Programming

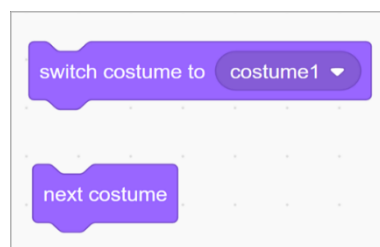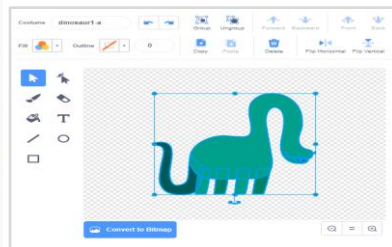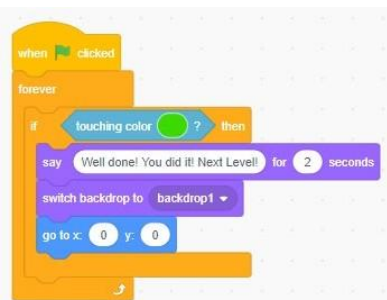| Knowledge	Skills
To know how to design characters and backdrops.	To use tools to draw a character (sprite). To program commands that change the backdrop. To test and debug a program after making changes.
To know how to program costume changes for a sprite.	To design new costumes for an existing sprite. To design code that switches from one costume to another. To add appropriate effects to complement a change of costume.
To know how to add features or effects to enhance a game.	To add appropriate commentary to a code. To add sounds as a consequence of an action. To create events as a consequence to another action. To make two characters move in relation to each other.
To know how to design and program a game.	To draw a background using blocks to make a maze. To select and change a character (sprite). To create appropriate backdrops and sprites. To program commands that control the movement of a sprite. To program consequences for specific actions. To plan sequences of instructions (an algorithm). To translate logical instructions into coding language (blocks). To test for errors and debug a code for a game.
To know how to add point-scoring and levels to game code.	To create a variable. To use code to increase the value of a variable. To add relevant messages that are linked to a final value.
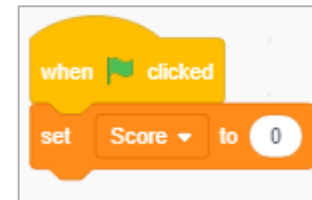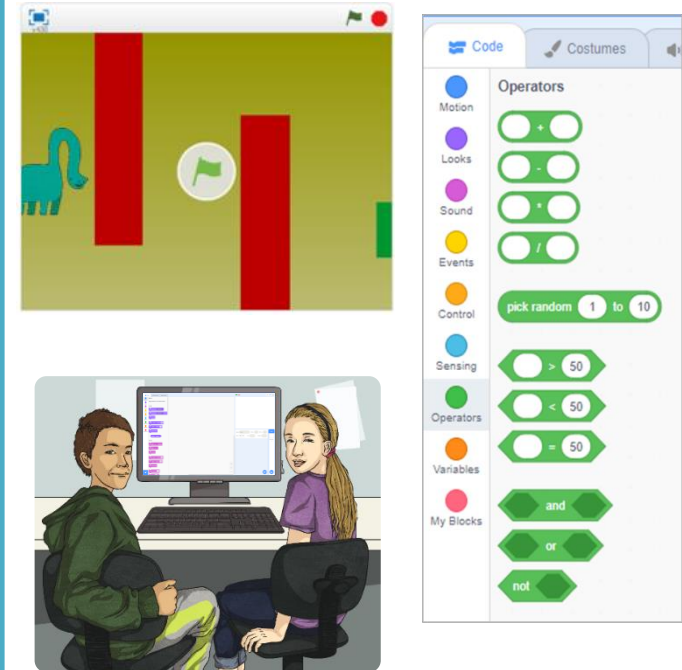
This unit's Online Safety focus develops their understanding of Online Relationships.
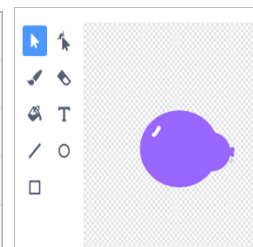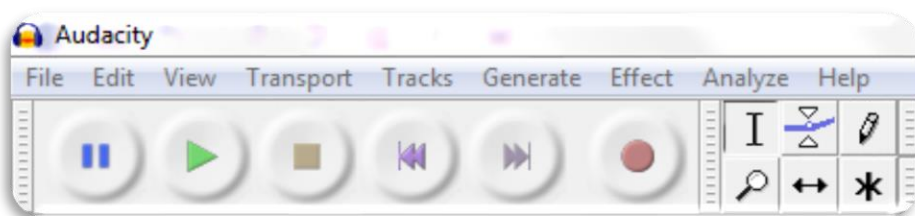
Key Words

Algorithm, sprite, backdrop, script, block, script events, sequence, gradient, fill, levels, repeat, commentary, consequence, action, penalty, test, debug, costume, score and variable.

Radio Station

Knowledge	Skills
To know how to use software to create my own sounds by recording, editing and playing.	To name different devices (including input and output) used for sound recording. To use a digital device to record my own voice To play back the recording and listen to it. To delete and re-record sounds.
To know how to combine audio effects to create an original radio jingle.	To import existing sounds. To record a voiceover in the style of a jingle. To rehearse timings to combine two audio tracks. To add effects to enhance a track.
To know how to plan, create and present digital content for a radio podcast.	To choose and use appropriate software for sound recording. To describe what is meant by a podcast. To plan appropriate audio information to use. To evaluate what features make good quality audio content. To present audio information confidently and clearly. To evaluate and improve my recordings
To know how to design and record a persuasive radio advert for a product or service.	To evaluate what makes a good advert and plan the features of a good advert. To use recording skills to record and present my own advert. To analyse and identify improvements to an advert.

*This unit's Online Safety focus develops their understanding of Online Bullying.*
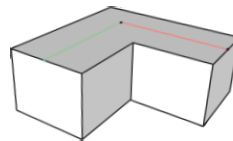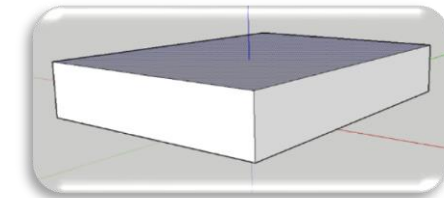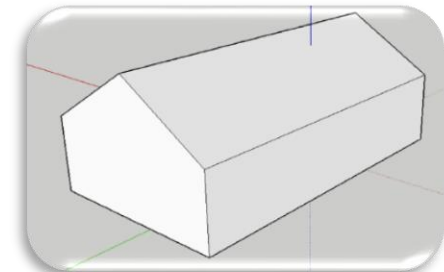
Key Words

Sound, audio, record, edit, play, stop, skip, waveform, input, output, jingle, backing track, voiceover, mute, gain, podcast, digital content, downloadable, rehearse, download and listen.

3D Modelling

Knowledge	Skills
To know how to draw 3D shapes.	To draw a 2D shape or line. To manipulate 2D shapes into 3D shapes.
To know how to add detail to 3D shapes and drawings.	To use the measure tool to draw shapes. To use inference points to draw lines and shapes. To double click to copy push/pull and offset.
To know how to add and manipulate 3D models.	To import 3D models from the 3D Warehouse. To copy and manipulate 3D models.
To know how to create a complex 3D model.	To select the tools needed to use different features. To use the main tools independently.

This unit's Online Safety focus develops their understanding of Health, Wellbeing and Lifestyle
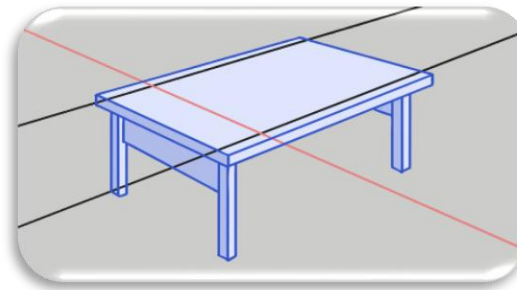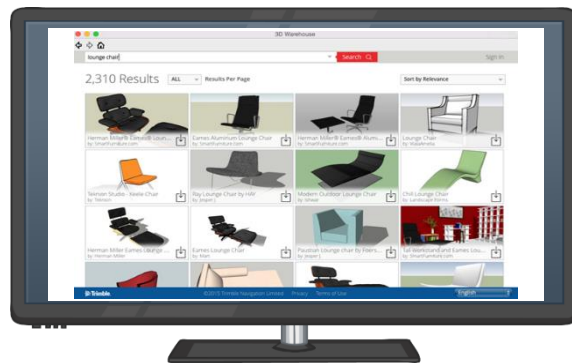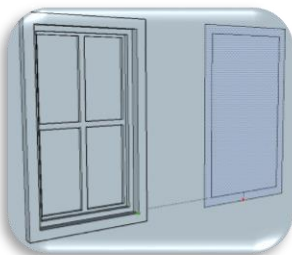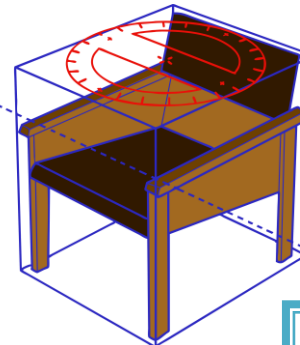
Key Words

2D shape, 3D shape, rectangle, push/pull, orbit, pan, zoom, zoom extents, move, inference, eraser, dimension, measurement, guide, group and component.