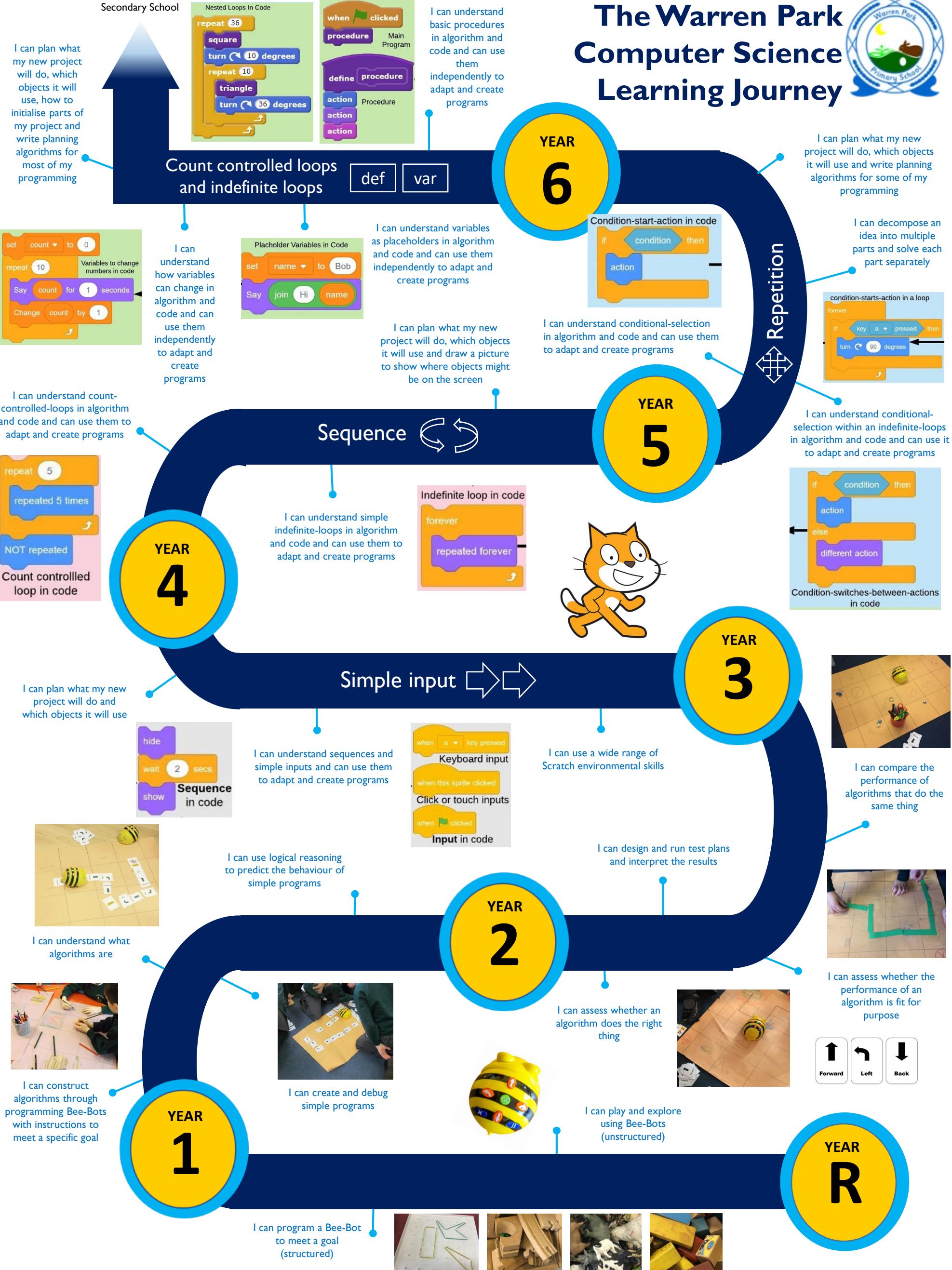


The Warren Park Computer Science Learning Journey



I can plan what my new project will do, which objects it will use, how to initialise parts of my project and write planning algorithms for most of my programming

```

set count to 0
repeat 10
  Say count for 1 seconds
  Change count by 1
  
```

Variables to change numbers in code

Nested Loops In Code

```

repeat 36
  square
  turn 10 degrees
  repeat 10
    triangle
    turn 36 degrees
  
```

when clicked
Main Program
define procedure
action Procedure
action
action

Count controlled loops and indefinite loops

def var

I can understand basic procedures in algorithm and code and can use them independently to adapt and create programs

YEAR 6

I can plan what my new project will do, which objects it will use and write planning algorithms for some of my programming

I can decompose an idea into multiple parts and solve each part separately

I can understand how variables can change in algorithm and code and can use them independently to adapt and create programs

Placeholder Variables in Code

```

set name to Bob
Say join Hi name
  
```

I can understand variables as placeholders in algorithm and code and can use them independently to adapt and create programs

I can plan what my new project will do, which objects it will use and draw a picture to show where objects might be on the screen

Condition-start-action in code

```

if condition then
  action
  
```

I can understand conditional-selection in algorithm and code and can use them to adapt and create programs

Repetition

condition-starts-action in a loop

```

forever
  if key a pressed then
    turn 90 degrees
  
```

I can understand conditional-selection within an indefinite-loops in algorithm and code and can use it to adapt and create programs

I can understand count-controlled-loops in algorithm and code and can use them to adapt and create programs

```

repeat 5
  repeated 5 times
  NOT repeated
  
```

Count controlled loop in code

YEAR 4

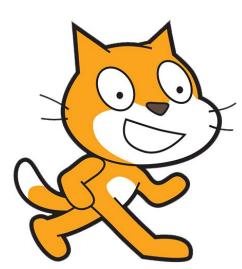
Sequence

I can understand simple indefinite-loops in algorithm and code and can use them to adapt and create programs

Indefinite loop in code

```

forever
  repeated forever
  
```



Condition-switches-between-actions in code

```

if condition then
  action
else
  different action
  
```

YEAR 3

Simple input

I can plan what my new project will do and which objects it will use

Sequence in code

```

hide
wait 2 secs
show
  
```

I can understand sequences and simple inputs and can use them to adapt and create programs

Keyboard input

```

when a key pressed
  
```

Click or touch inputs

```

when this sprite clicked
  
```

Input in code

```

when clicked
  
```

I can use a wide range of Scratch environmental skills



I can compare the performance of algorithms that do the same thing

I can use logical reasoning to predict the behaviour of simple programs

I can design and run test plans and interpret the results

YEAR 2

I can understand what algorithms are

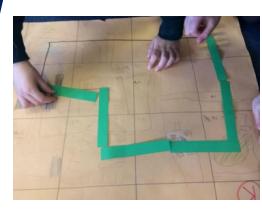


I can construct algorithms through programming Bee-Bots with instructions to meet a specific goal

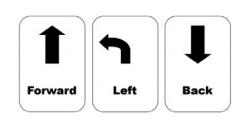


I can create and debug simple programs

I can assess whether an algorithm does the right thing



I can assess whether the performance of an algorithm is fit for purpose



I can play and explore using Bee-Bots (unstructured)

YEAR 1

YEAR R

I can program a Bee-Bot to meet a goal (structured)

