Springfield School

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| Blackbirds Class Medium Term Planning for Computing  |
| Topic: The Great Fire of London  |

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| **Lesson 1 ‘link it’** **What do we know about coding and computers?** Demonstrate knowledge. Use Discovery Education to show prior knowledge of programming and coding. Access your own log on  | **Lesson 2 ‘learn it’** **What is an algorithm?** Begin to build your game by giving your fish instructions.  | **Lesson 3 ‘learn it’** **What is an algorithm?** Continue to build your game by giving your fish instructions.  |
| **Lesson 4 ‘check it’****Creating your own game** Build your own game by giving instructions  | **Lesson 5 ‘check it’****Creating your own game** Build your own game by giving instructions | **Lesson 6 ‘check it’** **Creating your own game** Build your own game by giving instructions |

Take the objectives for the LO stickers from this section

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| Substantive Knowledge (Content) | Disciplinary Knowledge (Skills)  |
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| Children begin to make links to how they use technology outside of the classroom. They begin to think about the benefits of using technology in their lives, making links to learning about online safety. Children recognise common uses of technology beyond school. They use technology safely and respectfully, keeping personal information private; they identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.**Children can:****a** recognise ways that technology is used in the home and community, e.g. taking photos, blogs, shopping;**b** use links to websites to find information;**c** recognise age-appropriate websites;**d** use safe search filters;**e** use key vocabulary to demonstrate knowledge and understanding in this strand: filter, Google, search engine, image, keyboard, email, internet, subject, address, communicate, sender, safe, secure.**Coding and Programming**  |

Children begin to understand their influence on technology by developing their programming skills to determine output. They begin to understand that an algorithm is a series of steps for solving problems and a code is a series of steps that machines can execute. They begin to explore debugging, predicting when codes may not work and changing them. Children understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions. They create, debug and use logical reasoning to predict the behaviour of simple programs.**Children can:**a give commands one at a time to control direction and movement, including straight, forwards, backwards, turn;b control the nature of events: repeat, loops, single events and add and delete features;c give a set of instructions to follow and predict what will happen;d improve/change their sequence of commands by debugging;e use key vocabulary to demonstrate knowledge and understanding in this strand: algorithm, instruction, order, debug, program, turn, left, right, clockwise, anticlockwise, blocks, sequence, project, repeat, repeat forever, invisible, grow, shrink. | * Use animation software to create a short film, including music and illustrations.
* Use technology purposefully to create, organise, store, manipulate and retrieve digital content.
* **Organise and manipulate data in a range of digital formats.**
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Progression of Learning

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| ‘Link It’  | ‘Learn It’ | ‘Check It’  | ‘Show It’ | ‘Know It’ |
| Previous learning of pupils * Knowledge games and computer programmes
* Understand how to log on
 | Activities provided during lesson Resources **Using Discovery Education** **IPads/ Laptops** Give instructions Understand algorithms  | Independent activities linked to lesson Resources  **Using Discovery Education** **IPads/ Laptops** Give instructions Understand algorithms  | How will the pupils share knowledge during or end of lesson**Explore and discuss photographs of lessons**Share and compare work through performance  | Retrieve or generalization of learning after lesson * Use knowledge to activate a range of programmes
* Use technology in everyday life.
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