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 | ITFact files-Introduction to Word  |  CSGreen Screen-Using photos and apps to present information | CSBeebots-Introduction to algorithms |  CSApp smashing-Using apps to create artwork | IT/CSComputational thinking-Using IT for pattern recognition | CSLego Wedo-Introduction to Lego programmingalgorithms and debugging |
| Year 2 | CSLego WeDo - Developing our Lego programmingskills | ITWord Building our word processing skills. | CSiMovie-Creating short videos about the Great Fire/Black Death | CSGreen Screen-Comparing landscapes of England and Africa | CSScratch- Programming a dialogue between two spritesLinks to the Industrial Revolution | IT Building our presenting skills - exploring PowerPoint Presentation about the UK |
| Year 3 | CSScratch-Creating a gameWhack-a-mole | ITPowerPoint - Creating presentations about the Stone Age  | ITExcel-An introduction to spreadsheets | CSGreen Screen-Science link to Light and DarkNow you see me, now you don’t.Exploring the visual effects with the Green Screen | CSScratch-Creating a maze | ITDatabases-Introduction to databases |
| Year 4 | ITApple Pages-Fake news - presenting images and text using an alternative to Word | CSScratch-Creating a quiz about capital cities | ITDatabases (unplugged) | ITKeynote/PowerPoint-Creating a presentation-How to be a Roman soldier | CSScratch-Adapting our quizzes.(links to Science)Creating a Habitats quiz | CSGreen Screen-History Theme |
| Year 5 | CSScratch-Creating a Turing Test | ITBlogging-Using Seesaw to create a class blog | CSiMovie-Using iMovie as a platform for presenting facts and information about ‘Mountains, Rivers and Lakes’ | CSGreen Screen-Time travelling; Presenting information about the Mayans(images and videos) | CS/ITGarage Band-Creating our no.1 hits | CS/ITUnderstandingNetworks |
| Year 6 | CS/ITApp smashing-Manipulating and presenting images | CSScratch-Creating a quiz with levels | CSCrumble-Physical programming | CSCrumble-Physical programming | \* | CSMindstorms-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 |