### Year 2

# Hollybush Primary school

### Knowledge Organiser: Computing

# Programming A – Robot algorithms

#### In Year 1, you learnt:

- · robots only do what they're told
- an algorithm is a precise set of ordered instructions, which can be turned into code
- the same outcome can be achieved through a number of different approaches

Key Vocabulary				Giving	Giving instructions to a human is different to giving		
nstruction	order	debugging			instructions to a flo	or robot because	
sequence	prediction	decomposition		When I	press the buttons o	n the floor robot I crea	
clear	artwork			These algorithms are the sai	me because when I follov		
iambiguous	design		" ((	The floor robot		cause	
algorithm	route			The map of my design has _	and	t	
program	map	Go forwards 1 step	Turn right	Next time I could	w	hen writing an algorit	
			90 degrees	Programmers break complic	ated tasks into		
				chunks	because		

## Key Facts

- programming projects can have code and artwork
- computers can only follow clear and unambiguous instructions
- different orders of instructions will affect the outcome
- following an algorithm or program is called 'code tracing'
- algorithms and programs are predictable
- design in programming not only includes code and algorithms, but also artefacts related
- to the project, such as artwork

