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|  | Lyng Primary School Knowledge Organiser  Computing | | https://img.cdn.schooljotter2.com/sampled/8041361/140/140/nocrop/ |
| Topic: Computing | What are algorithms? | Year 1 | Autumn 1 |

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| Image result for steps clipart**Image result for goldilocks**What Goldilocks and Step On words will I use? | |
| **Spelling** | **Defintion** |
| Tablet | Mobile device with mobile operating system and touchscreen |
| Blocks | Puzzle piece shapes that can be put together to create code |
| Sprite | The objects/characters that perform actions in a project |
| Background | The backdrop for a project |
| Sequences | A set of programming blocks that make actions happen one after another |
| Record | The block which allows sound to be added to a sprite |
| Wait | The block which delays an action from happening |
| Sequence | This is when a computer program runs commands in a set order |
| Show/hide | The block which can make a sprite/object be visible or invisible |
| Debug | Looking for any errors in the code, fixing and testing them.  **Agreed outcome**  Create a scene with sprites based on their topic learning |

**Aims of this unit**

Understanding that programmes execute by following precise and unambiguous instructions. To use logical reasoning to predict the behaviour of simple programs. To create and debug simple programs To understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.

To use logical reasoning to predict the behaviour of simple programs.

* Characters
* Grow and shrink
* Time to move
* Repeat

**Safeguarding**

Filtering and monitoring system is in place. Children will use their own log in details to track any misuse and to protect the child from harmful websites and pop ups. Children will be reminded of how to stay safe online and to use technology safely and respectfully and to tell a trusted adult if there is anything on their computer that makes them uncomfortable. When using the iPads, the filtering and monitoring software will track which iPad is being used so we will know which class has been using the iPads.

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| Outcomes |
| **All children**   * Open ScratchJr app and start a new project * Add new characters and background * Use blocks for movement in different directions * Create short sequences   **Most children**   * use different end blocks including repeat * Change the size of characters * Hide and show characters * Program two or more sprites at the same time   **Some children**   * use a repeat block for a section and a specified number of times * predict behaviour based on sequence * edit colours * create longer sequences of instructions |

Autumn Term

Programming using Scratch

**:**

**In this unit…**

Children are introduced to the principles of coding. Scratch Programming helps pupils learn basic understanding of algorithms and how to create precise instructions for visual working programs.

It begins to develop a sense of creating, debugging and logic.