Coley Primary School – Knowledge Organiser

SUBJECT FOCUS:	Computing – coding	YEAR	6

Prior learning: Simple input **sequences; repetition –** count controlled and indefinite loops; **selection**

Key knowledge

Procedure variables

Real life examples

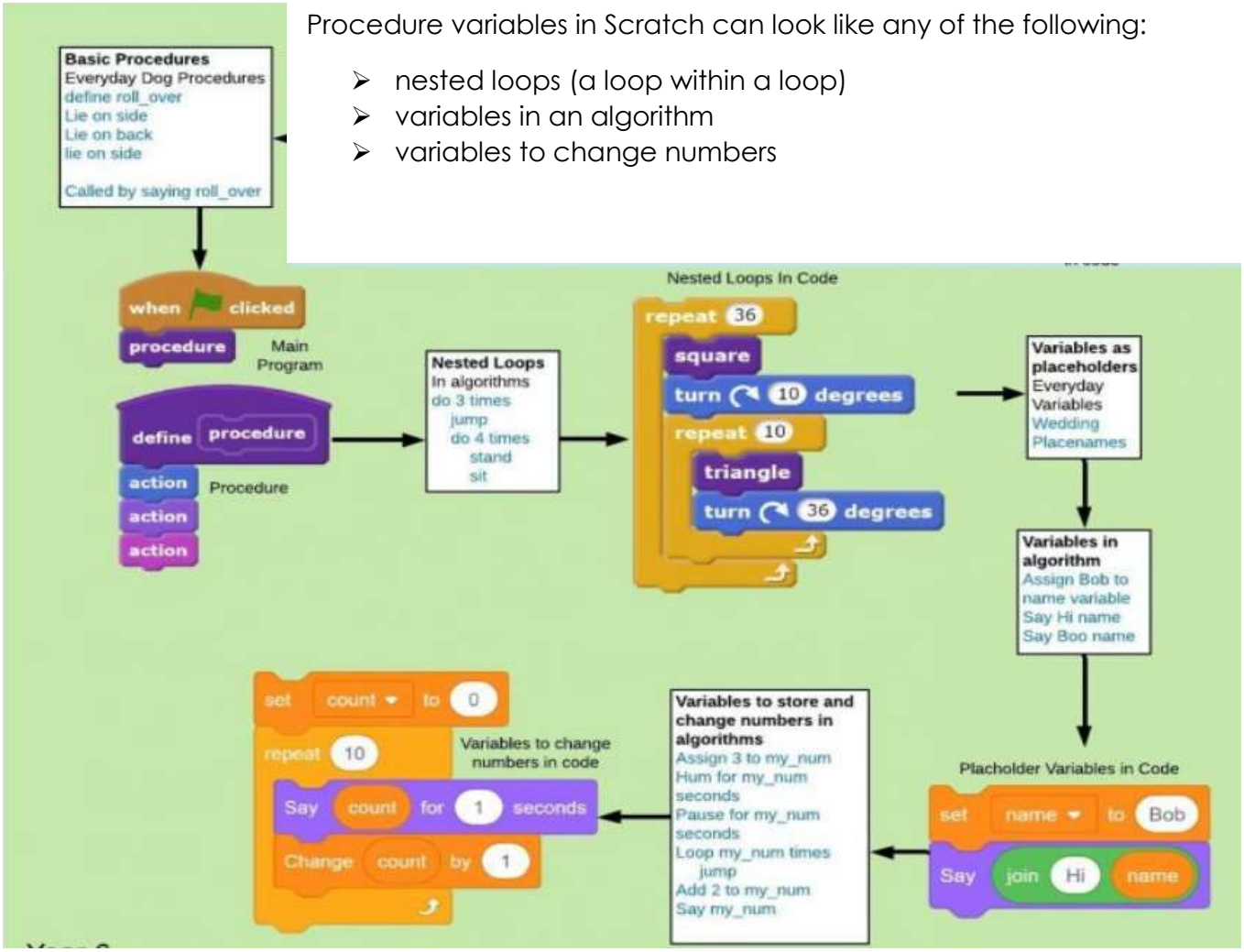
Variables are used to keep track of things that change. For example, if we were running a quiz for our class, our **variables** would be the number of questions that each player has attemped and each player's score.

Variables in coding

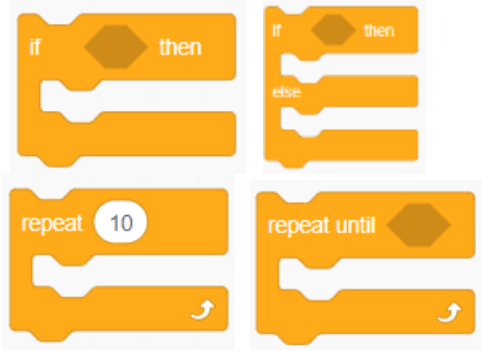
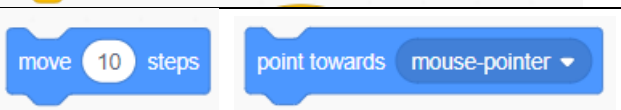
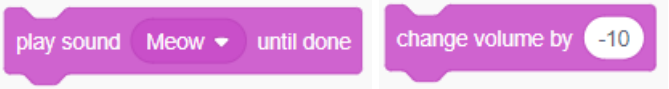
Variables are used to keep track of the things that can change while a program is running. They are a bit like x or y in algebra, in that the values may not initially be known. Variables are not just used for numbers. They can also hold text, including whole sentences ('strings'), or the logical values 'true' or 'false'. Variables are like boxes, in that the computer can use them to store information that can be changed by the user, the program or by another variable.

Procedure variables in Scratch can look like any of the following:

- nested loops (a loop within a loop)
- variables in an algorithm
- variables to change numbers



Scratch blocks

block colour	what it does	examples
Operators	performs maths functions controls lists	
Control	controls scripts	
Sensing	detects things	
Events	makes things happen	
Motion	makes things move	
Looks	changes how something looks; makes things appear and disappear	
Sound	makes a sound	

Vocabulary

variable – a box with numbers in it. These numbers can be increased and decreased and made to control various parts of a project

procedure - grouped code that can be used lots of times by referring to the name

local – applies to one thing

global – applies to everything

loop – action repeated over and over

nested loop – a loop within a loop

Experiences

Every day variables

Unplugged and role-play activities related to variables

Code-it Gold: Shape – basic procedures and nested loops

Code-it Gold: Game – New Crab Maze

Code-it Gold: Shape – adapted procedures

Can you …?

Recognise procedures and variables in everyday life

Match code to different actions in a program

Predict what code, including variables and loops, will do in Scratch

Use, adapt and create variables as part of a game in Scratch