

Programming – Events and Actions

By the end of the unit, you will be able to use blocks on Scratch to use, modify and create a working maze.

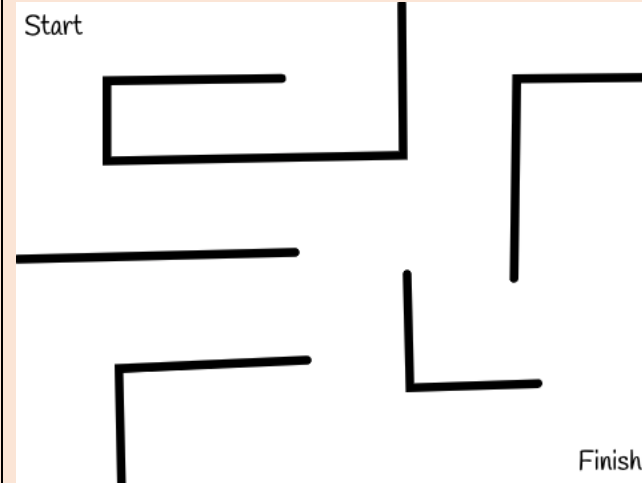
Key Vocabulary

motion	the action or process of moving
event	a thing that happens or takes place
sprite	a computer graphic
algorithm	a process or set of rules to be followed
move	go in a specified direction or manner; change position
resize	change the size
design	planning that exists behind an action
action	process of doing something
debugging	the process of identifying and removing errors from computer hardware or software
errors	a mistake

Maze Movement

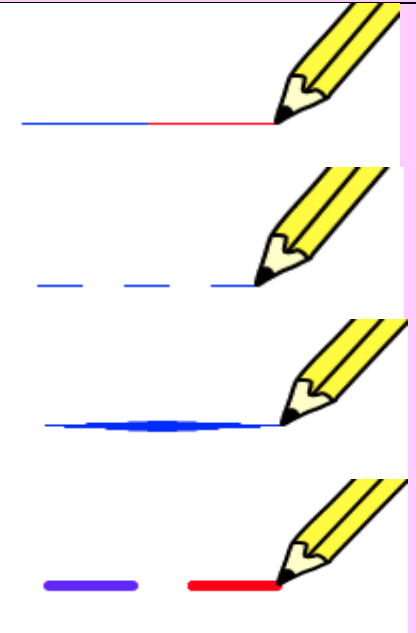
Move the sprite up, down, left and right to move around the maze.

Start



Finish

Adding Features



Using the blocks, you are able to add more features

Moving a Sprite



Controllers let us make things happen in a game, on a computer and for lots of things.

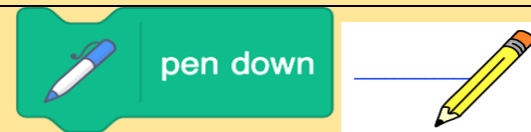
when **d** key pressed

point in direction **180**

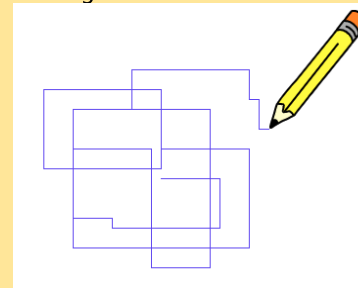
move **10** steps

These are blocks that we use on Scratch to control the movements of a Sprite.

Drawing Lines



Pen down enables you to draw lines. Pen up stops the sprite drawing.



Debugging

Debugging is needed when there is an error in your programming.

5 Steps to effective debugging

1. Review the task — what should the project do?
2. Test the project
3. Identify the bug
4. Fix the bug
5. Test the bug fix — does the code now do what it should?