



LTP Year 5:Computing						
Themes (Number of weeks/Term)	Autumn 1 Systems and Searching	Autumn 2 Video Production	Spring 1 Selection in Physical Computing	Spring 2 Flat File Databases	Summer 1 Introduction to vector graphics	Summer 2 Selection in quizzes
NC Content/Coverage	Systems and Searching Recognising IT systems in the world and how some can enable searching on the internet.	Video Production Planning, capturing, and editing video to produce a short film.	Selection in Physical Computing Exploring conditions and selection using a programmable microcontroller	Flat-file databases Using a database to order data and create charts to answer questions.	Introduction to vector graphics Creating images in a drawing program by using layers and groups of objects	Selection in quizzes Exploring selection in programming to design and code an interactive quiz.
Declarative knowledge	-I can explain that computers can be connected together to form systems. -I can recognise the role of computer systems in our lives. -I can describe how search engines select results. -I can recognise why the order of results is important, and to whom.	-I can explain what makes a video effective. -I can identify that video can be improved. -I can consider the impact of the choices made when making and sharing a video	-I can write a program that includes cont-controlled loops -I can explain that a loop can stop when a condition is met. -I can explain that a loop can be used to repeatedly check whether a condition has been met	-I can use a form to record information. -I can outline how you can answer questions by grouping and then sorting data. -I can explain that tools can be used to select specific data. -I can explain that computer programs can be used to compare data visually	-I can identify that drawing tools can be used to produce different outcomes -I can recognise that vector drawings consist of layers	-I can explain how selection is used in computer programs. -I can relate that a conditional statement connects a condition to an outcome. -I can explain how selection directs the flow of a program.



Procedural knowledge	-I can explain how search results are ranked. -I can identify how to use a search engine.	-I can use a digital device to record video. -I can capture video using a range of techniques. -I can create a storyboard.	-I can design a physical project that includes selection. -I can create a program that controls a physical computing project. -I can control a simple circuit connected to a computer.	-I can compare paper and computer-based databases. -I can use a real-world database to answer questions.	-I can create a vector drawing by combining shapes. -I can use tools to achieve a desired effect. -I can group objects to make them easier to work with. -I can apply what I have learned about vector drawing.	-I can design a program that uses selection. -I can create a program that uses selection. -I can evaluate my program.
Key vocabulary	Systems and Searching index, bot, ordering, links, algorithm, search engine optimisation (SEO), web crawler, content creator, selection, ranking.	Video Production talking head, panning, close up, mid-range, moving subject, side by side, angle, static, zoom, pan, tilt, storyboard, review, import, split, reshoot, reorder, export,	Selection in Physical Computing microcontroller, USB, components, component, motor,, count-controlled loop, Crumble controller, switch, LED, Sparkle, crocodile clips, connect, battery box, program, condition, action, circuit,, cell, buzzer	Flat File Databases database, data, information, record, field, order, group, value, criteria, graph, chart, axis, compare, filter, presentation.	Introduction to vector graphics vector, drawing tools, object, toolbar, vector drawing, duplicate/copy, zoom, select, align, modify, layers, order, group, ungroup, reuse, reflection	Selection in quizzes Selection, condition, count-controlled loop, outcomes, conditional statement, algorithm,, question, answer, task, design, implement, test, run, setup,