

## Construction

### Prior Knowledge

Year 1- Understand what algorithms are, how they are implemented as programs on digital devices.

Year 2 - Understand what algorithms are; how they are implemented as programs on digital devices.

Year 3 - Design, write and debug programs that accomplish specific goals.

Year 4 - Use logical reasoning to explain how some simple algorithms work, and to detect and correct errors in algorithms and programs.

### Future Knowledge

Year 6—Select, use and combine a variety of software on a range of digital devices.

```

when this sprite clicked
ask what's your name? and wait
set variable_b to answer
say join Hi variable_b for 2 seconds
ask How old are you? and wait
set variable_a to answer
ask join Are you join variable_a years old? and wait
if answer = yes then
say Oh good, I've used variables well for 5 seconds
  
```

### My Component Knowledge:

**Lesson 1:** I can identify examples of information that is variable.

**Lesson 2:** I can recognise that the value of a variable can be changed.

**Lesson 3:** I can decide where in a program to change a variable.

**Lesson 4:** I can create algorithms for my project.

**Lesson 5:** I can test the code that I have written.

**Lesson 6:** I can share my game with others.

### My Composite Knowledge:

I can design, write and debug programs that accomplish specific goals. Using variables and various forms of input and output.

### My Powerful Knowledge:

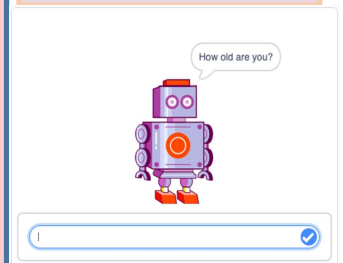
I can use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.

### Key Vocabulary

**Tier 1:** change, name, improve

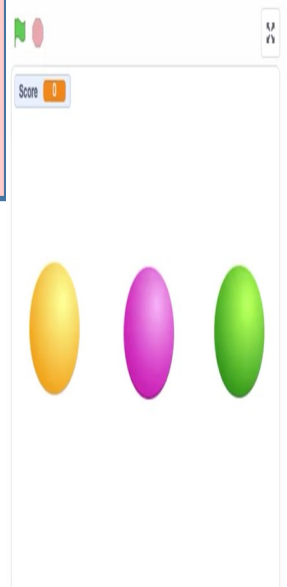
**Tier 2:** variable, value, share, evaluate

**Tier 3:** output, test, debug



```

when clicked
set score to 0
go to x: 20 y: 150
point in direction 45
repeat until touching color red
move 15 steps
if on edge, bounce
if touching Paddle then
turn pick random 160 to 200 degrees
move 15 steps
  
```



What is a variable?

How can I test variables?