



Mossfield Primary School Knowledge Organiser



Year 4 — **Coding and Logo**. Logo is a text-based coding language used to control an on-screen turtle to create mathematical patterns. Code is the language used to instruct computers.

Key Learning

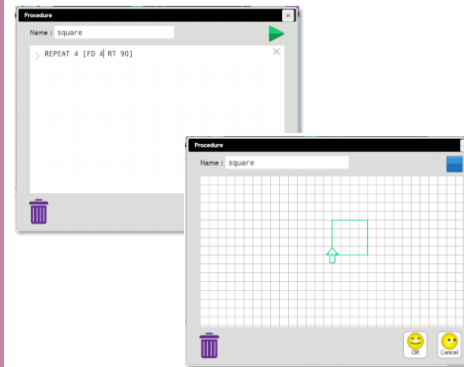
To input simple instructions in Logo.

```
FD 8 RT 90
FD 4 RT 90
PU
FD 3 RT 90
PD
FD 4 LT 90
FD 4 LT 90
FD 4
```



To use the Repeat function in Logo to create shapes

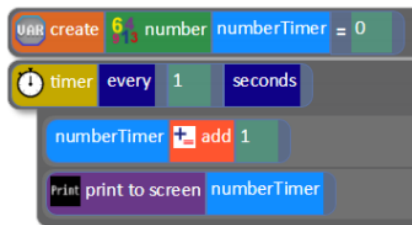
To use and build procedures in Logo.



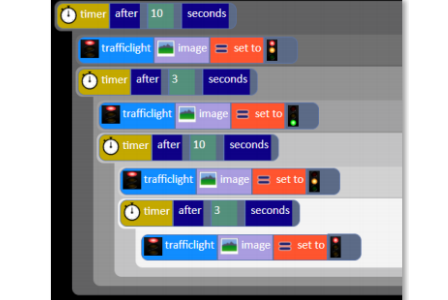
To use selection in coding with the 'if/ else' command.



To understand and use variables.



To use flowcharts for design of algorithms including selection.



To use the 'repeat until' with variables to determine the repeat.

To learn about and use computational thinking terms; decomposition and abstraction.

Key Vocabulary

Algorithm	A precise step by step set of instructions used to solve a problem or achieve an objective.
Command	A single instruction in a computer program.
Debug/Debugging	Looking for any problems in the code, fixing and testing them.
Event	Something that causes a block of code to be run.
If	A conditional command. This tests a statement. If the condition is true, then the commands inside the block will be run.
If/else	A conditional command. This tests a statement. If the condition is true, then the commands inside the 'if block' will be run. If the condition is not met, then the commands inside the 'else block' are run.
Input	Information going into the computer. Can include moving or clicking the mouse, using the keyboard, swiping and tilting the device.
Logo	A text-based coding language used to control an on screen turtle to create mathematical patterns.
Output	Information that comes out of the computer e.g. sound.
Object	An element in a computer program that can be changed using actions or properties. In 2Code, buttons, characters and vehicles are types of objects.
Repeat	This command can be used to make a block of commands run a set number of times or forever.
Selection	This is a conditional/ decision command. When selection is used, a program will choose a different outcome depending on a condition.
Simulation	A model that represents a real or imaginary situation.
Variable	A named area in computer memory. A variable has a name and a value. The program can change this variable value.