

St Paul's Church of England Primary School



"Don't let anyone look down on you because you are young but set an example for the believers in speech; in conduct; in love; in faith and in purity."

(1 Timothy 4:12)

Subject: Computing	Year group: 6 Term: Summer 1 and 2	Title: Programming (Lego)
What should I know?	Facts I will learn	Key questions
 Know the meaning of the key terms: selection and decomposition. Know the meaning of logical reasoning Know that programs can be represented in different formats including written and diagrammatic What an IP (Internet Protocol) address is A range of ways to report concerns about content and contact 	 The meaning of the key terms: selection variable decomposition Understand what a procedure is and why it is important in programs The need for precision when creating sequences to ensure reliability How experiences of programming and control relate to control systems in the real world That there are often different ways to solve the same problem or task That programming software can create simple and complex simulations The common systems that regulate agerelated content and describe their purpose Recognise the pressures technology can put on someone Recognise features of persuasive design and how they are used to keep users engaged 	 What is the meaning of decomposition? What is the meaning of selection? What are variables? What does procedure mean in programming? How can programming help us to solve problems? How is programming used in everyday life? Is the person we are talking to online always who they say they are?

Key Skills...

- To use repetition and selection in programs
- To use variables in programs
- To design and create programs using decomposition
- To design programs to accomplish specific tasks or goals
- To use logical reasoning to develop systematic strategies that can be used to debug algorithms and programs
- To use procedures in programs
- To design, test and refine programs to control robots or floor turtles taking account of purpose and needs
- To use programming software to create simulations

Experiences that school may provide:

• The opportunity to carry out practical programming activities



Web links

https://www.codemonkey.com/

https://www.tynker.com/

Experiences that could be provided at home...

• Complete online coding activities and games such as Minecraft and Tynker

Key vocab Definition

Selection	Selection is a decision or	
	question.	
Decomposition	Breaking a problem	
	down into smaller pieces.	
Diagrammatic	Of or in the form of a	
	diagram.	
Variables	A placeholder for a piece	
	of information that can	
	change.	
Programming	The art of creating a	
	program.	
Algorithm	An algorithm is a	
	detailed, step-by-step	
	process followed in order	
	to accomplish a specific	
	task or to solve a	
	specific problem.	
Procedure	In computer	
	programming,	
	a procedure is a set of	
	coded instructions that	
	tell a computer how to	
	run a program or	
	calculation.	
Regulate	To control or direct	
	according to rule,	
	principle or law	
Persuasive	To convince someone to	
	agree, accept or do	
	something	