



Linked learning theme: Year 3 – Summer 2

Computing – Programming B – Events and actions in programs

Prior Learning

- This unit assumes that learners will have some prior experience of programming. The key stage 1 National Centre for Computing Education units focus on floor robots and ScratchJr, however experience of other languages or environments may also be useful. The Year 3 — Programming A unit introduces the Scratch programming environment and the concept of sequences. The children will have prior experience of using block coding and will have used the event blocks during Year 3 – Programming A – Sequencing sounds.

Core knowledge

This unit explores the links between events and actions, while consolidating prior learning relating to sequencing. Learners begin by moving a sprite in four directions (up, down, left, and right). They then explore movement within the context of a maze, using design to choose an appropriately sized sprite. This unit also introduces programming extensions, through the use of Pen blocks. Learners are given the opportunity to draw lines with sprites and change the size and colour of lines. The unit concludes with learners designing and coding their own maze-tracing program.

Key skills

- Analyse existing programs to design projects.
- Use the 'event' tool in block coding.
- Duplicate code to efficiently develop outcomes.
- Use extension blocks to complete programs.
- Predict and test block-coded programs.
- Use functioning programs to debug issues.
- Design and plan functioning programs.

Vocabulary

Sprite
Event
Analyse
Duplicate
Movement
Extension
Program
Debug
Design

Learning Outcomes

- To explain how a sprite moves in an existing project.
- To create a program to move a sprite in four directions.

- To adapt a program to a new context.
- To develop my program by adding features.
- To identify and fix bugs in a program.
- To design and create a maze-based challenge