



Year: 1/2      Subject: Computing PoS: Digital literacy		Topic Question/Title: Online Safety	Term - Autumn 1	Curriculum - B
<b>Prior Knowledge</b> All children will have looked at online safety last year. Children in year 2 will have already completed last year's online unit and children in year 1 will have completed work on online safety in EYFS. Children in EYFS have looked at how to use devices safely and how long to use the devices for. Children in year 1- looked at project evolve and have completed a unit of work on it. They have looked at how to use the internet safely, permission, online bullying, showing respect, real/ made up things online, online ownership and what to do if we need help online.		<b>Key Vocabulary</b> Self-image, internet, online relationships, online bullying, responsible, personal information, technology, privacy, security, password.	<b>Outcome</b> Children to create a poster to explain what they have learnt in the unit.	
<b>Future Learning</b> Children will continue this learning in any unit using the internet or devices. Online safety should be recapped at every opportunity when using devices in and out of school. Children will also have internet safety day later in the year. In year 2- children will recap their learning of online safety and then continue to develop their understanding of online safety using similar things. In year 3- Children will progress to looking in more detail of online safety. They will look at identity, respectful behaviour, how to help and support with online behaviour, to understand acceptable use of online platforms, protecting privacy online and importance of limiting time spent online.		<b>Stimulus</b> Be internet legends game. <b>First hand experiences (enrichment)</b> Be internet legends game.	<b>World of Work</b> General employment skills for a variety of jobs. Media Computer programmer/ designer Social media influencer.	
National Curriculum PoS		Key Knowledge	Possible evidence	
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.		<u>Self- image and identity</u> If something happens that makes me feel sad, worried, uncomfortable or frightened I can give examples of when and how to speak to an adult I can trust and how they can help. <u>Online relationships</u> I can use the internet with adult support to communicate with people I know (e.g. video call apps or services). I can explain why it is important to be considerate and kind to people online and to respect their choices. <u>Online reputation</u> I can describe what information I should not put online without asking a trusted adult first. <u>Online Bullying</u> I can describe how to behave online in ways that do not upset others and can give examples. <u>Managing Online information</u> I know / understand that we can encounter a range of things online including things we like and don't like as well as things which are real or make believe / a joke. <u>Heath, well- being and Lifestyle</u> I can explain rules to keep myself safe when using technology both in and beyond the home. <u>Privacy and Security</u> I can explain how passwords are used to protect information, accounts and devices. I can explain why it is important to always ask a trusted adult before sharing any personal information online, belonging to myself or others. <u>Copyright and Ownership</u> I understand that work created by others does not belong to me even if I save a copy	See project evolve resources. See 'Be internet legends' resources.	


<b>Year: 1/2      Subject: Computing</b> <b>PoS: Information Technology</b>		<b>Topic Question/Title: Weird &amp; Wonderful</b>	<b>Term - Autumn 2</b>	<b>Curriculum - B</b> 
<b><u>Prior Knowledge</u></b> All year 2s should be able to: Recognise software used in school where information can be inputted using typing (notepad/Word/Seesaw). <ul style="list-style-type: none"> <li>• Know how to open and save a document from/to a specific location within Word.</li> <li>• Know how to find previously saved files in folders using File Explorer.</li> <li>• Recognise where similar digital tasks have been done in the past.</li> <li>• To use letters, numbers and space keys to enter text onto a computer.</li> </ul> Year 1s will have looked at in EYFS have looked at how to use devices safely and how long to use the devices for.		<b><u>Key Vocabulary</u></b>  Word, keyboard, back space, mouse, open, save, document, keys, select, edit.	<b><u>Outcome</u></b> Children to create their own edited text for purpose	
<b><u>Future Learning</u></b> In year 2- children will continue to explore these skills and knowledge into looking at word processing and more purposeful changes and text manipulation. In year 3- children will develop this understanding further but going on to use these skills to create PowerPoint documents and word documents using more skills. They will also link their learning to the use of the internet- selecting images and information from the internet to use in their presentations.		<b><u>Stimulus</u></b> Children to look at a range of Posters / Books / Adverts  <b><u>First hand experiences (enrichment)</u></b> Using the computers.	<b><u>World of Work</u></b> Journalist /Author	
<b><u>National Curriculum PoS</u></b> <ul style="list-style-type: none"> <li>• Use technology purposefully to create, organise, store, manipulate and retrieve digital content.</li> <li>• Recognise common uses of information technology beyond school.</li> <li>• 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.</li> </ul>	<b>Key Knowledge</b>		<b>Possible evidence</b>	
	<ul style="list-style-type: none"> <li>• To recognise that a keyboard is used to enter text into a computer</li> <li>• To recognise that text can be changed</li> <li>• To recognise that the appearance of text can be changed</li> <li>• To recognise that text can be edited.</li> <li>• To consider the impact of choices made</li> <li>• To know how to open and save a document from/to a specific location within Word.</li> <li>• To know how to find previously saved files in folders using File Explorer.</li> <li>• To recognise where similar digital tasks have been done in the past.</li> <li>• To know how to login and out of computers.</li> </ul>		<ul style="list-style-type: none"> <li>• <b>Link the outcome to a piece of work linked to your topic to make the learning more meaningful for the children.</b></li> <li>• Children should be familiar with how to sit at a computer in the correct way, recap this very quickly to remind them.</li> <li>• Children should be able to type using correct hand positioning and trying not to use just one finger at a time.</li> <li>• Children should be able to turn the computer on and log in to their class. Mixed ability pairs will help with this.</li> <li>• Children to look at why we need to edit our writing.</li> </ul>	
	<b>Application of Key Skills</b>		<b>Possible evidence</b>	
	<ul style="list-style-type: none"> <li>• To use letter, number, and Space keys to enter text into a computer.</li> <li>• To use punctuation and special characters</li> <li>• To use the Backspace key to remove text.</li> <li>• To choose options to achieve a desired effect</li> <li>• To use Undo</li> <li>• Type simple words/ sentences (where appropriate)</li> </ul>		<ul style="list-style-type: none"> <li>• Children can open a document and then begin to practice typing skills.</li> <li>• Children should use capital letter and full stops in their typing.</li> <li>• Once work has been typed, even if this is a simple sentence of creation of their name in typed form, children will need to save their work.</li> <li>• Children should be given a piece of writing for them to edit and then to talk about why they have edited it.</li> <li>• Children need to be reminded about the use of double clicking to find the file destination, encourage children not to move the mouse when they double click.</li> </ul>	

Year: 1/2      Subject: Computing		Topic Question/Title: Treasure hunters		Term - Spring 1	Curriculum - B	
<b>Prior Knowledge</b> If children are in year 1, children will have looked at some basic online skills, but they will not have any prior knowledge of computer science or programming yet. If children are in year 2, they will have looked at Bee-bots last year. They will have looked at sequencing, ordering and debugging routes using the bee-bots. Children will build on their knowledge and understanding from the last unit. They have looked at explaining what a given command does. They looked at understanding that a program is a set of commands that a computer can run.		<b>Key Vocabulary</b> Bee Bot, program, device, sequence, instructions, outcome, command, order, debug, directions.		<b>Outcome</b> Treasure Map		
<b>Future Learning</b> This unit progresses learners’ knowledge and understanding of giving and following instructions. It moves from giving instructions to each other to giving instructions to a robot by programming it. In this same year children will look at programming again. They will use the skills of sequencing, commands and instructions in the next unit of Scratch Jr. Next year in year 2 children will continue this learning, they will look at Bee-bots again in more detail. They will also complete another programming unit on Scratch Jr. Using the programming skills of sequencing and recognising that a command will have an outcome.		<b>Stimulus</b> Videos of Robots  <b>First hand experiences (enrichment)</b> Robots		<b>World of Work</b> Programmer		
<b>National Curriculum PoS</b> <ul style="list-style-type: none"><li>Understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions</li><li>Create and debug simple programs</li><li>Use logical reasoning to predict the behaviour of simple programs</li><li>Recognise common uses of information technology beyond school</li></ul>		Key Knowledge		Possible evidence		
		<ul style="list-style-type: none"><li>To explain what a given command does</li><li>To match a command to an outcome</li><li>To understand that a program is a set of commands that a computer can run</li><li>To recall that a series of instructions can be issued before they are enacted</li></ul>		Children will explore using individual commands, both with other children and as part of a computer program. They will identify what each bee-bot command does and use that knowledge to start predicting the outcome of programs. Children will use the commands to run a program and then debug the program if they encounter any problems. Children should be able to identify at least two different routes to get from the same start position to the same end square. Learners should plan programs for each of the routes they have selected		
		Application of Key Skills		Possible evidence		
		<ul style="list-style-type: none"><li>To predict the outcome of a command on a device</li><li>To list which commands can be used on a given device</li><li>To run a command on a floor robot</li><li>To choose a command for a given purpose</li><li>To choose a series of words that can be enacted as a program</li><li>To build a sequence of commands in steps</li><li>To run a program on a device</li></ul>		Children will be introduced to floor robots. They will talk about what the buttons on a floor robot might do and then try the buttons out. They will spend time linking an outcome to a button press. Children will consider the direction command buttons, as well as the ‘clear memory’ and ‘run program’ buttons. Children will make their predictions by looking at the commands and matching the program steps to movements. Children will decide what their program will do. They will then create their program and test it on the robot. Where needed, children will also debug their program. Children will be encouraged to plan routes around a mat before they start to write programs for those routes. The activities in this lesson also introduce the concept of there being more than one way to solve a problem.		

Year: 1/2      Subject: Computing PoS: Information Technology		Topic Question/Title: Strike a Pose	Term - Spring 2	Curriculum - B
<u>Prior Knowledge</u> All year 2s should be able to: Recognise software used in school where information can be inputted using typing (notepad/Word/Seesaw). know how to open and save a document from/to a specific location within Word, know how to find previously saved files in folders using File Explorer, recognise where similar digital tasks have been done in the past, To use letters, numbers and space keys to enter text onto a computer. Year 1s will have looked at in EYFS have looked at how to use devices safely and how long to use the devices for. All children will have used an iPad and should be familiar with using an app/ program.		<u>Key Vocabulary</u> Photo, photograph, photography, zoom, filter, edit, landscape and portrait.	<u>Outcome</u> Photo Exhibition to display	
<u>Future Learning</u> In Summer 2, children will also complete a digital drawing unit where they will use some skills to create digital artwork. Children will move onto in year 3/4 looking at editing photos, rotating, adding filters, cloning and removing unwanted things from a photo to improve the photo to meet a given purpose. They will also move onto in year 5/6 looking at making and editing videos. This unit will help build and give the children the basic skills of taking and evaluating good photos which will be used in future units of learning across school.		<u>Stimulus</u> Photo Bingo <u>First hand experiences (enrichment)</u>	<u>World of Work</u> Photographer	
<u>National Curriculum PoS</u> <ul style="list-style-type: none"> <li>Use technology purposefully to create, organise, store, manipulate, and retrieve digital content</li> <li>Recognise common uses of information technology beyond school</li> <li>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</li> </ul>	Key Knowledge		Possible evidence	
	To recognise that some digital devices can capture images using a camera To talk about how to take a photograph To recognise that photographs can be saved and viewed later To recognise features of ‘good’ photographs To identify how a photograph could be improved To recognise that photographs can be change after they have been taken		<ul style="list-style-type: none"> <li>Children to use iPads to experiment taking photos.</li> <li>Children to learn about landscape and portrait and why we might need to use the different options.</li> <li>Children to think about what makes good photos- children to create a checklist of how to take one and what must be included</li> <li>Children to experiment with different lighting and how these can effect the photos.</li> <li>Children then to have time to explore editing the photos they have created using different effects.</li> <li>Children to explore some photos that have already been edited and briefly explore whether they could be real or fake.</li> <li>Children also to evaluate the photos they have taken to decide whether they are ‘good photos’ or not and explain why.</li> </ul>	
	Application of Key Skills		Possible evidence	
		To capture a digital image To take photographs in both landscape and portrait format To view photographs on a digital device To hold the camera still to take a clear photograph To use zoom to change the composition of a photograph To improve a photograph by retaking it To use filters to edit the appearance of a photograph	<ul style="list-style-type: none"> <li>Children to start by looking at a range of devices that will take photos, discuss possible advantages, and disadvantage.</li> <li>Learning will be easier and will allow all children to use iPad with cameras will work.</li> <li>This unit uses screenshots from the website <a href="https://pixlr.com/x/">https://pixlr.com/x/</a>, but you could also use the Pixlr app if you’re using tablets.</li> </ul>	

Year: 1/2		Subject: Computing		Topic Question/Title: Space Race!		Term - Summer 1		Curriculum - B		
PoS: Computer Science										
<b>Prior Knowledge</b> This unit progresses learners’ knowledge and understanding of programming and follows on from Moving a robot- treasure hunters, where children will have learned to program a floor robot using instructions. All children will now have looked at the BeeBots in previous units, looking at sequencing and algorithms. They will have looked at commands, outcomes also how to program a device to meet a purpose. They will also have looked at how to debug and problem solve when they have encountered a problem.						<b>Key Vocabulary</b> Command, outcome, program, algorithms, digital device, instructions, logical reasoning.			<b>Outcome</b> Create Rocket Game	
<b>Future Learning</b> Next year in year 2 children will continue this learning, they will complete another programming unit on Scratch Jr. Using the programming skills of sequencing and recognising that a command will have an outcome. In year 3, children will progress this learning onto Scratch using the computers. They will look at sequencing, events and controls. They will look into more detail using sprites and a variety of commands as well as debugging and problem solving.						<b>Stimulus</b> Play Computer Games/ scratch programs that already exist.  <b>First hand experiences (enrichment)</b> Using iPads			<b>World of Work</b> Game Programmer	
<b>National Curriculum PoS</b>		<b>Key Knowledge</b>				<b>Possible evidence</b>				
<ul style="list-style-type: none"><li>Understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions</li><li>Create and debug simple programs</li><li>Use logical reasoning to predict the behaviour of simple programs</li></ul>		To predict the outcome of a command on a device To list those commands that can be used on a given device To explain what a given command does To recognise how to run a command (press a button) To understand that a program is a set of commands a computer can run To build a sequence of commands in steps To combine commands in a program				<ul style="list-style-type: none"><li>Children are to build the unit up to creating a ‘space race’ rocket program using Scratch Jr. (Take photos and videos as evidence of the children’s outcome)</li><li>Children to start by becoming accustomed to the ScratchJr programming environment. Children to discover that they can move characters on-screen using commands, and compare ScratchJr to the Bee-Bots used in the previous unit.</li><li>Children to follow given algorithms to create simple programs.</li><li>Look into how some blocks in ScratchJr have numbers underneath them and how to change these values. Then identify the effect on a block of changing a value.</li><li>Test whether their algorithms are effective when their programs are run and evaluate their project.</li></ul>				
		<b>Application of Key Skills</b>				<b>Possible evidence</b>				
		To choose a command for a given purpose To choose a series of words that can be enacted as a program To choose a series of commands that can be run as a program To run a program on a device				<ul style="list-style-type: none"><li>Children to choose appropriate backgrounds and sprites for a ‘Space race’ project. They will decide how each sprite will move, and create an algorithm based on the blocks available in ScratchJr that reflects this.</li><li>Look at how blocks can be joined together in ScratchJr. Use a Start block to run their programs. Also, look at additional skills such as adding backgrounds and deleting sprites.</li><li>Look at how to add and delete sprites in ScratchJr. Look at how each sprite has its own programming area, and learn how to add programming blocks to give instructions to each of the sprites.</li></ul>				



Year: 1/2      Subject: Computing PoS: Information Technology		Topic Question/Title: Doodles & Designs		Term - Summer 2		Curriculum - B		
<u>Prior Knowledge</u> All children have completed a unit this year in Spring 2 all about ‘photography.’ They have looked at what makes a good photo.				<u>Key Vocabulary</u>			<u>Outcome</u> Display of Artwork	
<u>Future Learning</u>				<u>Stimulus</u> Artist- Wassily Kandinsky  <u>First hand experiences (enrichment)</u>			<u>World of Work</u> Artist, Designer	
<u>National Curriculum PoS</u> <ul style="list-style-type: none"><li>To understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions</li><li>To create and debug simple programs</li><li>To use logical reasoning to predict the behaviour of simple programs</li></ul>		Key Knowledge			Possible evidence			
		To explain what different freehand tools do To recognise computers can be used to create art To recognise a tool can be adjusted to suit my need To decide when it's appropriate to use each tool To consider impact of choices made To compare painting using a computer with painting using brushes						
		Application of Key Skills			Possible evidence			
		To create a picture using freehand tools To use shape and line tools when precision is needed To use a range of paint colours To use the fill tool to colour an enclosed area To use the undo button to correct a mistake To combine a range of tools to create a piece of artwork						