Computing

Develop Test Innovate

Year Group	Unit Title	End Points
5	Computing Systems and Networks	• Know that computer systems communicate with other devices • Identify tasks that are managed by computer systems • Know that data is transferred using agreed methods • Know that connected digital devices can allow us to access shared files stored online • Know people can send information over the internet in different ways • Explain that the internet allows different media to be shared • Recognise that working together on the internet can be public or private
5	Vector Drawings	• Recognise that vector drawings are made using shapes • Identify the shapes used to make a vector drawing • Move, resize, and rotate objects that have been duplicated • Use the zoom tool to help add detail to a drawing • Explain how alignment grids and resize handles can be used • Identify that each added object creates a new layer in the drawing • Copy part of a drawing by duplicating several objects
5	Programming (Selection in physical computing)	• Build a simple circuit to connect a microcontroller to a computer • Program a microcontroller to light an LED • Connect more than one output device to a microcontroller • Explain that a condition is something that can be either true or false • Explain that a condition being met can start an action • Write an algorithm to control lights and a motor • Test and debug a project
5	Data and Information	• Create multiple questions about the same field • Navigate a flat-file database to compare different views of information • Explain what a 'field' and a 'record' is in a database • Explain how information can be grouped • Choose which field and value are required to answer a given question • Use 'AND/OR' to refine data selection • Ask questions that will need more than one field to answer
5	Creating Media	• Know that a video can include both visual and audio media • Locate and identify the working features of a digital device that can record video • Demonstrate suitable methods of using a digital device to capture my video • Explain why lighting and angle are important in creating an effective video • Store, retrieve, and export my recording to a computer

		• Explain how to improve a video by reshooting and editing • Select the correct tools to make edits to my video • Make edits to a video to improve the final outcome
5	Programming (selection in quizzes)	• Identify conditions in a program • Use selection in an infinite loop to check a condition • Create a program with different outcomes using selection • Explain that program flow can branch according to a condition • Design the flow of a program which contains 'if… then… else…' • Identify the outcome of user input in an algorithm • Test a program created • Evaluate a program created