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| http://www.usworthcolliery.co.uk/wp-content/uploads/2014/09/Usworth-Colliery-Primary-School-Logo.png | **Computer Science** | **Information Technology** | **Digital Literacy** |
| **YEAR 1** | Understands what algorithms are. (IT1.1a) | Uses technology purposefully to create digital content. (IT1.2a) | Uses technology safely and sensibly. (IT1.3a) |
| Creates simple programs by giving instructions. (IT1.1b) | Uses technology purposefully to store digital content. (IT1.2b) | Keeps personal information private. (IT1.3b) |
| Use simple on screen games and simulations. (IT1.1c) | Uses technology to present simple data. (IT1.2c) | Recognises advertising and learns to ignore it. (IT1.3c) |
|  |  | Uses ICT to communicate as part of a group. (IT1.3d) |
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| **YEAR 2** | Understands that algorithms are implemented as programs on digital devices. (IT2.1a) | Uses a combination of technology purposefully to create digital content. (IT2.2a) | Uses technology respectfully. (IT2.3a) |
| Understands that programs execute by following precise and unambiguous instructions. (IT2.1b) | Uses technology purposefully to manipulate digital content. (IT2.2b) | Identifies where to go for help and support when they have concerns about content or contact on the internet or other online technologies. (IT2.3b) |
| Tests and changes programs. (IT2.1c) | Uses technology purposefully to organise and sort digital content. (IT2.2c) | Recognises cyber-bullying and what to do if it happens. (IT2.3d) |
| Uses logical reasoning to predict the behaviour of simple programs. (IT2.1d) | Uses technology (and internet services) to retrieve digital content. (IT2.2d) | Uses ICT to communicate. (IT2.3e) |
|  |  | Recognises some common uses of information technology beyond school such as simulations. (IT2.3f) |
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| **YEAR 3** | Writes programs that accomplish specific goals. (IT3.1a) | Uses search technologies effectively. (IT3.2a) | Uses technology responsibly. (IT3.3a) |
| Debugs simple programs. (IT3.1b) | Uses a variety of software to accomplish given goals. (IT3.2b) | Identifies a range of ways to report concerns. (IT3.3b) |
| Explores the effect of variables on simulations. (IT3.1c) | Collects and sorts data in different ways to answer questions. (IT3.2c) | Recognises the importance of staying safe and methods achieve this. (IT3.3c) |
| Understands the importance and advantages of using simulations. (IT3.1d) | Creates and improves digital content. (IT3.2d) | Recognises cyber-bullying and the consequences of taking part. (IT3.3d) |
| Controls or simulates physical systems. (IT3.1e) |  | Recognises some advantages of using ICT. (IT3.3e) |
|  |  | Uses ICT to communicate clearly with another person. (IT3.3f) |
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| **YEAR 4** | Designs and creates programs to accomplish a variety of goals. (IT4.1a) | Uses and combines a variety of software to accomplish given goals and appeal to a familiar audience. (IT4.2a) | Uses ICT to communicate with multiple recipients. (IT4.3a) |
| Debugs programs that accomplish a variety of goals. (IT4.1b) | Selects, uses and combines internet services. (IT4.2b) | Identifies a range of ways to report concerns about content. (IT4.3b) |
| Uses repetition in programs. (IT4.1c) | Uses technology purposefully to collect, organise, sort, search and present digital content and data. (IT4.2c) | Recognises acceptable/unacceptable behaviour and share tips and advice in order to stay safe. (IT4.3c) |
| Uses logical reasoning to detect and correct errors in programs. (IT4.1d) | Presents digital content in a variety of ways. (IT4.2d) | Recognises some advantages of using ICT both inside and outside of school. (IT4.3d) |
| Understands how computer networks can provide multiple services, such as the World Wide Web. (IT4.1e) |  | Recognises that some online sources more trustworthy & accurate than others. (IT4.3e) |
| Uses sequence in programs. (IT4.1f) |  |  |
| Works with various forms of output. (IT4.1g) |  |  |
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| **YEAR 5 & YEAR 6** | Designs and create programs that accomplish specific goals. (IT5-6.1a) | Selects, uses and combines a variety of software to accomplish given goals. (IT5-6.2a) | Understands the opportunities computer networks offer for communication and collaboration (IT5-6.3a) |
| Solves problems by decomposing them into smaller parts and using logical reasoning. (IT5-6.1b) | Designs and creates systems to achieve a specific goal. (IT5-6.2b) | Is discerning in evaluating digital content. (IT5-6.3b) |
| Works with variables. (IT5-6.1c) | Check systems for accuracy and plausibility. (IT5-6.2c) | Recognises a range of e-threats and can share advice on how to avoid and combat them. (IT5-6.3c) |
| Uses logical reasoning to explain how some simple algorithms work. (IT5-6.1d) | Selects, uses and combines software on a range of digital devices. (IT5-6.2d) | Appreciates copyright and can take measures to ensure it isn’t broken. (IT5-6.3d) |
| Understands computer networks, including the internet. (IT5-6.1e) | Analyses and evaluates data. (IT5-6.2e) | Recognises the positives and negatives of ICT. (IT5-6.3e) |
| Appreciates how search results are selected and ranked. (IT5-6.1f) | Selects, uses and combines internet services in order to answer questions and teach others. (IT5-6.2f) |  |
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| **Key Skills with The Base & Thrive** | Understands what algorithms are. (ITB.1a) | With support, uses a variety of programs to create digital content. (ITB.2a) | Understands how to stay safe when using technology. (ITB.3a) |
| Creates and plays simple programs by giving instructions. (ITB.1b) | Uses technology to store data and answer questions. (ITB.2b) | Uses ICT to communicate. (ITB.3b) |
| Tests and changes simple programs. (ITB.1c) | Uses search technologies and internet services to collect information. (ITB.2c) | Recognises some common uses of ICT both within and outside of school. (ITB.3c) |
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| **Key Skills with Reception** | Gives instructions to control on screen avatars and physical hardware. (Rec.1a) | They select and use technology for particular purposes, interacting with age-appropriate software. (Rec.2a) | Uses and understands technical language (Rec.3a) |
| Uses peripherals in a variety of ways to follow onscreen and audio instructions. (Rec.1b). | With support, uses ICT to store and retrieve information (Rec.2b). | Uses internet services and software to fulfill given goals (including staying on a selected site). (Rec.3b) |
|  | With support, uses ICT to present information (Rec.2c). | Children recognise that a range of technology is used in places such as homes and schools (Rec.3c) |