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| Progression of Skills | | | | | | |
| **Early learning Goals**  **Personal, Social and Emotional Development** - **Managing Self**  Be confident to try new activities and show independence, resilience and perseverance in the face of challenge. Explain the reasons for rules, know right from wrong and try to behave accordingly  **Expressive Arts and Design** - **Creating with Materials**  Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. | | | | | | |
| Skill | EYFS/Year 1/ Year 2  Cycle A | EYFS/Year 1/ Year 2  Cycle B | Year3/4  Cycle A | Year3/4  Cycle A | Year 5 | Year 6 |
| Creativity – Digital Creativity (Information technology and digital literacy) | **Autumn 1**  **Everyone Can create: Light and shadows in Photography**  Students will use the camera app to discover how light can effect the objects they see around them. They will use light to emphasise subjects, shadows to draw attention to unseen worlds and take control of the light source to capture different perspectives on every-day objects linked to their class topic.  **Summer 2**  **Everyone can create: Patterns and shapes**  Children will use the Sketches School app to practice their fine motor skills through creative drawing exercises on iPad. They will explore different digital art tools as they work towards producing their own pattern linked to their class topic. They will begin to develop an understanding of storing and retrieving digital files as they create their artwork | **Autumn 1**  **Everyone Can create: Drawing People and Places**  Students will learn how to draw more complex pieces of art using digital tools. This will include using scale and perspective, showing emotion and movement and saving and organising their documents in the Sketches School app. Students will link their artwork to the topic they are studying where possible, to be used as illustrations in other pieces of digital learning.  **Summer 2**  **Everyone can create: Photo Collages**  Students will learn a variety of photographic and digital skills in this module, including how to edit, crop, rotate, position, resize and remove backgrounds from images. They will use both the Camera app and Keynote to pull photographs together to form their compositions | **Autumn 1**  **Everyone Can create: Your First Movie**  Students will learn the key skills of recording, editing, selecting background footage, building a storyline and creating their own short movie about themselves in Clips. This could also be linked to the topic being studied at the time  **Summer 2**  **Everyone can create: Artistic Adjectives**  Students will use digital methods to portray emotion, meaning and expression in the Sketches School app. They will learn different methods of creating lettering using different drawing tools within the app, before then creating their own piece of Expressive Word Art based around an adjective. They will create a visual representation of the adjective through a creative depiction of the word itself. | **Autumn 1**  **Everyone Can create: Story boards and Movie Pitch**  Students will learn the key skills of planning and refining a video project whilst developing their skills in both Pages and Keynote. Their video will link to their topic work in order to bring their existing learning to life whilst developing their narrative abilities  **Summer 2**  **Everyone can create: Infographics**  Students will use their own imagery, combined with symbols and text in Keynote, to create their own Infographics linked to their topic of either the Egyptians of the Shang Dynasty. These skills will empower student sot be confident creators with iPad by teaching them how to share information and display relevant facts and research through colourful and vibrant Infographics. | **Autumn 1**  **Augmented Reality: Ancient Greek Civilisation**  Using the AR Makr App, students will create key features of Ancient Greek life in their classroom using Augmented Reality. They will create their own graphics and imagery in Keynote which will then be exported and used in AR Makr to bring this world to life. Students will then narrate a short documentary-style video of their AR civilisation, identifying key features.  **Summer 2**  **Everyone can create: Podcasts**  Students will learn how to use the Audio Recorder in GarageBand to record a conversation between two or more participants, before carefully editing and arranging these audio clips to create a polished narrative in the form of a Podcast. Students will also use Apple Loops to add background music, sound effects and section divides in their podcasts. | **Autumn 1**  **Everyone Can create: Special Effects in iMovie**  Students will learn to use jump cuts to enhance storytelling and green screen to bring their imaginations to life using iMovie. They will also learn to use the built-in Storyboards feature of iMovie to structure their projects as they create a final project sharing their topic based learning  **Summer 2**  **Everyone can create: Year 6 short film**  Combining all the skills learnt in iMovie and Clips, as well as students story-telling abilities, the students will create a short film linked to their time in Primary School. They may choose to look back at their seven year journey or look ahead to the next steps, but they will concentrate on narrative, structure and content based on a screenplay which they will create in Pages. |
| Programming – Digital programming (Computer science and digital literacy) | **Autumn 2**  **Everyone can code early learners: functions and loops**  Students will explore the idea of grouping sets of instructions together with a name to create a ‘Function ’ and then consider how these can be repeated multiple times using a ‘Loop’. By relating these two Computing concepts to real life situations the students will develop a real-world knowledge and understanding of how both Functions and Loops work.  **Spring 2**  **ScratchJr: Creating a quiz**  Students will build on their previous learning in ScratchJr to design and code a series of simple quiz questions based on the sprites and backgrounds they have chosen. These quiz questions will be coded to be either a correct or incorrect answer, before students are encouraged to evaluate and refine their ideas and project. | **Autumn 2**  **Everyone can code early learners: Variables and App Design**  Students will explore the concept of ‘Variables ’by relating them to real-world examples. They will develop an understanding of a Variable being something which can change in value when requested and which can be used to inform future choices or decisions. They will then use their learning to unpick several apps they are familiar with on iPad and try to identify examples of Commands, Functions, Loops and Variables within them.  **Spring 2**  **Scratch: Musical Actions and Sequences**  Students will be introduced to the main version of Scratch by using sound blocks to sequence a piece of music. They will consider the order in which blocks are placed, and the effect they have on the overall program. Students will then be encouraged to use Sprites as buttons to activate different sound and motion effects by making their own ‘Rock Band ’using multiple Spites and sound effects. | **Autumn 2**  **Scratch: Using loops and Repetition**  Students will learn to use Loops and Repetition blocks (repeat x times / forever blocks) to create shapes using the drawing tools in Scratch. They will differentiate between these two types of loops to determine which one is best suited to a particular use-case. Once these skills are mastered they will then create animations to be used in a Scratch game project.  **Spring 2**  **Scratch: Selection in Quizzes**  Students will learn to use ‘If / Then / Else ’structures to alter the outcome of their code depending on whether a certain condition has been met. They will use this structure to create an interactive multiple-choice quiz using Scratch, with questions linked to their topic of Stone Age or Roman Britain. | **Autumn 2**  **Scratch: Using variables in a Game**  Students will use Variables to add a scoreboard into a Scratch project, ensuring that points are recorded accurately. As they develop a greater understanding of variables they will then implement a Timer into their game using a second variable.  **Spring 2**  **Everyone can code: Commands and Functions**  Students will begin to learn how to code in Swift using the Swift Playgrounds app. The first concept to grasp is that of using Commands to control what is happening in the app. In this instance the students will be issuing commands to move a character around a course. They will then take this further with Functions, which act as a series of commands run in one go | **Autumn 2**  **Everyone Can Code: For Loops and Variables**  Students will use Loops to run the same instruction-set multiple times in order to complete tasks in the Swift Playgrounds app. These Loops are found by locating patterns in the existing code and then reducing the total number of lines written by exchanging them for Loops. Students will also learn that Variables are ways of storing data and values to use within their coding.  **Spring 2**  **Everyone can code: Conditional Code and Types and Initialisation**  Students will learn how to use Conditional Code to make decisions in their programming, such as whether something is true or false. This is called a ‘Boolean ’ comparison. They will also learn how to classify and organise their code using Types, structures which can save time when writing large programs and algorithms | **Autumn 2**  **Everyone can code: Functions and Parameters and Logical Operators**  Students will learn that Functions are powerful ways of running an algorithm multiple times, but with subtle differences specified in an input. This means they can reuse code to create more complex programs in less time. They will also learn about using Logical Operators in Swift which will determine which algorithm to run at which point, based on pre-determined conditions.  **Spring 2**  **Everyone can code: With Loops and Arrays and Refactoring**  Students will learn that powerful While Loops allow code to run for a variable period of time or iterations, stopping only when a condition is met. For instance, keep moving one step forward and until you reach the end of the path. They will combine previous learning and coding structures together to create more interesting and complex programs by rewriting existing code so it links together in a more effective way. |
| Safety – Digital safety (Digital literacy) | **Spring 1**  **Online safety: Smartie the penguin**  Students will use the two Year 1 books to explore various themes linked to online safety and discuss them as a class afterwards. The opportunity for discussion after reading the books is incredibly valuable and may lead to unexpected issues that the children are already aware of which can be properly addressed in this session | **Spring 1**  **Online safety: Smartie the penguin**  Students will use the two Year 2 books to explore various themes linked to online safety and discuss them as a class afterwards. The opportunity for discussion after reading the books is incredibly valuable and may lead to unexpected issues that the children are already aware of which can be properly addressed in this session. | **Spring 1**  **Be Internet Legends: Online Reputation, Passwords & Behaviour and Opinions and Differences**  Students will discover what their online reputation is and how it can follow them as they grow older. They will decide which information is safe to share and which should be kept private, including how passwords can help us keep our digital lives secure. They will also understand that messages online can be interpreted in different ways and that it may be easy for misunderstandings to occur | **Spring 1**  **Be Internet Legends: Making Good Decisions Online, Being Brave Online and Speak Up & Report It**  Students will learn that the decisions they make online can have real world implications if not handled correctly. They will understand the difference between being a ‘bystander’ and an ‘up stander’ when they see somebody experiencing unkind behaviour online and will learn how to bring this to a responsible adult so that it can be resolved. | **Spring 1**  **Be Internet Legends: Positive Digital Footprints, Spotting Fake Information Online and Sharing, Settings & Passwords**  Students will learn about their digital footprint and how this reflects who they are to people who have never met them. They will consider how something that seems harmless and silly now could have huge implications in the future when they’re adults. They will learn all about the concept of ‘fake news’ and how to spot this dangerous misinformation online as well as how to report this and make others aware | **Spring 1**  **Be Internet Legends: Relationships & Being Kind, Refusing & Reporting and Handling & Reporting Mean Behaviour**  Students will learn how offline and online relationships can become blurred and how decisions they make can impact both. They will learn more about cyber bullying and how to keep themselves and others safe online by reporting behaviour which is upsetting or unkind. |
| Technology- Digital technology (Computer science and information technology) | **Summer 1**  **Data and Information – Grouping Data**  Labelling, grouping and searching are important aspects of data and information. Searching is a common operation in many applications and requires an understanding that to search data, it must have labels. The children will focus on assigning data (images) with different labels in order to demonstrate how computers are able to group and present data. | **Summer 1**  **Technology All Around Us**  Students will consider different uses of Computing Technologies in their own lives including at home and at school. They will discover how it can be used for good in our lives and the benefits it can bring. Students will also learn about the benefits technology can bring in other walks of life from libraries to hospitals and shops to businesses. | **Summer 1**  **Data and information – Branching databases** Students will use the Numbers app to explore the concept of spreadsheets and consider how they can be useful in different contexts. Starting with a simple data collection spreadsheet with the class, students will learn to format and present their data including through appropriate charts and graphs. | **Summer 1**  **Computer systems and networks - The Internet**  Students will be briefly introduced to the concept of computer networks before focussing more on the Internet itself, something they will be far more familiar with. Students will be encouraged to evaluate online content in order to decide how honest, accurate, or reliable it is and understand the consequences of false information. | **Summer 1**  **Data and Information - Flat-File Databases**  Students will discover how data can be stored in a database by using two example databases. They will understand the concept of a record, a field and a key. They will learn how records can be grouped and how this makes it easy to access data stored on an electronic device | **Summer 1**  **Computer systems and networks - Communication and networks**  Students will 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 internet |