

# COMPUTING

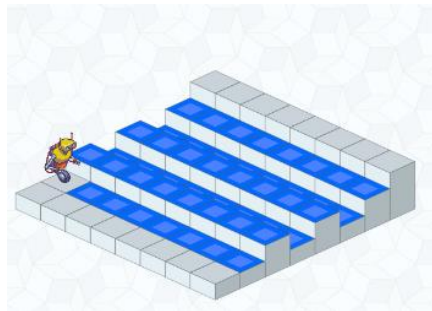
## PROBLEM SOLVING

### National Curriculum Objective

- o design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.
- o use sequence, selection, and repetition in programs; work with variables and various forms of input and output
- o use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.
- o select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information
- o use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

### Key Vocabulary

data	algorithm	input	variable	programme
sequence	system	output	field	Lightbot
Substantive- Subject Knowledge		Bigger Picture- Support Words		



Objectives	Student
Have I used technology safely, respectfully and responsibly?	
Can I follow a programme to correctly sequence and repeat an algorithm?	
Can I code an algorithm to achieve a specific goal e.g. movement / light?	
Have I used logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs?	