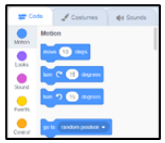
Year: 5
Term: Summer 2
Topic: Programming - Selection in Quizzes

St Dennis Primary Academy

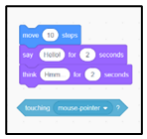
"Everyone matters, everyone succeeds, every moment counts"

Main areas in Scratch:

The **Blocks Palette** contain all of the different blocks: puzzle piece commands which control the animation.



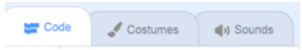
The **Code Area** is where the blocks are placed to create a program.



Stage with Sprite is where the output of the program is presented.

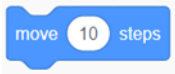
The sprite is the character.

Attributes: There are three attributes of the sprite which we can change to make our animation: Code, Costumes, Sounds.



Event Blocks: Event blocks are coloured yellow and are used to sense different events that happen.

Action Blocks: Action blocks include 'Motion' blocks, 'Sound' blocks and 'Looks' blocks. They make the sprite move, make sounds and change appearance.

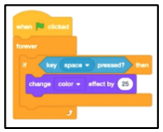


Glossary

algorithm	A set of instructions to perform a task.
conditional statement	'If-then' rule that allows a program to make decisions based on different conditions
loop	Commands that repeatedly run a defined section of code
programming	Making a set of instructions for computers to follow.

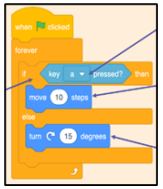
Selections and Conditions

Creating Conditions: The 'If-then' command block helps us to create conditions. Other blocks are placed inside the 'If-then' blocks to create conditions.



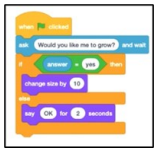
Senses blocks create the 'trigger'. The 'actions' blocks are then used to program what will happen when the 'senses' command is triggered.

Different Outcomes: The 'If-then-else' command block helps us to write programs that have selections with two outcomes. Actions to be carried out if the condition is 'true' are placed below 'then.' Actions to be carried out if the condition is 'false' (e.g. if any other key is pressed) go below 'else.'

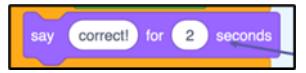


The 'forever' block means that the command will happen continually.

Questions can be included by using the 'ask' command blocks.



If specific answers are needed (e.g. yes or no), these can be typed in when using the 'answer' sensing block within the = 'Operators' block. The 'say' command block is used to inform the user if the response was correct.



Programmers do not put their computer programs straight to work. They **trial** them first to find any errors:

Sequence errors: An instruction in the sequence is wrong or in the wrong place.

Keying errors: Typing in the wrong code.

Logical errors: Mistakes in plan/thinking. If your algorithm does not work correctly the first time, remember to **debug** it.