn how to open a browser and use a search engine to search for pictures. They will use their pictures and	Develop basic keyboard and keypad skills, through typing and formatting pictures.	In this unit, pupils produce short videos of themselves completing an activity from an area of learning (eg making fruit kebabs, or a	
1		instructions to a digital device. They have practical experience of	instructions as an algorithm.	more familiar with the different components of a computer by	create a picture	Chrome books and then the app they are using. In this unit, pupils	keypad skills, through typing and formatting text, acording to	incorporate them into scenes to create digital Art, using J2 Draw.	Use agreed keywords to search for pictures.	rocket). They also decompose a complex problem into smaller	Use a video camera to capture moving images.
		giving simple instructions to control a digital device to solve a problem. If things do not go as	Program a toy to follow an algorithm.	developing keyboard and mouse skills, and also start to consider how to use technology	Type my name on a computer	learn to use a software program (J2E Write) to write a label, caption or sentence. They edit their work	including changing a font colour,	The outcome, for assessment purposes, will be the picture created.	Combine picture objects to make a composition.	parts – an important idea from computer science. The outcome, for assessment, will	Create simple digital content usi video.
		expected they are taught to use a 'trial and error' approach to fix problems. Pupils will also begin to develop logical reasoning	Try a different solution when something doesn't happen as expected.  Make verbal predictions about what	responsibly. Summative assessment	Create simple digital content using some text, paint and photographic tools.  Create and save new files within a	and talk about their choices. With guidance, they learn to save their work and understand that doing this makes it available to work on	Develop skills in combining text and images.  With guidance, save their work		With guidance, save their work with a meaningful name.	be the videos.	Develop basic collaboration skills
		through making simple predictions.	will, or has, happened.		personal network location.	in the future. Summative assessment.	with a meaningful name.				
	CURRICULUM - LINK: PSHE	The state of the s	netry - position and direction). This st be taught in autumn 1.	CURRICULUM -LINK: English (Writ	ing skills)	CURRICULUM LINK:	Engligh (Writing skills)	CURRICULUM LINK: Art; Area resea	rched (eg old toys, weather, seasons)	· CURRICULUM LINK: D&1	(eg fruit kebabs, rocket)
	[7]		ATIONS [8]		ATIONS [9]	APPLICA	 FIONS [10]	FOLINDA	 TIONS [11]	ΔΡΡΙΙΓΔΊ	IONS [12]
		RE INTERNET USERS Internet of every term, so the mes	t safety, taught at the start	In Year 2, pupils learn about ho identify inappropriate content	ow what they do online leaves a tr and the actions they should take	ail called a digital footprint. They if they do. Children will be introdu	look at how to improve the efficienced to the term 'cyberbullying' are	ency of their online searches, the ty nd look at how they should commu s them uncomfortable, identify unl	ypes of websites that are best for unicate online and deal with instal	children to access when looking fonces of people being unkind via di	or information, as well as how to gital means. Skills: know that a
	an be edited for	e edited for Character WE ARE CODERS Creating on-screen programs - sequencing, algorithms, de-bugging		OPTIONAL/NOT ESSENTIAL WE ARE COLLECTORS Alternative Learning - I/N Safety		SPRING 2: TECHNOLOGY AROUND US - Common uses of IT outside school Computing systems and networks – IT				WE ARE RESEARCHERS - Researching and presenting topic	
		Knowledge	Skills	Knowledge	Skills	Knowledge	Skills	Knowledge	Skills	Knowledge	Skills
2		In this unit, pupils learn how algorithms are implemented as programs on-screen, and make links with their previous experience of programming floor robots. (J2 Code-JIT). They create their own simple	Begin to plan algorithms by first recording them verbally, on paper or digitally.	Pupils learn the advantages of collecting information in an organised way. They learn that information can be presented as digital content in a variety of	Collect data using simple methods such as tick charts or tally charts.	T C plans. Use Teach Computing year 2 plans. Once children have learned about the history of computers, children consider and discover how IT is used for good in	Identify computers and their uses, identifying that they are part of IT. Learn how computers have changed over the last fifty years.  Lesson 1 What is IT?	In this unit, pupils are given the chance to consolidate, or further improve, their understanding of how algorithms are implemented as programs on digital devices. They develop their programming skills from	Begin to plan algorithms by recording them first.	In this unit, pupils research a topic, safely, effectively and efficiently. They share their findings with others through a short multimedia presentation using Google Slides	Research a subject on a recommended website. Make notes relating to subject
		on-screen algorithms using a sequence of commands in a turtle program. They build on their logical	Convert simple algorithms to screen-based programs.	ways for different purposes, and gain practical experience of this.  They work together to develop	Use simple charting software to produce pictograms and other basic charts.	our lives. With an initial focus on IT in the home, learners explore how IT benefits society in places such as	Identify IT and school and beyond, and	complex programs so two sprites reach the same destination	Convert simple algorithms to screen-based programs.	- <u>We-Are-Researchers</u>	Learn to insert a text box, image and shapes.
		reasoning skills by making predictions and testing their code for expected outcomes. When outcomes are not as expected they make changes to their algorithms to	Predict what a simple program will do.	collaboration skills and begin to critically evaluate the merits of different data presentations. (J2E)	Begin to think independently about using meaningful names when saving digital files.	shops, libraries, and hospitals. They also discuss the responsible use of technology, and how to make smart choices when using it.	Recognise common types of technology, demonstrate how IT devices work togetherand say why we use IT Lesson 3 IT in the world	simultaneously, or they debug programs written earlier (with deliberate errors). (Using J2E JIT).  We are coders	Predict what more comples programs will do.		Learn to proofread slide presentation, edit text, images as shapes.

14/05/2024

Year		Autu	ımn 1	Aut	umn 2		ing 1	Spr	ing 2	Sun	nmer
		try and correct them.  We are coders  Y2 Computing We Are Coders	Spot and debug errors in programs.		Retrieve previously saved files from a personal network location.	* Y2 Spring Computing.docx	Talk about rules for using IT and how they keep me safe. Explain the different ways of using IT.  Lesson 4 The benefits of IT  Lesson 5 Using IT safely  Identify choices made when using IT.  Lesson 6 Using IT in different ways	_	Spot and fix (debug) errors in programs.	_	Make simple edits to correct and improve work.  Combine text and graphics on slides
		CURRICULUM -LINK: Maths		CURRICULUM	Л -LINK: MATHS	CURRICULU	M LINK - PSHE	CURRICULUM L	INK - Maths, D&T	CROSS-CURRICULAR LINK wit	n another Year 2 topic. May be taught
		E INTERNET USERS Internet saf erm, so the message is reinfor			p their knowledge of what it mea ne. Follow The Be Internet Legend	· · · · · · · · · · · · · · · · · · ·	They learn about the reliability and	d truth of information online and l	ook at some ways to protect then	nselves and their reputation. They	also learn about ways in which
	[13]	FOUNDAT	TIONS [14]	APPLICA	TIONS [15]	USING TECHNOLOG	GY - Implications [16]	FOUNDA	TIONS [17]	APPLICAT	IONS [18]
		Events and Actions in Pr	CODERS rogramming - sequence, tion, logical reasoning	SafetyWE ARE	L Alternative Learning - I/N DATA ANALYSERS d analysing data		ECHNICIANS oputer networks		E CODERS g an animation		UBLISHERS Publishing
		Knowledge	Skills	Knowledge	Skills	Knowledge	Skills	Knowledge	Skills	Knowledge	Skills
3		T C Plans This unit explores links between events and actions and consolidates learning on sequencing. Learners begin by moving a sprite in four directions and then explore movement in a maze, using design to choose an appropriately sized sprite. Also introduces programming extensions pen blocks. Learners can draw lines with sprites and change line size/colour. Finally, they design and code their own maze tracing program.  Summative assessment		TC Plans In this unit, children further develop data collection and analysis skills from year 2. They understand what a branching database is and how to create one, using yes/no questions to gain an understanding of what attributes are and how to use them to sort groups of objects. Learners create physical and on-screen branching databases. To conclude the unit, they create an identification tool using a branching database, which they will test by using it. They also consider real-world applications for branching databases. (J2 Data Pictogram, Branch, and Database). Summative asssessment.	Select an attribute to separate objects into groups, create a group of objects within an existing group and arrange objects in tree structure  Group objects using yes/no questions and test the branching database to see if it works  Plan branching database carefully so both parts are similar sizes and create questions allowing objects to be uniquely identified.	T C Plans Learners develop their understanding of digital devices, with an initial focus on inputs, processes, and outputs. Start by comparing digital and non-digital devices, before introducing them to computer networks that include network infrastructure devices like routers and switches. Summative assessment.		TC Plans Learners use a range of techniques to create a stop-frame animation using tablets. Next, they apply those skills to create a story-based animation. This unit! concludes with learners adding other types of media to their animation, such as music and text. They will use Canva - Students below the age of 13 require parental consent to use Canva for Education. For further details and to download a sample consent template visit Summative assessment.	Demonstrate that animation is a sequence of drawings or photographs, creating an effective flip book—style animation  Develop this knowledge and apply it to make a stop-frame animation using a tablet.  Plan own stop-motion animation by creating a storyboard. Check work by reviewing the scenes, making small changes where necessary (onion skinning) and revewing the quality of work.  Review own and others' work. Respond to feedback and improve own animation.	images to communicate messages. They use desktop publishing software and consider careful choices of font size, colour and type to edit and improve premade documents. They begin to understand how templates, orientation and placeholders can support them in making their own template for a magazine front cover. They will start to add text and images to create their own pieces of work using desktop publishing software. Learners will look at a range of page layouts	Explaim the difference between text and images Recognise that text and images can communicate messages clearly identify advantages and disadvantages of using text and images  Edit text and layout for given purposes and to make meanings clearer  Choose appropriate page settings, using placeholders, template and deciding page orientation. Add content, in the best locations; and then amend to improve. Consider different layouts for different purposes.  Compare work created by DTP with that done by hand; identify uses of DTP in the real world and say what its uses are.
			desibn work  test program against a given design, match command to action and modify program as needed		Working collaboratively, create identifier (cross-curr or for dinsosaurs). Consider real-world applications of branching databases.		devices.  Recognise the physical components of a network and identify networked devices at school		Add other media to film, explaining why and evaluate the outcome.		
		CURRICULUM	И LINK - Maths	CURRICULUM -LINK: MATHS, P	SHE, Other area of learning used					CURRICULI	JM -LINK: PE
		WE ARE INTERNET USERS Int start of every term, so the m			velop their knowledge of what it r rs online. Follow The Be Internet		on. They learn about the reliability	and truth of information online a	nd look at some ways to protect t	hemselves and their reputation. T	ney also learn about ways in
	[19]	FOUNDAT	TIONS [20]	APPLICA	TIONS [21]	APPLICA	TIONS [22]	FOUNDA	TIONS [23]	APPLICAT	IONS [24]
		Repetition in shape	CODERS s - loops, repetition, position		MUSICIANS ligital music		WEB USERS ding of the Internet		AME CODERS n in games		TA LOGGERS resenting xxxxxx
		Knowledge  T C Plans This looks at repetition and loops within programming. Pupils will create programs by planning, modifying, and testing commands to create shapes and patterns. They will use Logo, a text-based programming	Skills  Program a computer by typing commands Explain the effect of changing a value of a command Create a code snippet for a given purpose	Knowledge In this unit, pupils are introduced to digital music. They use software tools to explore different musical concepts including rhythm, tempo, melody and pitch. They then create a composition designed to create a mood for a film soundtrack.	Skills Use one or more programs to edit music.	Knowledge T C Plans. appreciate the internet as a network of networks which need to be kept secure. They will learn that the World Wide Web is part of the internet, and will be given opportunities to explore the World Wide Web for themselves in		programming using J2E block	Skills  Recognise repetition in real-life and programs. Modify existing snippets of code to achieve different outcomes.	Knowledge  TC Plans - Use TTS data logger OR Arduino Science Journal on a Chrome Book. PLAN THE DATA COLLECTION IN GOOD TIME - Chn need to learn how to use the data loggers in good time, to allow for sufficient data to be collected.	Skills  Discuss and understand the value of collecting data, over a period of time; and which questions can and can't be answered by long-term data collection. Understand concepts of data loggers and sensors.

14/05/2024 2

		ımn 1	Au	tumn 2		ing 1		ing 2		nmer
	language.Use J2E Code Logo.  Summative assessment.	create a program in a text-based language (use a template, write and test algorithms)		Create and develop a musical composition, refining ideas through reflection and discussion.	order to learn about who owns content and what they can access, add, and create. Finally, they will evaluate online content to decide	how websites can be shared via the World Wide Web (WWW)	can discover similarities between two environments. Learners look at the difference between count- controlled and infinite loops, and	Identify count-controlled and infinite loop and use correctly for desired outcomes. Understand that some programs need simultaneous processes.	is collected over time. They consider the senses humans use to experience the environment	Record data OVER TIME, in the d logger and then download to computer. Understand and use to
		Understand repetition and use the "repeat" command		Discuss how the composition can enhance work in other media.	how honest, accurate, or reliable it is, and understand the consequences of false information. Chn will write HTML code in one	Describe how content can be	use their knowledge to modify existing animations and games using repetition. Their final project is to design and create a game	Develop a design that includes two or more loops which run at the same time	and how computers use input devices called sensors to monitor the environment. Pupils collect data as well as access data	time interals; discuss data captur Use PRE-EXISTING data file and software to find out key informat and analyse the data.
		modify a count-controlled loop to produce a given outcome and use decomposition			lesson. Summative assessment.	Evaluate the consequences of unreliable content	which uses repetition, applying stages of programming design throughout. Summative	Modify an infinite loop in an existing program.	captured over long periods of time. They look at data points, data sets and logging intervals.	Design questions to answer using data which is being collected by chn using the data loggers, "live"
		Apply the skills that they have learnt in this unit to create a program containing a count- controlled loop; and de-bug				Use HTML tags for mark up of text and (optional) style elements and images. As an example of content which can be published on the WWW.	assessment.	Design and create a project using repetition.	Pupils use a computer to review and analyse data. Towards the end of the unit, pupils pose questions and then use data loggers to automatically collect the data needed to answer them.	Access and review the data in logger. Use this data to answer their question. Also reflect or benefits of using a data logge
CURRICULUM - LINK: RSE, PSHE	CURRICULUI	M -LINK: D&T	CURRICULU	IM -LINK: MUSIC	CURRICULUM	-LINK: ENGLISH	CURRICULUM -LINK: E	DESIGN & TECHNOLOGY	CURRICULUM -LIN	K: other subject used
	WE ARE INTERNET USERS Int start of every term, so the m	nessage is reinforced	importance of protecting person footprint and why this is important and describe how to find and a	lop their understanding of what it is onal information. Pupils also learn rtant. They desctibe ways to critica ask for help when feeling unsafe or	how to respect online privacy bot lly evaluate what we see on socia nline. Follow The Be Internet Lege	undaries for themselves and other Il media as well as identifying differnds curriculum.	s and further ways to seek or ask rent types of online scams their p	for help if they or others feel uns eers may experience. They expla	afe online. Chn explain what it me in the importance of keeping perso	ans to have a positivie digit onal information private onl
[25]		TIONS [26]		ATIONS [27]	APPLICAT			TIONS [29]		TIONS [30]
		CODERS Cal Computing - selection		GITAL ARTISTS ctor drawings		LM MAKERS roduction		PTOGRAPHERS ng codes		BLOGGERS and opinions online
Knowl Skills edge	Knowledge	Skills	Knowledge	Skills	Knowledge	Skills	Knowledge	Skills	Knowledge	Skills
	selection. Chn are introduced to a microcontroller (Crumble) and learn how to connect and program it to control components (including output devices — LEDs and motors). Learners use conditions to control the flow of actions in a program. They use knowledge of repetition and conditions when introduced to the concept of selection (through the 'ifthen' structure) and write algorithms &		different drawing tools to create images. They 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 create more complex pieces of work. Use Google Drawings app. Summative assessment	drawings are different from paper- based drawings	create short videos in groups. As they progress through this unit, they are exposed to topic-based language and develop the skills of capturing, editing, and manipulating video. Active learning is encouraged through guided questions and by working in small groups to investigate the use of devices and software. Learners are guided with step-by-step support to take their idea from conception to completion. At the teacher's		through an introduction to cryptography (the science of keeping communication and information secret). They investigate early methods of communicating over distances, learn about two early ciphers, and consider what makes a secure password. They consider why some information needs to be kept private and the need to use complex passwords and to keep information secure.		as a medium and a genre of writing. They look at and evaluate some different blogs, and examine comments left there. Pupils will then create a series of their own blog posts (that may combine other media such as photos or illustrations) to share with peers and invite and respond to comments from others. They will be taught how to respond to the blog posts of others in a meaningful and respectful way.	Gillile.
	programs using this concept. Learners design and make working model of a fairground carousel to show understanding of how microcontroller and its components are connected, and how selection is used to control model's operation. Throughout, learners apply the stages of	Write a program that includes count- controlled loops  Explain that a loop can stop when a condition is met and that a loop can be used to repeatedly check		Create own vector drawing by moving, resizing, rotating, and changing the colours of a selection of objects. They also learn how to duplicate the objects to save time.  Use tools to achieve desired effects: zoom tool, alignment grids, resize handles for	discretion, the use of green screen can be incorporated into this unit. At the conclusion of the unit, learners have the opportunity to reflect on and assess their progress in creating a video. Summative assessment.	filming techniques, some of which will be used in own video project later in the unit. Evaluate the effectiveness of		Encrypt and decrypt messages in simple ciphers.  Write an algorithm that uses repetition and variables to 'hack' a password.		When searching for informatic online, make decisions about useful, relevant, valid and accepte information is.  Use and combine digital meditechnology to create a progras specific purpose.
	programming design.	whether a condition has been met  Design a physical project that includes selection		Use layering to create an image and group objects to make them easier to work with (ungrouping when needed)		Retrieve, reshoot and edit video. Appreciate the impact the various choices have had on the quality of the video. Final edit and evaluation of video.				Analyse and evaluate data and information.
		Create a program that controls a physical computing project		Apply vector drawing learning to create a vector drawing for specific purpose. Then reflect on skills used and why, compare vector drawings to freehand paint drawings						

14/05/2024

MPLICATION Ski	,	ATIONS PROGAMMERS in games  Skills  Define a 'variable' as something that is changeable and explain why a variable is used in a program.	including the importance of pr positive digital footprint and hi privacy settings and Identify so APPLICA VE ARE DATA ANALYST Knowledge	rotecting personal information. Pur low social medica can mislead or no purces of support for someone wh ATIONS [32] SS - Introduction to spreadshed	pils also learn how to respect onlinisrepresent reaility. They identify to is worried about anything online  APPLICA  WE ARE WEB USERS - Inte	ne privacy boundaries for themse different online scames their pee e Follow The Be Internet Legends TIONS [33]  ernet Communication and poration  Skills  Explain the importance of internet addresses and understand how data is transferred across the internet	rs might experience, including phis is curriculum.  FOUNDAT  E GAME PROGRAMMERS: Co  Knowledge  T C Plan This unit is the final KS2 programming unit and brings together elements of all the four programming constructs: sequence from Year 3, repetition from Year 4, selection from Year 6 – 'Programming A'). It offers pupils the opportunity to use all of these constructs in a different, but still familiar environment, while also utilising a physical device — the micro:bit. The unit begins with a simple program for pupils to build in and test within the new	o seek or ask for help if they or ot shing. They describe ways to keep TIONS [34]	Knowledge  T C Plans This unit introduces learners to the creation of websites for a chosen purpose. Learners identify what makes a good web page and use this information to design and evaluate their own website using Google Sites. Throughout the process	in what they can to do to build ne by using safety tools and  FIONS [35]  ERS Creating websites  Skills  learners will explore and review existing websites and evaluate their content. REfer to Y4 learnin that websites are created by usin HTML code. Plan the features of
nowl ski	WE ARE GAME Variables  Knowledge  T C plans. This unit explores the concept of variables in programming through games in J2E Code Visual. First, learners find out what variables are and relate them to real-world examples of values that can be set and changed. Then they use variables to create a simulation of a scoreboard. Using the Use-Modify-Create model, learners experiment with variables in an existing project, then modify them, before creatingown project. They focus on design,	PROGAMMERS in games  Skills  Define a 'variable' as something that is changeable and explain why a variable is used in a program.	Knowledge  NB: Decide what data used will be. Ideally, use data from another curriculum subject to embed learning there. If not, provide chn with data. T C Plans Chn are supported in organising data into columns and rows to create their own data set. The learn the importance of formatting data to support calculations, while also being introduced to formulas and beginning to understand how they can be used to produce calculated data. Learners are taught how to apply formulas that include a range of cells, and	Skills  Manual recording of data collected and then tabulated on Chrome	APPLICA  WE ARE WEB USERS - Interpretation  Knowledge  T C Plans Chn explore how data is transferred over the internet. Learners initially focus on addressing, before they move on to the makeup and structure of data packets. Learners then look at how the internet facilitates online communication and collaboration; they complete shared projects online and evaluate different methods of communication. Finally, they learn how to communicate responsibly by considering what should and should not be shared on the	ernet Communication and coration  Skills  Explain the importance of internet addresses and understand how data is transferred across the internet	FOUNDATE  E GAME PROGRAMMERS: Co  Knowledge  T C Plan This unit is the final KS2 programming unit and brings together elements of all the four programming constructs: sequence from Year 3, repetition from Year 4, selection from Year 5, and variables (introduced in Year 6 – 'Programming A'). It offers pupils the opportunity to use all of these constructs in a different, but still familiar environment, while also utilising a physical device — the micro:bit. The unit begins with a simple program for pupils to build in and test within the new	Skills  Chn are introduced to function of micro:bit and the programming environment, before creating their own programs. They will then run	Knowledge  T C Plans This unit introduces learners to the creation of websites for a chosen purpose. Learners identify what makes a good web page and use this information to design and evaluate their own website using Google Sites. Throughout the process learners pay specific attention to copyright and fair use of media, the aesthetics of the site, and navigation paths. Material for the website the teacher's choice,	Skills  learners will explore and review existing websites and evaluate their content. REfer to Y4 learnithat websites are created by us HTML code. Plan the features o web page. Home Learning idea Learners look at two of their favourite websites and sketch them on the worksheet provide detailing the similarities and
	T C plans. This unit explores the concept of variables in programming through games in J2E Code Visual. First, learners find out what variables are and relate them to real-world examples of values that can be set and changed. Then they use variables to create a simulation of a scoreboard.Using the Use-Modify-Create model, learners experiment with variables in an existing project, then modify them, before creatingown project. They focus on design,	Skills  Define a 'variable' as something that is changeable and explain why a variable is used in a program.	Knowledge  NB: Decide what data used will be. Ideally, use data from another curriculum subject to embed learning there. If not, provide chn with data. T C Plans Chn are supported in organising data into columns and rows to create their own data set. The learn the importance of formatting data to support calculations, while also being introduced to formulas and beginning to understand how they can be used to produce calculated data. Learners are taught how to apply formulas that include a range of cells, and	Skills  Manual recording of data collected and then tabulated on Chrome	Knowledge  T C Plans Chn explore how data is transferred over the internet. Learners initially focus on addressing, before they move on to the makeup and structure of data packets. Learners then look at how the internet facilitates online communication and collaboration; they complete shared projects online and evaluate different methods of communication. Finally, they learn how to communicate responsibly by considering what should and should not be shared on the	Skills  Explain the importance of internet addresses and understand how data is transferred across the internet	Knowledge  T C Plan This unit is the final KS2 programming unit and brings together elements of all the four programming constructs: sequence from Year 3, repetition from Year 4, selection from Year 5, and variables (introduced in Year 6 – 'Programming A'). It offers pupils the opportunity to use all of these constructs in a different, but still familiar environment, while also utilising a physical device — the micro:bit. The unit begins with a simple program for pupils to build in and test within the new	Skills  Chn are introduced to function of micro:bit and the programming environment, before creating their own programs. They will then run	Knowledge  T C Plans This unit introduces learners to the creation of websites for a chosen purpose. Learners identify what makes a good web page and use this information to design and evaluate their own website using Google Sites. Throughout the process learners pay specific attention to copyright and fair use of media, the aesthetics of the site, and navigation paths. Material for the website the teacher's choice,	Skills  learners will explore and review existing websites and evaluate their content. REfer to Y4 learning that websites are created by usi HTML code. Plan the features of web page. Home Learning idea web page. Home Learning idea their favourite websites and sketch them on the worksheet provide detailing the similarities and
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			by duplicating them. They use spreadsheets to plan an event and answer questions. Finally,				programming environment, before transferring it to their micro:bit. Pupils then take on three new projects with each lesson adding more depth. <b>Summative</b> assessment.		subjects. THe other subject provides the material for the website and the Computing learning must show progression from previous years. Summative assessment.	
		8	learners will create charts, and evaluate their results in comparison to questions asked. Summative assessment	Develop understanding of the spreadsheet structure, explore various formats, select for data items and then apply to own spreadsheets.		Explain how sharing information online can help people to work together and evaluate different ways of working together online.		Explore how if, then, else statements are used to direct the flow of a program. Apply their knowledge of if, then, else statements to create a program that features selection influenced by a random number to create a micro:bit fortune teller project.	This unit progresses students' knowledge and understanding of the following: digital writing, digital painting, desktop publishing, digital photography, photo editing, and vector drawing. Refer to learning graph for detail on this.	Consider the ownership and u images (copyright), recognise need to preview pages and ou the need for a navigation path
		Design a project that builds on a given example, choosing own artwork for my project, creating algorithms and explaining design choices		Use formulas to produce calculated data and apply formulas to data.				Update a variable with a user input and use an conditional statement to compare a variable to a value		Recognise the implications of linking to content owned by oth people
		Develop and refine ideas and content collaboratively.	-	Create spreadsheet to plan an event.				Design a project that uses inputs and outputs on a controllable device		
		Use design to create project and then evaluate it.		Use Google Charts to present data.				Develop a program to use inputs and outputs on a controllable device		
		C: PSHE, D&T, Maths	CURRICULU	IM -LINK: MATHS	CURRICULU	M LINK: PSHE,	CURRICULUM	Л -LINK: Maths	CURRICULUM LINK : SUBJECT which props	rovides content for the website, Engl
	CURRICULUM -LINE				+				- F-2	100

14/05/2024 4

- [1] ONLINE SAFETY is recorded here as one block but is actually taught as 6 lessons in 2 week blocks (1 block per term) over the course of the year.
- [2] Taught as an 8-10 week block.
- [3] Taught as a 4-5 week block.
- [4] Taught as a 4-5 week block.
- [5] Taught as an 5-6 week block.
- [6] Taught as a 5-6 week block.
- [7] ONLINE SAFETY is recorded here as one block but is actually taught as 6 lessons in 2 week blocks (1 block per term) over the course of the year.
- [8] Taught as an 8-10 week block.
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- [10] Taught as a 4-5 week block.
- [11] Taught as an 5-6 week block.
- [12] Taught as a 5-6 week block.
- [13] ONLINE SAFETY is recorded here as one block but is actually taught as 8 lessons in 2 week blocks (2 blocks in autumn and 1 block each in spring and summer).
- [14] Taught as an 8-10 week block.
- [15] Taught as a 4-5 week block.
- [16] Taught as a 4-5 week block.
- [17] Taught as an 5-6 week block.
- [18] Taught as a 5-6 week block.
- [19] ONLINE SAFETY is recorded here as one block but is actually taught as 8 lessons in 2 week blocks (2 blocks in autumn and 1 block each in spring and summer).
- [20] Taught as an 8-10 week block.
- [21] Taught as a 4-5 week block.
- [22] Taught as a 4-5 week block.
- [23] Taught as an 5-6 week block.
- [24] Taught as a 5-6 week block.
- [25] ONLINE SAFETY is recorded here as one block but is actually taught as 8 lessons in 2 week blocks (2 blocks in autumn and 1 block each in spring and summer).
- [26] Taught as an 8-10 week block.
- [27] Taught as a 4-5 week block.
- [28] Taught as a 4-5 week block.
- [29] Taught as an 5-6 week block.
- [30] Taught as a 5-6 week block.
- [31] ONLINE SAFETY is recorded here as one block but is actually taught as 8 lessons in 2 week blocks (2 blocks in autumn and 1 block each in spring and summer).

14/05/2024

- [32] Taught as an 4-5 week block.
- [33] Taught as an 4-5 week block.
- [34] Taught as a 5-6 week block.
- [35] Taught as a 5-6 week block.