# Computing — Year 5 (Spring)

#### Key vocabulary to remember and use in your learning

selection	a decision or question
flowchart	a diagram representing a set of instructions
Flowol 4	a programming language that uses flowcharts
process	a series of actions taken to achieve a goal
mimic	something that represents a real life object or system that we can draw the code for
	an oval represents the start/end
	a parallelogram represents input/output
	a rectangle represents a process
	a rhombus indicates a decision

#### Online Safety—Passwords

Passwords are what keep our data private. Strong passwords include a range of letters, numbers and symbols. We should use different passwords for different accounts. Two-factor authentication often pairs a password with another layer of security to keep an account safe.



# **Computational Thinking and Programming**

## Key knowledge to know and use

- Understand that a flowchart is a diagram that depicts a process and we can use this to plan out an algorithm
- Computers can react to a more than one inputs at the same time and produce a similar number of outputs
- There are different shapes within a flowchart, that each have different jobs—see the vocabulary
- Selection is used in programs to change what happens if the input changes, e.g. lights coming on automatically when a sensor senses that it is dark
- We can make ourselves safer online by adjusting privacy settings and that secure passwords can keep our information safe

### **Python**

The inspiration for the name for the programming language 'Python' came from BBC's TV Show – 'Monty Python's Flying Circus', as Guido Van Rossum

who invented the programming language, was a big fan of the TV show. Python was released in 1991.

The Monty Python song 'Spam, spam, spam' which came from a sketch where everyone said 'spam' over and over, is also the reason why we call unsolicited emails 'spam'.



# The world's oldest computer program

In 1958, the United States Department of Defense launched a computerized contract management system that it dubbed Mechanization of Contract Administration Services, or MOCAS. The original interface was based on punch cards. It's still going today.