



LTP Year 4:Computing						
Themes (Number of weeks/Term)	Autumn 1 The Internet	Autumn 2 Audio Production	Spring 1 Repetition in Shapes	Spring 2 Data Logging	Summer 1 Photo Editing	Summer 2 Repetition in Games
NC Content/Coverage	-Recognising that the internet is a network of networks including the WWW, and why we should evaluate online content.	Capturing and editing audio to produce a podcast, ensuring that copyright is considered.	Using a text-based programming language to explore count-controlled loops when drawing shapes.	Recognising how and why data is collected over time, before using data loggers to carry out an investigation,	Manipulating digital images, and reflecting on the impact of the changes and whether the required purpose is fulfilled,	Using a block-based programming language to explore count-controlled and infinite loops when creating a game.
Declarative knowledge	-I can recognise how networked devices make up the internet. -I can outline how websites can be shared via the World Wide Web (WWW). -I can recognise how the content of the WWW is created by people.	-I can identify that sound can be recorded. -I can recognise the different parts of creating a podcast project. -I can combine audio to enhance my podcast project.	-I can identify that accuracy in programming is important -I can explain what 'repeat' means	-I can explain that data gathered over time can be used to answer questions. -I can use a digital device to collect data automatically. -I can explain that a data logger collects 'data points' from sensors over time. -I can identify the data needed to answer questions.	-I can explain that the composition of digital images can be changed. -I can explain that colours can be changed in digital images. -I can explain that images can be combined. -I can combine images for a purpose.	-I can explain that in programming there are infinite loops and count-controlled loops.



Procedural knowledge	-I can describe how networks physically connect to other networks. -I can describe how content can be added and accessed on the World Wide Web (WWW). -I can evaluate the consequences of unreliable content.	-I can apply audio editing skills independently. -I can explain that audio recordings can be edited. -I can evaluate the effective use of audio.	-I can create a program in a text-based language. -I can modify a count-controlled loop to produce a given outcome. -I can decompose a task into small steps. -I can create a program that uses count-controlled loops to produce a given outcome.	-I can use data from sensors to answer questions. -I can recognise how a computer can help us analyse data.	-I can explain how cloning can be used in photo editing. -I can evaluate how changes can improve an image.	-I can develop a design that includes two or more loops which run at the same time. -I can modify an infinite loop in a given program. -I can design a project that includes repetition. -I can create a project that includes repetition. -I can develop the use of count-controlled loops in a different programming environment.
Key vocabulary	The Internet router, security, switch, server, access point (WAP), web browser, download, sharing, ownership, permission,	Audio Production audio, microphone, podcast, trim, align, layer, import, playback, selection, export,	Repetition in Shapes program, turtle, code snippet, algorithm, count-controlled loop, value, trace, decompose, procedure.	Data Logging table, layout, sensor, logger, logging, data point, analyse, dataset, import, export, logged, collection, review,	Photo Editing crop, rotate, undo, adjustments, effects, hue, saturation, sepia, vignette, retouch, clone, combine, made up, real, composite alter, background, foreground, zoom, undo, font.	Repetition in Games Scratch, blocks, code, value, infinite loop, costume, forever, animate, event block, duplicate, modify, design, algorithm, refine,