

## **Computing** End of Year Expectations for Children in Year **5**



Computing Systems and Networks	Creating Media	Programming A	Data and information	Creating Media	Programming B
Systems and searching	Intro to vector Graphics	Selection in Physical computing	Flat file Databases	Video Production	Selection in Quizzes
Autumn Term	Spring Term	Summer Term	Term: Autumn	Summer Term	Spring Term
I can describe that a computer system features inputs, processes, and outputs I can explain that computer systems communicate with other devices I can explain that systems are built using a number of parts	I can discuss how vector drawings are different from paper-based drawings I can experiment with the shape and line tools I can recognise that vector drawings are made using shapes	I can create a simple circuit and connect it to a microcontroller I can explain what an infinite loop does I can program a microcontroller to make an LED switch on	I can create a database using cards I can explain how information can be recorded I can order, sort, and group my data cards	I can compare features in different videos I can explain that video is a visual media format I can identify features of videos	I can identify conditions in a program I can modify a condition in a program I can recall how conditions are used in selection
I can explain why we need tools to find things online I can recognise the role of web crawlers in creating an index I can relate a search term to the search engine's index	I can explain how alignment grids and resize handles can be used to improve consistency I can modify objects to create a new image I can use the zoom tool to help me add detail to my drawings	I can design a conditional loop I can explain that a condition is either true or false I can program a microcontroller to respond to an input	I can choose multiple criteria to answer a given question I can choose which field and value are required to answer a given question I can outline how 'AND' and 'OR' can be used to refine data selection	I can create and save video content I can decide which filming techniques I will use I can outline the scenes of my video	I can design a conditional loop I can explain that a condition is either true or false I can program a microcontroller to respond to an input
I can describe some of the ways that search results can be influenced I can explain how search engines make money I can recognise some of the limitations of search engines	I can compare vector drawings to freehand paint drawings I can create a vector drawing for a specific purpose I can reflect on the skills I have used and why I have used them	I can test and debug my project I can use selection to produce an intended outcome I can write an algorithm that describes what my model will do	I can ask questions that will need more than one field to answer I can present my findings to a group I can refine a search in a real-world context	I can evaluate my video and share my opinions I can make edits to my video and improve the final outcome I can recognise that my choices when making a video will impact on the quality of the final outcome	I can extend my program further I can identify the setup code I need in my program I can identify ways the program could be improved