



Aintree Davenhill Planning Overview

Subject: Computing **Term:** Summer 1

	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	Animal Safari (IT) Pretty Pictures (IT)	Minibeasts (IT)	Story Land (IT)	Rainforests (IT)	Dinosaurs (IT)	AR Games (IT)	Money (IT)
Lesson 1	Animal Safari (IT) To use digital devices safely in the classroom. (IT) To open apps and scan QR codes. (IT) To sort data.	(IT) To find and open a digital file. (IT) To add a photograph and text to a digital document. (IT) To use a paint application to create a digital self-portrait. (IT) To use a microphone to record a mini-beast fact.	(IT) To understand what the term 'multimedia' means. (IT) To understand the different media types that can be combined. (IT) To create a digital drawing. (IT) To record a short audio clip.	(IT) To add text to a document and apply text formatting. (IT / DL) To use Google Earth to search for specific places. (IT) To take screenshots and insert images into a document.	(IT) To add text to a document and apply text formatting. (IT) To film using the camera on an iPad or similar device (IT) To film high-quality film shots.	(IT) To understand AR technology and its uses. (IT/DL) To discuss new technologies and their impact on work/society. (IT) To open a digital file and edit it. (IT) To play and review an AR game, detailing positives and negatives.	(IT/DL) To understand the evolution of money and the move to digital currency. (IT) To save an image of a historical figure to a device. (IT) To create an illustration (or apply filters to an image) based on an image and insert it into a document.
Lesson 2	Animal Safari (IT) To use digital devices safely in the classroom. (IT) To open apps and scan QR codes. (IT) To record data.	(IT) To sort data to match a label. (IT) To record data in a tally chart. (IT) To sort data into different groups. (IT) To create a pictogram of mini-beasts.	(IT) To sort data to determine the outcome of a class vote. (IT) To brainstorm ideas for a sequel to the selected book and produce a paper-based layout. (IT) To use the internet to find an image and insert the image into a document. (IT) To photograph a paper-based plan and insert it into a document.	(IT) To use a digital device to scan QR codes (IT/DL) To understand what is meant by 360° (degree) video (IT) To explore an AR (Augmented Reality) scene	(IT) To film more high-quality shots. (IT) To use a selection of filming and movie-making techniques. (IT) To direct an actor to give a great performance.	(DL) To discuss the role of an influencer (DL) To discuss the potential risks of sharing content online (IT) To create an AR scene (IT) To review an AR app	(IT/DL) To use an online currency exchange tool. (IT) To document research and data. (IT/DL) To use a Reverse Image Search tool.
Lesson 3	Animal Safari (IT) To independently find and open an application for a particular purpose. E.g. drawing a picture.	(DL) To open a browser and understand the term online. (DL) To enter keywords into a search engine. (DL) To conduct an image search. (IT) To save and insert an image into a document.	(IT) To explore basic digital drawing tools and techniques. (IT) To export and save a digital drawing. (IT) To create a front cover design with, text and an illustration that is related to their sequel story.	(IT) To record data in a tally chart. (IT) To record data in a bar chart. (IT) To use digital tools to present and analyse data.	(IT) To film high-quality shots (IT) To edit shots into a scene (IT) To use editing software to add effects to your scene.	(IT) To create a simple storyboard. (IT) To record a series of short video clips. (IT) To use a video editing application to create a short vlog that includes different types of media e.g. video, images, text and audio	(IT) To add text to a document, use a consistent size, colour and font. (IT) To create a digital drawing to show a future career. (IT) To record a short audio clip within a document.
Lesson 4	Pretty Pictures (IT) To understand how various devices and apps can be used in the classroom. (IT) To use a camera safely and respectfully. (IT) To learn to take photographs on a device. (IT) To learn to delete unwanted photographs on a device.	(DL) To use technology safely. (IT) To take good quality photographs. (IT) To delete poor-quality photographs from a device. (IT) To share and present the photographs in a digital document	(IT) To understand the term animation. (IT) To use frames to create movement. (IT) To export a video file. (IT) To import a video into a document.	(IT) To create a simple poster using an unfamiliar application (IT) To use text and image formatting tools (IT/DL) To advanced image search tools to refine an image search	(IT) To Explain what a film storyboard is. (IT) To create a storyboard for my film. (IT) To explain how I will film the shots in my storyboard	(IT) To create digital graphics and illustrations. (IT) To understand how to create digital art using Apple's Keynote. (IT) To export graphics with a transparent background.	(DL) To understand the risk of online scams. (IT/DL) To create images using AI - text-to-image prompts. (IT/DL) To produce a poster outlining the risk of an online scam.
Lesson 5	Pretty Pictures (IT) To take a photograph of the work (IT) To share a photograph with the teacher. (IT) To use a camera safely and respectfully.	(IT) To use a paint application and various tools. (IT) To export and share a picture. (IT) To use a microphone to record a narration. (IT) To take information, reformat it and present it.	(IT) To independently create an illustration. (IT) To export a digital drawing. (IT) To insert a digital drawing into a digital book. (IT) To use a microphone to add narration in a digital book.	(DL) To use online tools that can improve our writing skills (IT / DL) To download and save digital media (IT) To write a digital script (voice-over) (IT) To use a microphone to record audio	(IT) To film and act against a green screen. (IT) To use green screen software to add special effects to my film.	(IT) To import graphics into an app. (IT) To use an AR content creation app. (IT) To record audio and video to showcase an AR experience.	(IT) To use a device's in-built calculator. (IT) To create a spreadsheet with columns and rows. (IT) To input data into a spreadsheet.
Lesson 6	Pretty Pictures (IT) To take photographs using Zoom features and filters. (IT) To insert pictures into a document. (IT) To add text to a document.	(IT) To safety, hold a camera and record video clips. (IT) To present information as a video clip. (IT) To review video clips. (IT) To write a simple script.	(IT) To create a short video clip. (IT) To insert a video clip into a digital book. (IT) To share their finished multimedia creation	(IT) To import a video clip into a video editing application (IT) To record an audio clip on a video timeline	(IT) To edit shots together to create a movie trailer. (IT) To use green screen software to add special effects to my film. (IT) To choose titles, filters and soundtracks to make my movie trailer look more professional. (IT) To review my movie trailer and suggest improvements.	(IT/DL) To explain key vocabulary. (IT) To share what they have learnt and favourite parts of the lessons (IT/DL) To discuss how AR and the skills they've learned might be used in the future.	(IT) To assess data. (IT) To input additional data into a spreadsheet within columns and rows. (IT) To calculate profile or loss based on data. (IT) To use functions within a spreadsheet (extension activity).



Aintree Davenhill Planning Overview

Subject: Computing **Term:** Summer 2

	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	Robots (CS)	My Friend the Robot (CS)	Online Buddies (DL)	Programming with Robots (CS)	Games Designer (CS)	Web Designer (CS)	Online Safety Dilemmas (DL)
Lesson 1	(IT) To understand where can we find robots in the world around us. (IT) To create a painting or digital artwork of a robot, including printing and cutting out. (IT) To save/share work.	(CS) To understand what robots are and what jobs they do in the real world? (IT) To add a photograph and text to a document. (IT) To use various drawing features to create a digital drawing. (IT) To use a microphone to record voice narration.	(DL) To know that there are different methods of communicating online (IT) To open and edit a digital file (DL) To explain how digital devices are used in school and at home	(CS/IT) To better understand robots and their use in the world around us. (IT) To use a paint application to create an illustration of a robot. (CS/IT) To create a list of features a robot could perform to help in daily life.	(DL) To be able to explain the purpose of age restrictions for video games. (DL) To be able to identify the different age ratings for video games in the UK. (DL) To be able to explain why it is important to follow age restrictions for video games.	(IT/DL) To discuss different types of technology and their benefits/negatives (IT/DL) To name and describe different websites and their purpose (IT/DL) To use a web browser and search engine to find answers to questions (IT) To use editing and formatting to improve the presentation of your work	(DL) To explore the terminology and vocabulary of online life. (DL) To use either advanced searching or an AI chat bot to research. (IT/DL) To create an interactive game based on online safety vocabulary.
Lesson 2	(MS/IT) Explore how can technology (microphone) be used to record audio and share ideas (MS/IT) Learn to take photographs (MS/IT) Use a device to scan a QR code	(CS) To understand that an algorithm is a set of instructions to solve a problem. (CS) To follow an algorithm and create an algorithm. (IT) To move objects on the screen. (IT) To add text to a digital document.	(DL) To know who are the trusted adults, we can ask for help (DL) To understand the importance of always asking permission before using a digital device (DL) To know that you should always tell your parents what you are doing online	(CS) To understand that an algorithm is a detailed plan to solve a problem or complete a task. (CS) To understand that a program is a set of instructions for a computer, written in a way that a computer can understand (e.g. Command Blocks). (CS) To create and debug a program using Scratch command blocks.	(CS/IT) To be able to define the term "video game design." (CS) To be able to identify the different stages of the video game development process. (CS & IT) To be able to explain the role of the video game designer. (CS) To understand inputs and outputs on a digital device.	(CS) To name the equipment needed to access the Internet. (CS) To understand what a computer network is. (CS) To understand how browsers work. (CS) To find out the location of a computer using an IP address.	(DL) To explain how we communicate around the world and how communication has changed (DL) To understand why communication apps have age ratings. (DL) To explain the benefits and risks of online communication apps.
Lesson 3	(CS) Why sequencing is important (IT/MS) Learn to move objects on a screen (CS) Sequence instructions to solve a problem	(DL/IT) To work with a partner and take turns using a device. (CS) To use logical reasoning to predict the outcome of actions/instructions. (CS) To give instructions to a programmable toy to reach a destination.	(DL) To understand how to treat a friend offline and online (DL) To understand, we need to think about how our behaviour might make them feel online (DL) To share a photograph and make a positive comment about a friend.	(DL) To sign in to or create an online account safely. (CS/IT) To discuss the positives and negatives of technology (Automation/Driverless Cars) (CS) To use logical reasoning to predict outcomes and potential errors in algorithms and programs.	(IT) To be able to use a digital art program to create game graphics. (IT) To be able to design characters, backgrounds, and objects that are appropriate for their target audience. (IT) To be able to export their game graphics in a format that is compatible with Scratch. (IT) To label various digital file types.	(CS) To use the programming/markup language of HTML. (CS) To use and develop your programming skills using HTML. (CS/IT) To media to an HTML website.	(DL) To identify real or fake images online and explain the benefits and risks of AI being used on social media. (DL) To consider their own personal social media habits (oversharing). (DL) To explain personal information and the importance of keeping it safe.
Lesson 4	(CS) What is an 'algorithm'? (CS) Sequenced instructions (understand that this is called an algorithm) (CS) Create a simple visual algorithm.	(DL/IT) To work with a partner and take turns using a device. (CS) To Use logical reasoning to predict the outcome of actions/instructions. (CS) To debug instructions if required. (CS) To give instructions to a programmable toy or app to reach a destination.	(DL) To know what constitutes personal information. (DL) To understand the need to minimise the amount of personal information shared online. (DL) To use an online service to communicate.	(IT) To use a drawing application to create a car graphic with a transparent background. (DL) To sign-in with a username and password to an online account. (IT) To export an image file and upload it to an online site.	(DL) To create secure usernames and passwords for an online account. (DL) To be aware of the risks associated with sharing personal information such as passwords. (CS) To be able to import and use game graphics in their Scratch programs.	(IT/DL) To discuss and evaluate the features of a good website. (IT/DL) To understand basic icons used on websites. (CS/IT) To plan and create a basic site map for a website.	(DL) To understand the different age ratings on games and other media. (DL) To understand the reasons for age ratings on games and other media (DL) To know what to do if they should experience something not designed for their age range.
Lesson 5	(CS) Use directional language as part of an algorithm (CS) Create a simple visual algorithm to move an object. (CS) Play with electronic robot toys/apps	(CS) To use logical reasoning to solve sequencing challenges (IT) To take screenshots of work and insert an image into a document. (IT/CS) To use a microphone/record audio tool to discuss sequencing/creating a program.	(DL) To understand that online bullying is an example of unacceptable behaviour (DL) To understand, it is crucial to tell a trusted adult straight away and explain what is happening if you have a negative experience online (IT) To use different types of digital media in a document	(CS) To understand how the skill of decomposition is used in computing. (CS) To debug programs. (CS) To work independently to solve problems and create a program to complete a task.	(DL) To sign into an online account. (CS) To be able to use Scratch and start to create a simple hero versus villain game. (CS) To be able to use block commands to control the movement and behaviour of their sprites. (CS) To be able to create a simple game loop.	(IT/DL) To sign in to an online web builder. (DL) To discuss different forms of content and copyright. (DL) To understand how to find copyright-free images. (IT/DL) To add webpages and understand the menu system. (IT) To add images and text to the home page.	(DL) To explain what fake news is and why people share it. (DL) To identify the features of fake news and how to spot it. (DL) To understand the dangers of sharing fake news and how to combat it.
Lesson 6			(DL) To collaborate/take turns on a digital device. (IT) To use a range of digital drawing tools. (DL) To use a search engine and keywords to find a website.	(CS) To create a variable in a program. (CS) To use an IF Statement in a program. (CS) To use a Forever Loop in a program.	(CS) To create and manipulate game variables. (CS) To use repeat commands and IF/Then statements (CS) To be able to add finishing touches to their game, such as sound effects and music. (DL/CS) To be able to share their game with others.	(IT) To add various forms of content to web pages. (CS/IT) To review and change elements of a webpage to create a better user experience. (CS/IT) To evaluate your webpage. (IT) To review the previous vocabulary	(DL) To address online dilemmas responsibly and maturely. (IT) To film high-quality shots. (IT) To edit my film shots to make my film look more professional.