# Year 5 - Computing

# Knowledge, Skills and Understanding 2022/2023



# **Computing Systems and Networks – Sharing information**

- To explain that computers can be connected together to form systems
- To recognise the role of computer systems in our lives
- To recognise how information is transferred over the internet
- To explain how sharing information online lets people in different places work together
- To contribute to a shared project online
- To evaluate different ways of working together online

# **Creating Media – Vector Drawing**

- To identify that drawing tools can be used to produce different outcomes
- To create a vector drawing by combining shapes
- To use tools to achieve a desired effect
- To recognise that vector drawings, consist of layers
- To group objects to make them easier to work with
- To evaluate my vector drawing

# **Creating Media - Video Editing**

- To recognise video as moving pictures, which can include audio
- To identify digital devices that can record video
- To capture video using a digital device
- To recognise the features of an effective video
- To identify that video can be improved through reshooting and editing
- To consider the impact of the choices made when making and sharing a video

#### **Data and Information – Flat-file databases**

- To use a form to record information
- To compare paper and computer-based databases
- To outline how grouping and then sorting data allows us to answer questions
- To explain that tools can be used to select specific data
- To explain that computer programs can be used to compare data visually
- To apply my knowledge of a database to ask and answer real-world questions

# **Programming A – Selection in physical computing**

- To control a simple circuit connected to a computer
- To write a program that includes count-controlled loops
- To explain that a loop can stop when a condition is met, e.g. number of times
- To conclude that a loop can be used to repeatedly check whether a condition has been met
- To design a physical project that includes selection
- To create a controllable system that includes selection

# **Programming B – Selection in quizzes**

- To explain how selection is used in computer programs
- To relate that a conditional statement connects a condition to an outcome
- To explain how selection directs the flow of a program
- To design a program which uses selection
- To create a program which uses selection
- To evaluate my program