

Scratch

# Computing

## Knowledge organiser

Learning Lens:  
Class: 4

### Previous Knowledge

Children will know how to write a basic program on Scratch.

### The key skills we want pupils to use during this topic:

Solving problems

Testing and debugging

Improving and evaluating

### Project Hook or 'Wow' memory

Complete an online quiz — Who wants to be a millionaire?

### Learning Steps

### Key Knowledge (answers)

How do paper quizzes and online quizzes differ?

Identify pros and cons of using computer based program  
Identify steps needed to create a quiz. (decompose a problem)  
Create a flowchart to form a quiz question (write a program)

How can I create quiz questions?  
How do I use the if..then.. else.

Complete debugging activity sheet—identify and correct errors  
Write a program to form question.  
Use duplicate, sequence and selection to create more questions.

How can I change the sprite?

Change Sprites: colour, costume, size.  
Change Sprite add an effect for right / wrong answer

How can I add additional effects to my program?

Add a sound for correct / incorrect answers

How to create a scoring system for a quiz.

Create a scoring system—show end scores

I can create a quiz on Scratch.

Children to design, write and debug a program that accomplishes a specific goal—write a quiz. Using sequencing, selecting, repetition in Scratch.  
Work with variables by creating different effects.

### Key vocabulary

**Logical sequence**

Writing (command) in a step by step way, building on the previous command

**flowchart**

a diagram that depicts a process, system or computer algorithm

**command**

A directive (instruction) to a computer program to perform a specific task

**Algorithm**

a list set of instructions, used to solve problems or perform tasks

**program**

a specific set of ordered operations for a computer to perform.

**variables**

A container that holds the information used by the computer

**effects**

A modification on the original action

### Statutory Requirements

design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts

use sequence, selection, and repetition in programs; work with variables and various forms of input and output

