**Curriculum Overview – Computing**

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| **Reception** | * Digital Literacy - e-Safety * Recognise ways in which computers are used. * Being aware of how you have to be careful when using computers, particularly online. | * Information Technology – 2DIY * Using computers in a variety of ways. * Using computers to write, paint and create. * Interacting with and exploring computer software. | * Computer Science – Hour of Code 1 * Understand that lots of everyday things are controlled by computers. * Programming a device and predicting what it will do. | * Information Tech. – 2Simple City * Using computers in a variety of ways. * Using computers to write, paint and create. * Interacting with and exploring computer software. |
| **Reception continued** | * Computer Science – Beebot * Control simple devices * Programming a device and predicting what it will do. | * Information Tech. – Keyboard Intro. * Using computers in a variety of ways. * Using computers to write, paint and create. |  |  |
| **Year 1** | * Digital Literacy – e-Safety * Know about common uses of technology in and out of school. * Know how to stay safe online and keep personal information private. | * Information Tech. – 2Create * Using I.T. purposefully to create. * Store and retrieve. * Organise and manipulate digital content. | * Computer Science – Daisy the Dinosaur * Understand that algorithms are groups of commands created to achieve a specific purpose. * Creating and debugging their program to ensure precision. | * Information Tech. – School 360 * Using I.T. purposefully to create. * Store and retrieve. * Organise and manipulate digital content. |
| **Year 1 continued** | * Computer Science – J2Code * Creating programs with more complex groups of commands. * Understand that algorithms are groups of commands created to achieve a specific purpose. * Creating and debugging their program to ensure precision. | * Information Tech. – JIT * Using I.T. purposefully to create. * Store and retrieve. * Organise and manipulate digital content. |  |  |
| **Year 2** | * Digital Literacy – e-Safety * Know about common uses of technology in and out of school. * Know how to stay safe online and keep personal information private. | * Information Tech. – 2Animate * Using I.T. purposefully to create. * Store and retrieve. * Organise and manipulate digital content. | * Computer Science – Hour of Code 1 * Creating programs with more complex groups of commands. * Understand that algorithms are groups of commands created to achieve a specific purpose. * Creating and debugging their program to ensure precision. | * Information Tech. – Word Processing * Using I.T. purposefully to create. * Store and retrieve. * Organise and manipulate digital content. |
| **Year 2 continued** | * Computer Science – Scratch Jr. * Creating programs with more complex groups of commands. * Understand that algorithms are groups of commands created to achieve a specific purpose. * Creating and debugging their program to ensure precision. | * Information Tech. – Powerpoint * Using I.T. purposefully to create. * Store and retrieve. * Organise and manipulate digital content. |  |  |
| **Year 3** | * Digital Literacy – e-Safety * Know about common uses of technology in and out of school. * Know how to stay safe online and keep personal information private. * Know who to contact if they have concerns. | * Information Tech. – MS Publisher * Be able to confidently search the internet safely and accurately. | * Computer Science – Scratch * Design and create their own programs to control or simulate the real world. * Develop complex routines using sequences and repetition. * Logically explain the algorithms in their programs. | * Information Tech. – School 360 * Develop capability through having opportunities to select appropriate software for a specific purpose. * Be able to confidently search the internet safely and accurately. |
| **Year 3 continued** | * Computer Science – J2Code * Design and create their own programs to control or simulate the real world. * Develop complex routines using sequences and repetition. * Logically explain the algorithms in their programs. | * Information Tech. – Topic based PP * Develop capability through having opportunities to select appropriate software for a specific purpose. * Be able to confidently search the internet safely and accurately. |  |  |
| **Year 4** | * Digital Literacy – e-Safety * Know about common uses of technology in and out of school. * Know how to stay safe online and keep personal information private. * Know who to contact if they have concerns. | * Information Tech. – Word Processing * Develop capability through having opportunities to select appropriate software for a specific purpose. * Be able to confidently search the internet safely and accurately. | * Computer Science – Hour of Code 2 * Develop complex routines using sequences and repetition. * Logically explain the algorithms in their programs. | * Information Tech. – Databases * Develop capability through having opportunities to select appropriate software for a specific purpose. * Be able to confidently search the internet safely and accurately. |
| **Year 4 continued** | * Computer Science – Scratch * Design and create their own programs to control or simulate the real world. * Develop complex routines using sequences and repetition. * Logically explain the algorithms in their programs. | * Computer Science – Drone Control * Design and create their own programs to control or simulate the real world. * Develop complex routines using sequences and repetition. * Logically explain the algorithms in their programs. |  |  |
| **Year 5** | * Digital Literacy - E-Safety Publications * Know about common uses of technology in and out of school. * Know how to stay safe online and keep personal information private. * Know who to contact if they have concerns. | * Computer Science – Hour of Code 2 * Develop complex routines using sequences and repetition. * Logically explain the algorithms in their programs. | * Information Tech. – Rainforest Presentations * Develop capability through having opportunities to select appropriate software for a specific purpose. * Be able to confidently search the internet safely and accurately. | * Computer Science – Dance eJay * Design and create their own programs to control or simulate the real world. * Develop complex routines using sequences and repetition. * Logically explain the algorithms in their programs. |
| **Year 5 continued** | * Computer Science – Scratch Games * Design and create their own programs to control or simulate the real world. * Develop complex routines using sequences and repetition. * Logically explain the algorithms in their programs. | * Information Tech. – Paint * Develop capability through having opportunities to select appropriate software for a specific purpose. * Be able to confidently search the internet safely and accurately. |  |  |
| **Year 6** | * Digital Lit. - E-Safety Presentations * Know about common uses of technology in and out of school. * Know how to stay safe online and keep personal information private. * Know who to contact if they have concerns. | * Information Tech. - Book Creator * Develop capability through having opportunities to select appropriate software for a specific purpose. * Be able to confidently search the internet safely and accurately. | * Computer Sci. – Scratch Animations * Design and create their own programs to control or simulate the real world. * Develop complex routines using sequences and repetition. * Logically explain the algorithms in their programs. | * Info. Tech. - App Development * Develop capability through having opportunities to select appropriate software for a specific purpose. * Be able to confidently search the internet safely and accurately. |
| **Year 6 continued** | * Computer Science - Hour of Code 3 * Develop complex routines using sequences and repetition. * Logically explain the algorithms in their programs. | * Information Tech - Web Design * Develop capability through having opportunities to select appropriate software for a specific purpose. * Be able to confidently search the internet safely and accurately. |  |  |