

Our School Values	
Love	We show love by enjoying exploring a range of computer programmes and ICT equipment.
Unity	We show unity by working together on computing projects.
Courage	We show courage by trying different strategies when learning how to code and by reporting online safety concerns.
Inspiration	We show inspiration by encouraging others to have a go at finding new solutions.



## Year 6 Computing Programming I



### NC Objective

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

### Knowledge I already know

- I know how to simplify or summarise something.
- I know how to think creatively and how to extend an idea
- I know how to refine a procedure using repeat commands to improve a program.
- I can apply logical reasoning to detect and debug mistakes in a program.

### Knowledge I will learn

- To know how to think through a problem logically and efficiently to help solve it.
- To know how to deconstruct a problem into smaller steps, recognising similarities to solutions used before.
- To know how to program each of the steps in my algorithm.
- To know how to evaluate the effectiveness and efficiency of my algorithm while I continually test the programming of that algorithm.
- To know how to recognise when I need to use a variable to achieve a required output.
- To know how to use logical reasoning to detect and correct errors in algorithms and programs.

### Key Vocabulary

Word	Definition
Solutions	the way to solve a problem
Effectiveness	how well something works
User Acceptance Testing	testing a program so it will work for other users



### Project

Using Scratch, design, code and save a chase game, including detecting and correcting bugs.

LI: I know how to think through a problem logically and efficiently to help solve it	LI: I know how to program each of the steps in my algorithm	LI: I know how to evaluate the effectiveness of my program through continual testing.
LI: I know how to deconstruct a problem into smaller steps	LI: I know how to detect and correct errors in algorithms and programs	LI: I know how to recognise when I need to use a variable to achieve a required output.