

# Year 3 Summer 1 Computing – Programming



## Big Question

Can I be a game designer?

### Key Vocabulary for the unit:

**Application:** A computer program.

**Code:** A set of instructions written in programming language, to tell a computer what to do.

**Code block:** A visual representation for a section of code that performs a certain job. They can be snapped together to build a program.

**Debug:** To remove and repair the error or mistake in computer code.

**Decompose:** To break something down into smaller chunks.

**Interface:** The menus, buttons and other functions which makes a computer program or website intuitive to humans.

**Loop:** A repeated sequence of instructions.

**Predict:** To make an educated guess, as to what might happen or occur as the result of something in the future.

**Program:** A series of code that instructs the computer to perform specific tasks.

**Remixing code:** Altering code that already exists.

**Repetition code:** To create loops in your program, to make it more efficient.

**Review:** To look at something in detail and give constructive feedback if it requires improvement.

**Sprite Visual:** objects that can be moved or perform an action through code, for example: move forwards by one step.

### Powerful knowledge/skills for this unit:

I understand that Scratch is a programming language.

I can use decomposition to explore code.

I can explain the purpose of an algorithm.

I can form algorithms independently.

I can incorporate loops to make code more efficient.

I can make suggestions for how to debug their own and others' code.

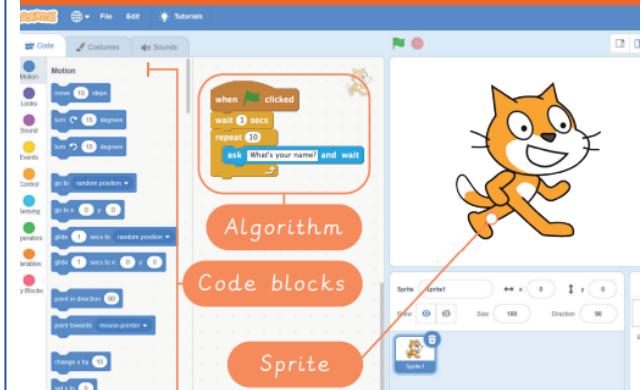
I can understand that you can remix and adapt existing code.

### What I should already know from Year 2:

- ◆ To understand what machine learning is.
- ◆ To know about loops in programming.
- ◆ To know that coding is writing in a special language for computers.
- ◆ To understand that scratch uses programming blocks.

### Useful diagrams for the unit:

Scratch is a coding program, that lets you build interactive games and animations.



Did you know? In Scratch, you can:

<p>Abby Amon Andie</p>	<p>Paint your own sprite</p>
<p>Generate a random (surprise!) sprite</p>	<p>Upload a sprite</p>