



Computing	Year 6
Algorithms and programming– selection in physical computing	
Age related computing vocabulary	

Scenarios- foreseeable interactions of types of users and the system	Logical reasoning- explain why something happens. We can use it to work out exactly what a program or computer system will do	Solution- a way in which a problem or task is solved or otherwise addressed using electronic computers
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Key Knowledge

- a microcontroller is a programmable device that can control outputs and respond to inputs (crumble)
- an algorithm is a precise set of ordered steps, which can be followed by a human or a computer in order to do a task
- algorithms can be presented in different ways
- ‘conditions’ can be used as inputs to control the crumble
- Conditions are always true or false statements
- Actions can either stop or start when conditions are met
- Selection follows an ‘if... then...’ structure
- Selection is where tasks are controlled by devices that have been programmed to carry out actions when a condition has been met.

Computing	Carlton Assessment Grid		
	Success Criteria	Pupil Reflection	
I can work with variables to control a circuit connected to a computer	Before <input type="checkbox"/>	After <input type="checkbox"/>	
I can design a solution by breaking a program up and use logical reasoning to detect errors	Before <input type="checkbox"/>	After <input type="checkbox"/>	
I can predict and explain why a loop can stop when a condition is met	Before <input type="checkbox"/>	After <input type="checkbox"/>	
I understand that a loop can be used to repeatedly check whether a condition has been met	Before <input type="checkbox"/>	After <input type="checkbox"/>	
I can work with variables and explore ‘what if’ questions by planning scenarios for different devices.	Before <input type="checkbox"/>	After <input type="checkbox"/>	
I can select and use software to create a program that controls a physical computing project and debug where appropriate	Before <input type="checkbox"/>	After <input type="checkbox"/>	