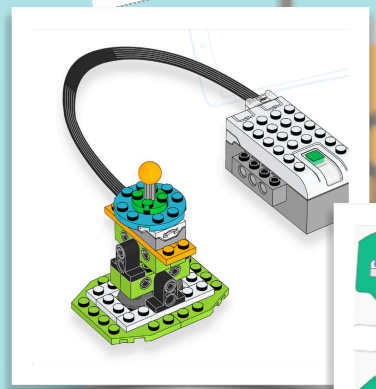
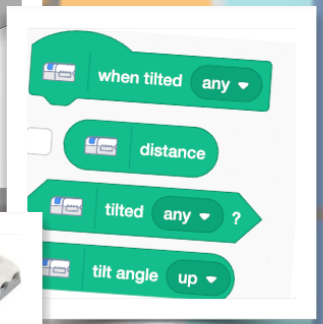
How can we code Lego in different ways?

St. Peter's CE Primary Academy

Programming

Year 6







Key learning

- Understand the tilt switch and how it outputs a number when tilted in a certain direction
- Create a code for the tilt switch in Scratch using conditionals / operators
- Design and build a model and code that uses the tilt switch to control an on-screen programme

Other coverage

Digital Citizenship

- Online bullying
- Online reputation

Mechanics

- Keyboard
- Connections

Key vocabulary

AND (&&) operator	This will run a code only if all conditions are true
comparison operator	A type of operator that compares variables and runs code dependent on their relationship
conditionals	A command that only runs if certain conditions are met. If uses 'if'.
debugging	Finding and fixing problems in a computer program or algorithm
function	A function is a named set of instructions that performs a specific task.
Operators	An operator is a symbol that tells the compiler to perform specific mathematical, relational or logical operations
OR (||) operator	This will run a code if at least one condition is true
NOT (!) operator	This operator changes a condition to use opposite
motion sensor	A sensor that can detect objects within 15cm of it
tilt sensor	A sensor that can detect multiple different types of orientation
variable	A value that can be changed or retrieved by your programmi

Programming - Our Learning Journey

Year 1

- Use simple commands to move and change direction
- Edit characters and backgrounds

Year 2

- Use repeat and forever loops
- Put a range of codes together to make a sequence
- Debug simple programmes

Year 3

- Use commands, for loops and conditionals
- Use different controls and conditionals including when and if
- Use sensors and code them to work in different ways

Year 4

- Create and edit functions
- Include functions in a game on Scratch
- Use logic for conditional commands, including 'else' command

Year 5

- Use comparison and logical operators in a range of programmes
- Create different variables for speed and proximity sensors in robots
- Code sensors for different purposes

Year 6

- Use variables to keep score in a created game
- Create a game using a range of functions, loops, operators and variables
- Begin to use Python to code Micro:Bits