The Meadow Community Primary School

Computing Overview 2021/2022

Year	Autumn	Spring	Summer
1	**We are treasure hunters** We will be using programmable toys, learning to develop and record algorithms and predict how programs work. **We are painters** We are going to be creating pictures using computer programmes and learn to choose the appropriate tool to create the effect we want. We are also going to learn how to save, retrieve and change our work.	**We are TV presenters** We are going to be learning to use a video camera to capture moving images. **We are celebrating** We will be learning basic keyboard and mouse skills.	**We are collectors** We will be learning to find and use images on the web. We will be learning to sort the images in to different groups. We will also be looking at e-safety. **Espresso coding** We will be using the computer programming tool Espresso to create simple animations using code.
2	**We are photographers** Find, take, evaluate and compose photographs using digital devices. **We are detectives** Use word and excel to find, organise and evaluate data/clues to solve a crime.	**We are games testers** Use Scratch projects to play and evaluate games safely using the Scratch platform **Espresso Coding / We are researchers** Coding – Use espresso coding resources to plan and create code to perform control functions.	**We are researchers** Use Powerpoint, Espresso and wikipedia to research, plan and present learning around an agreed topic. **We are astronauts** Using Scratch to programme a sprite to move around the screen.
3	**We are programmers** Children create an animated cartoon using characters they design. They use a paint tool to create characters and backgrounds. They then create an animation by translating a storyboard into a series of scripted instructions (program) for graphic objects. **We are communicators** Children work with six example Scratch projects. They explain how the scripts work, finding and correcting errors in them, and explore creative ways of improving them. The children learn to recognise some common types of programming error, and practise solving problems through logical thinking.	**Internet safety** Children consider the various digital communication methods which could be used by a cyberbully and how they would deal with instances of cyberbullying. **We are opinion pollsters** Children create their own opinion poll, seek responses, and then analyse the results.	**We are opinion pollsters cont.** Children create their own opinion poll, seek responses, and then analyse the results **Espresso Coding** Children will be learning the basic skills of coding using the Espresso Coding as well as developing computational thinking skills through decomposition, logical reasoning and problem-solving.
4	**We are musicians -** Learning to make music using the websites Isle of Tune and Incredibox. **We are HTML editors** Learning the basics of HTML language and how to format an HTML page.	**Internet Safety -** Using the Google Internet Legends, learning how to use the internet safely and wisely. **We are meteorologists** This unit brings together data measurement, analysis and presentation, as the children take on the role of meteorologists and weather presenters.	**Espresso Coding** Recap on everything learnt so far in coding and an introduction to 'variables'. **Espresso Coding** Recap on everything learnt so far in coding and an introduction to 'variables'.

| 5 | **We are architects**
By the end of the project, children aim to create a virtual art gallery using the programme sketch up.

We game developers
Children use what they have learnt so far to make their own app or game using a scheme from Espresso (block coding). | **We are web developers**
Children will list ways to stay safe on line; investigate how search works; create a web page that includes hyperlinks and look for ways to improve it.

We are bloggers
Children will explore what a blog is and create a blog that includes pictures and media. | **We are cryptographers**
Children will explore Morse code, semaphore and use the Caesar Cypher to create and crack codes; use a substitution and cypher and suggest ways of making a password secure and know whether a webpage is secure.

We are artists
Children will look at real life tessellations and use ICT create artwork in the style of Escher, Islamic art and Bridget Riley; use ICT programs to recreate landscapes. |
| 6 | **We are Adventure Gamers**
Using Python to code different games.

We are Computational Thinkers
Using Scratch, children develop their understanding of important algorithms. | **We are Advertisers**
Children create and edit their own promotional videos.

We are Network Technicians
This is an unplugged unit of work where children gain an understanding of Domain Names and Network systems. | **We are Travel Writers**
Children use mapping software to explore different routes to set locations.

We are publishers
Children use desktop publishing programmes to design and create a year book. |