Overview of Computing Content 2020-2021

Computer Science and Information Technology

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|  | Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 | Summer 2 |
| Nursery  &  Reception | **Exploring Computer science**: Remote control cars, torches, beebots, , interactive touch screen- prowise interactive games and resources, disabled remote controls and mobile phones in the home corner/ role play  **Talk times-** keeping safe online with an adult, websites- cbeebies, top marks, phonics play,  **Recording self:** microphones, talking tins, walkie talkie mobiles  **Capturing work:** ipads, cameras, printing from computer program | | | | | |
| Year 1 | IT  Fact files-  Introduction to Word | CS  Green Screen-  Using photos and apps to present information | CS  Beebots-  Introduction to algorithms | CS  App smashing-  Using apps to create artwork | IT/CS  Computational thinking-  Using IT for pattern recognition | CS  Lego Wedo-  Introduction to Lego programming  algorithms and debugging |
| Year 2 | CS  Lego WeDo -  Developing our Lego programming  skills | IT  Word  Building our word processing skills. | CS  iMovie-  Creating short videos about the Great Fire/Black Death | CS  Green Screen-  Comparing landscapes of England and Africa | CS  Scratch- Programming a dialogue between two sprites  Links to the Industrial Revolution | IT  Building our presenting skills - exploring PowerPoint  Presentation about the UK |
| Year 3 | CS  Scratch-  Creating a game  Whack-a-mole | IT  PowerPoint -  Creating presentations about the Stone Age | IT  Excel-  An introduction to spreadsheets | CS  Green Screen-  Science link to Light and Dark  Now you see me, now you don’t.  Exploring the visual effects with the Green Screen | CS  Scratch-  Creating a maze | IT  Databases-  Introduction to databases |
| Year 4 | IT  Apple Pages-  Fake news - presenting images and text using an alternative to Word | CS  Scratch-  Creating a quiz about capital cities | IT  Databases  (unplugged) | IT  Keynote/PowerPoint  -Creating a presentation-  How to be a Roman soldier | CS  Scratch-  Adapting our quizzes.  (links to Science)  Creating a Habitats quiz | CS  Green Screen-  History Theme |
| Year 5 | CS  Scratch-  Creating a Turing Test | IT  Blogging-  Using Seesaw to create a class blog | CS  iMovie-  Using iMovie as a platform for presenting facts and information about ‘Mountains, Rivers and Lakes’ | CS  Green Screen-  Time travelling; Presenting information about the Mayans  (images and videos) | CS/IT  Garage Band-  Creating our no.1 hits | CS/IT  Understanding  Networks |
| Year 6 | CS/IT  App smashing-  Manipulating and presenting images | CS  Scratch-  Creating a quiz with levels | CS  Crumble-  Physical programming | CS  Crumble-  Physical programming | \* | CS  Mindstorms-  Mastering Lego programming |

\*During Summer 1 the learning focus will be on Online Safety.

Online Safety and Digital Literacy

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|  | Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 | Summer 2 |
|  | Developing online safety guidelines | Social and emotional well being and developing resilience | Responsible internet use | Keeping information safe | Digital citizenship | Playing games and having fun |
| Year 1 | We are Year 1 rule writers.  Creating rules that help us to stay safe online | We are kind and thoughtful.  Understanding the impact of our behaviour on others | We are responsible internet and device users.  Remembering to take time out from technology | We are information protectors.  Understanding what is meant by personal information | We are good digital citizens.  Finding out what it means to be a good digital citizen | We are responsible gamers.  Learning how to stay safe when playing games online |
| Year 2 | We are Year 2 rule writers.  Reviewing and editing our online safety guidelines | We are not online bullies.  Creating a strong message against bullying online | We are safe searchers.  Learning how to use search engines safely | We are code masters.  Generating strong passwords and keeping them safe | We are online behaviour experts.  Solving online safety problems | We are game raters.  Understanding and applying the PEGI rating system for games |
| Year 3 | We are Year 3 rule writers.  Reviewing and editing our online safety rules | We are digital friends.  Developing an awareness of online bullying | We are internet detectives.  Assessing the trustworthiness of a website | We are aware of our digital footprint.  Understanding the digital trails we leave behind. | We are netiquette experts.  Practising good netiquette | We are avatar creators.  Who do we really know online? |
| Year 4 | We are Year 4 rule writers.  Reviewing and editing our online safety rules | We are standing up to peer pressure.  Dealing positively with peer pressure | We are aware that our online content lasts forever.  Getting the message: pre- and post-internet | We are online risk managers.  Understanding risk and prevention of information loss | We are respectful of digital rights and responsibilities.  Understanding and respecting the digital rights and responsibilities | We are careful when talking to virtual friends.  Virtual friendship vs real friendship; who can we trust? |
| Year 5 | We are Year 5 rule writers.  Reviewing and editing our online safety rules | We are responsible for our online actions.  Understanding the impact of our online behaviour | We are content evaluators.  Understanding advertising and endorsements online | We are protecting our online reputation.  Developing strategies to protect our future selves. | We are respectful of copyright.  Understanding and applying copyright laws | We are game changers.  Understanding how games developers make money |
| Year 6 | We are online safety ambassadors.  Reviewing and editing our online safety rules | We will not share inappropriate images.  Inappropriate use of the internet-nude selfies | We are safe social networkers.  Understanding that internet safety skills must always be switched on | We are respectful of others.  Respecting the personal information and privacy of others | We are online safety problem solvers.  Using our skills to resolve unfamiliar situations | We are safe gaming experts.  Creating and delivering advice on safe online gaming |