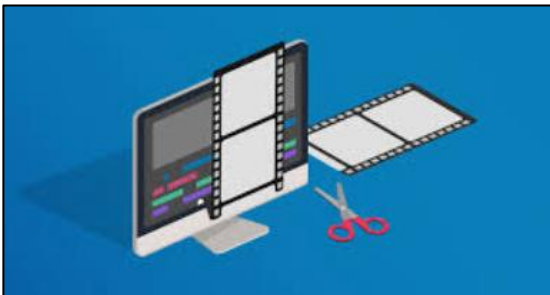


COMPUTING SUMMER KNOWLEDGE ORGANISERS

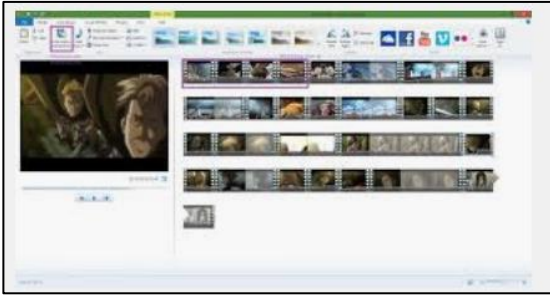


Overview



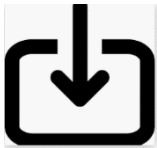
Video Editing

- You should already know that video means the recording, reproducing and broadcasting of visual images (often accompanied by audio).
- Video is made up of a sequence of images shown in quick succession, giving the impression of movement.
- Many different devices can be used to record, edit and playback video and sound.
- Theme, setting, characters, colour, sound, and dialogue are all important features of video.



Editing Videos

Windows Movie Maker is one example of a video editing tool, but many others are available. Examples include WeVideo, Nero Video, and Apple iMovie.



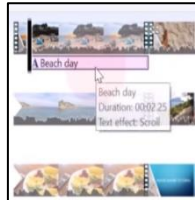
In order to edit your video, you first need to import it from your device to the computer. You then need to import it into Movie Maker by clicking 'Add videos and photos.'



By right-clicking on the video thumbnail, you can choose to 'split' the video into pieces. The different pieces can be moved or deleted.



The trim tool allows you to move excess video from the beginning or the end.



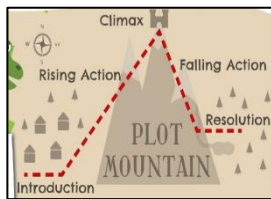
A number of special effects are available, including using animations and transitions between shots. You can also add text in captions.

Remember to save your project regularly. You need to save your project as a *.wmv file so that you can continue to edit it.



Features of Videos

Videos present moving images, often accompanied by sound. The following features are commonly found in videos.



Plot means the main events in the video, shown in a sequence. Plot features are caused by and affect one another.



Themes are the main ideas that run through the video, e.g. love, friendship, magic, violence.



Most videos, even very short videos, try to give the audience a message. This may be obvious or hidden.



Props are the moveable objects that are used by the actors/ actresses in videos texts.



Dialogue is the name given for the conversations between people in video texts.



Characters are the different people and animals in a story, including in a video.

Recording Videos



Static Camera: The camera is in a fixed position, sometimes using a stand or tripod. Examples of this in use are during news-reading and weather forecasts.



Zooming: Zooming in means to give a closer view of the subject. Zooming out gives us a further, broader view of the subject. Zooming too close can make the subject appear blurry.



Pan: The camera position is fixed, but moves from side to side.

Tilt: The camera position is fixed, but moves up and down.

Top Tips for Recording High-Quality Videos

- Use considered lighting.
- Think carefully about the sounds that you will use, e.g. music and sound effects.
- Think about the use of colour.
- Consider the use of a green screen for settings.

Devices for recording video:

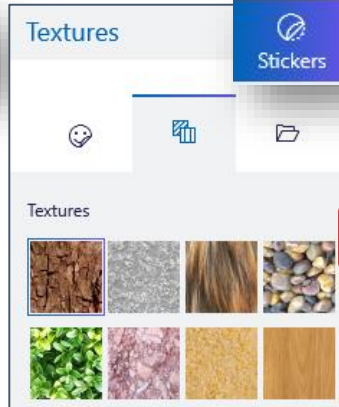
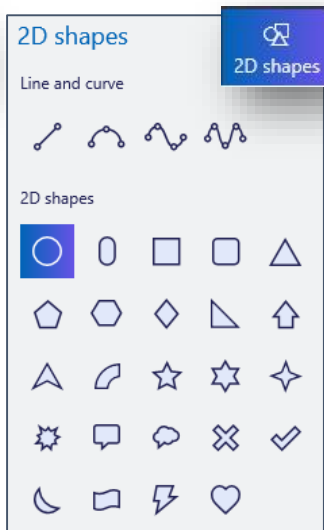
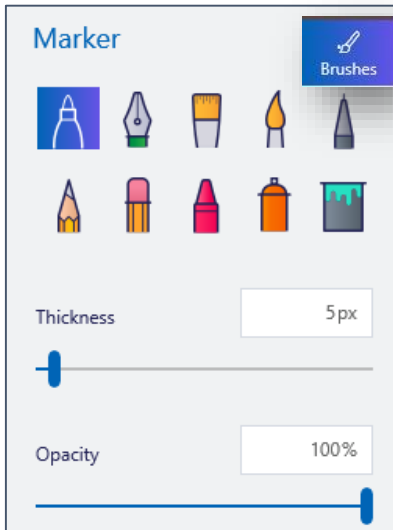
iPads/tablets/smartphones

Camcorders or Cameras



Important Vocabulary

Video Audio Recording Storyboard Script Soundtrack Dialogue Capture Zoom AV (Audio Visual) Videographer Zoom Pan Tilt Angle Lighting Setting Export Split Trim/Clip Titles Timeline Transitions Content Retake Special Effects Title Screen End Credits



Draw and edit animation characters using illustration skills for a movie trailer.
File Formats: Export as a movie.**mp4** to play the movie on other devices. **.mp3** and **.wav** are audio files.

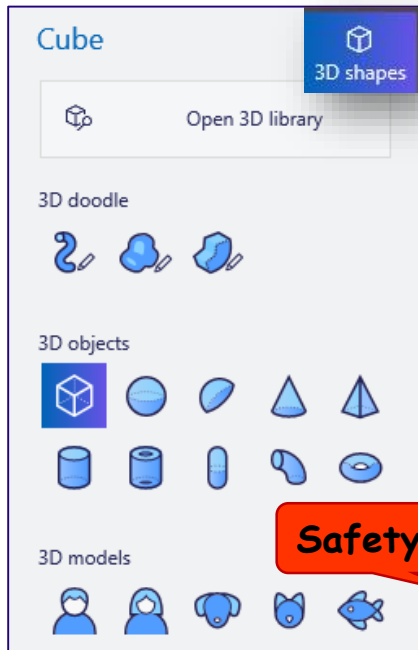
Review

Communication

Audience - who the film is aimed at.
Storyboard - A plan of the action and background ideas for the sequence.

3D means three-dimensional, i.e. something that has width, height and depth (length). Our physical environment is three-dimensional and we move around in **3D** every day.
Viewpoints - You can turn a 3D object around on the canvas and look at it from horizontal (**x**), vertical (**y**) or depth (**z**) viewpoints.
VR - **Virtual reality** is an artificial environment that is created with software and presented to the user in such a way that the user almost accepts it as a real environment.

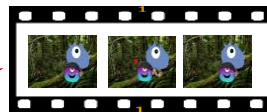
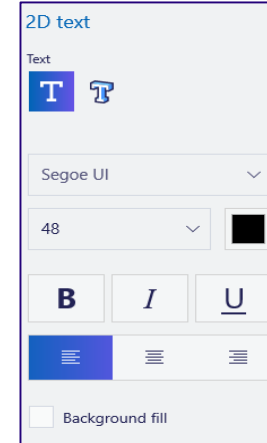
Copyright



Repetition



Sequence

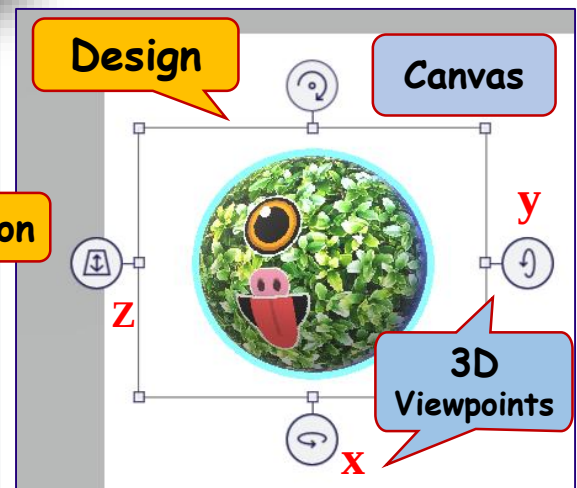


Animation is a way of making the illusion of movement from many still images. The images are put together one after another, and then played at a fast speed and converted into a video format.
Creative Commons - Work is free to use as long as the creator is acknowledged.



Selection

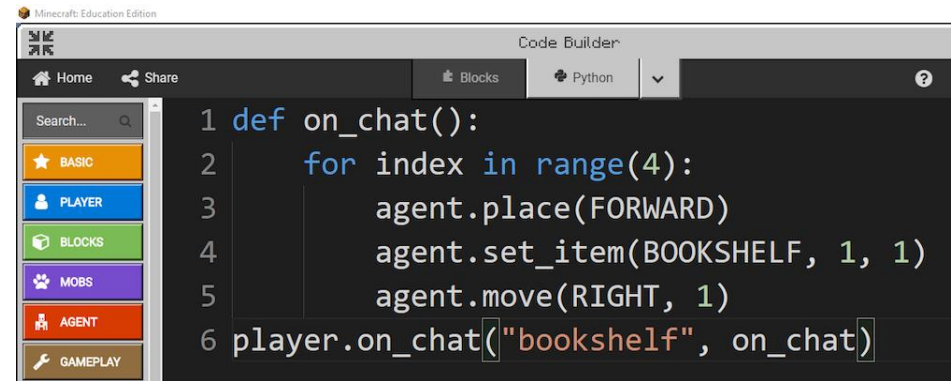
Simulation



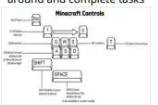
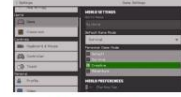
Design

Canvas

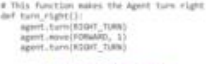
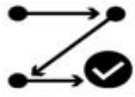
3D Viewpoints



MINECRAFT VISUAL GLOSSARY

Agent personal robot in Minecraft 	Blocks the basic units of structure in Minecraft that make up the game's world 	Book & Quill an item used to create written books in Minecraft 
Camera allows you to take screenshots and selfies in Minecraft: Education Edition 	Chalkboards special blocks that allow you to write and display text in Minecraft 	Controls (keyboard) keyboard buttons that help you move around and complete tasks 
Controls (touch) the touch pad that helps you move around and complete tasks 	Creative game mode that gives you unlimited resources, ability to fly, and lets you destroy blocks instantly when mining 	Hotbar selection bar that appears on the bottom of the screen 
Inventory pop-up menu the player (or Agent) uses to manage the items they carry 	Minecraft: Education Edition a game-based learning platform 	Mob game character resembling a living creature 
Portfolio saves all of the photos that you have taken with a camera; allows you to add captions 	NPC non-player character 	Spawn Point the location where a player begins game play 

COMPUTER SCIENCE GLOSSARY

Algorithm a sequence of defined steps 	Boolean Logic uses the numbers 1 and 0 to represent if something is true (1) or false (0) and is called its state 1 or 0	Code (Coding) the method of giving a computer instructions to perform a specific task 	Methods special commands that affect data in many ways 	Nested Loops a loop within a loop 	Parentheses used after a command name; can have parameters placed in them to set the command's settings, to make the command do exactly what is wanted ()
Colon a symbol used at the end of command declaration :	Commas used to separate parameters if there are two or more 	Comments pieces of text in a code that the computer does not run 	Python a computer programming language that uses a mixture of recognizable words and characters 	Quotes used to define a string; any characters between the quotes will be seen by Python as text " "	Sequence a programmed (coded) algorithm 
Compare double equals, or compare, is used when comparing two statements =	Conditionals an action or occurrence that is detected by the computer 	Coordinates a coordinate represents a position or location 	Square Brackets used when creating lists; contents of a list need to be placed within square brackets and separated by commas 	String a piece of text in quotes " " "Hello"	Syntax Error the computer's way to say that it cannot run a piece of code because the syntax structure is not correct X
Debug the process of finding (and correcting) errors in a computer program 	Decompose breaking down a problem or task into smaller, more manageable parts 	Event an action or occurrence that is detected by the computer 	Test the process of running a program to see if it is correct 	Underscore used in the place of a space my_list = [0, 1, 2, 3, 4] important_variable = 1	Variable the places in which computers store values in a computer program 
Function a named section of a program that performs a specific task function_name():	Indentation declare the piece of code belongs to the command above; to indent a piece of code, use the tab key on the keyboard for i in range(2): agent.move(FORWARD, 1)	List An ordered collection of strings, numerical values, or variables my_list = [elephant, lion, zebra, giraffe]	While Loops repeats code when a condition is met while	World Position unique coordinates defined by three numbers world(0, 0, 0)	

Icon	Software	Description
	Spreadsheet	Made up of rows, columns and cells. Used mainly for holding formulas to automatically complete calculations.
	Word processing	A modern-day typewriter used for typing text and changing the appearance of the text (such as making text bold or changing the colour).
	Email	Software that allows you to read and compose electronic messages that are sent between recipients across the network (usually the internet). You can send messages to multiple people at the same time and include attachments (such as files for people to open, read, or edit).
	Image editing	Software that allows you to create or edit images. It includes tools such as overlaying text, cropping, and recolouring.
	Presentation	Software that allows you to present information in the form of a slide show. The presenter would use this to provide a visual aid to support what they are saying.
	Web authoring	Software that creates web pages/websites without you having to write code. You can write, edit, and position text, add images, and embed videos, and the software will write the required code for it.

KEY VOCABULARY

credibility - the quality of the source from where the information is gathered

source - a place, person or thing from which facts or information can be obtained.

audience - a group of people of whom your project/work would be aimed at

plagiarism - the process or practice of using another person's ideas or work and pretending that it is your own

referencing - when you provide (a book or article) with citations of sources of information.

citation - a word or piece of writing taken from a written work

paraphrase - to repeat something written or spoken using different words, often in a simpler and shorter form that makes the original meaning clearer

blog - a regularly updated website or web page

Tool icon	Tool name	Brief description
	BOLD	Changes the text to be bold, i.e. thicker and more noticeable
	FONT	Allows you to change the style/appearance of the text
	CENTRE ALIGN	Moves the text so that it is in the middle of the page, rather than having a margin on the left- or right-hand side of the page
	TEXT COLOUR	Allows you to change the colour of the text
	BULLETED LIST	Allows you to create a bullet-pointed list



Copyright law gives rights to authors of creative works such as books, plays, artwork, and music so that they can decide how they would like their work to be used. By default, copyright law protects work from being used without permission.