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: Spring 1	Title: Coding

What should I know?

- 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
- That web users have to observe the terms and conditions of websites
- That electronic communication can be malicious or inappropriate and recognise when an attachment may be unsafe to open
- That social network or other online environments have security settings, which can be altered, to protect the user

Facts I will learn …

- Know the meaning of the key terms: selection, variables and decomposition
- To understand how the launch command works.
- To use functions and understand why they are useful.
- To understand how functions are created and called.
- To use flowcharts to create and debug code.
- To create a simulation of a room in which devices can be controlled
- Identify and evaluate online content regarding to gender, race, culture and other groups, and why it is important to challenge and reject inappropriate online representations.
- Describe online issues that may make people feel sad, worried, uncomfortable or frightened.
- Explain ways in which people can develop a positive online reputation
- Explain strategies people can use to protect their "digital personality" including degrees of anonymity.

Key questions …

- What is the meaning of decomposition?
- What is the meaning of selection?
- What are variables?
- 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.

Experiences that school may provide:

- The opportunity to complete computer based programming equipment

Key vocab Definition

Selection	Selection is a decision or question.
Decomposition	Breaking a problem down into smaller pieces.

- 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 programming software to create simulations
- To use functions

Web links

https://www.codemonkey.com/

https://www.tynker.com/

Experiences that could be provided at home…

- Complete online coding activities and game such as Minecraft and Tynker

Variables	A placeholder for a piece of information that can change.
Algorithm	An algorithm is a detailed, step-by-step process followed in order to accomplish a specific task or to solve a specific problem.
Function	A block or sequence of code to call when needed, so you don't have to rewrite the code
Flowchart	A diagram that uses specifically shaped, labelled boxes and arrows to represent an algorithm as a diagram.
Command	A single instruction in a computer program
Simulation	A model that represents a real or imaginary situation. Simulations can be used to explore options and to test predictions.