

| Year Group   | 1  | Term | Autumn 1 | Subject | Computing            | Topic   | Robot Maze Game using Scratch  |
|--|--|------|----------|---------|----------------------|---|--|
|  |  |      |          |         |                      | Key Question  | How do I create a simple program using a digital device?   |
| Prior Learning<br>and other<br>Curriculum<br>Links | Playing games on an iPad   |      |          |         | Skills<br>statements | <ul> <li>Computational Thinking</li> <li>I understand the sequence of algorithms is important</li> <li>I know how to debug simple algorithms         Coding/Programming     </li> <li>I know how to create a simple program on a digital device e.g. Bee Bot or tablet</li> <li>I know how to use sequence in programs I know how to locate and fix bugs in my program</li> </ul> |  |
| Fundamentals                                       | Copyright and Ownership: To explain why work I create belongs to me. Computational Thinking: To explain and write a simple algorithm. Coding and Programming: To locate and fix bugs in a program. |      |          |         | write a              | Key<br>Facts/Sticky<br>Knowledge  | A bug is a problem in the code A algorithm is a set of instructions given to a computer A sequence is the order of the algorithm A code is a program with instructions |
| Our<br>Curriculum<br>Journey                       | Journey:  D - Design: Pupils start to discuss the desired outco  |      |          |         |                      |   | ect and are given time to tinker with the ScratchJr before opportunity to display a sequence of blocks focusing on move  |

- A Apply: Pupils are given the opportunity to create a maze from their design. Once pupils have created their mazes they will be able to challenge to see if they can write a code to get the robot to move from one end to another.
- R Refine: Pupils spend time considering ways to modify and improve their projects to get the best results possible. The children will be encouraged to create interesting mazes.
- E Evaluate: Upon completing their desired outcome, pupils are given the opportunity to reflect and consider how effectively they have achieved their goal. They will think about what went well and how they would change/improve things if they were to complete this project again.
- S Share: The children will have the opportunity to share their work by uploading it to Seesaw.

| Key         | iPad, screen | Key Vocabulary | Algorithm, sequence, precise, Digital, program, follow, code, |
|-------------|--------------|----------------|---|
| Vocabulary  |              | (new)          | bugs, fix, order, ScratchJr                                   |
| (revisited) |              |                |   |
|             |              |                |   |