



Highsted Knowledge Organiser

Year 9 Term 4: Music

What I need to know

How to layer loops – Beats / rhythms, bass and piano.

How to manipulate these midi layers to create a piece with contrast and development.

How to create your own beats/Rhythms and adding own midi instruments

How to add audio and manipulate

Key Vocabulary

See the Knowledge Organiser

Student reference point

D.A.W	Digital Audio Workstation – Electronic software used for recording, editing & producing audio files. Has meant a generation of “bedroom” producers has emerged
Sequencer	The sequencer allows you to <u>organise</u> your layers into an arrangement / structure This is where you move blocks around to produce the whole piece
Audio	Real sound which has been recorded in using a microphone or DI. It looks like a soundwave
Track	Each track contains audio or midi sounds
Looping	Repeating a pattern again and again
MIDI	Musical Instrument Digital Interface, this is a digital instrument. Computer information translated into music (opposite of audio). It can be changed after it is input
Sampling	The reuse of a sound recording in another piece of music
Quantisation	using a <u>DAW</u> you <u>can</u> quantise notes, this means if you played them out of time they can be automatically placed in the correct location (in time).
<u>Synthesiser</u>	A technique of generating sound using electronic hardware from scratch. Replicates sounds. Can be a keyboard with a bank of sounds
Drum Machine	A programmable electronic device able to imitate the sounds of drum kits and beats (e.g. Beatmaker)





Some listening
Calvin Harris – We found love –feat. Rihanna – Scottish producer
Kraftwerk – Autobahn – the oldest & most important electronic artists
Bjork – Army of me – Icelandic musician, recorded this track in <u>Chorlton</u>
Billie Eilish
Charlie Puth
Olivia Rodrigo & Dan Nigro
Ebony Bones



4-to-the-floor	4 kick (bass) drum beats in a bar
Bass-line	Gives the groove & drive
Break	When all layers (except beat) disappear
Drop	A sudden change of rhythm or bass line, preceded by a build section & break

Digital Music – using Soundtrap

Effects / FX	Changing the way something sounds e.g. Reverb, Delay (Echo), Chorus, Distortion, Tremolo, Phaser
Mixing	Audio mixing is the process of assembling all the tracks and blending & balancing them together. Tracks are blended using various processes such as EQ, Compression and Reverb. Each input has a channel. Gain, Pan & EQ can be adjusted
Engineer	The engineer handles the sound using the mixer, the sequencer & the effects. They are responsible for the end sound
Technician	is responsible for the equipment & makes sure it works, is in tune and placed correctly
Compression	this is the narrowing of the dynamic range of a recording. It is like squeezing the volume <u>levels</u> so the quiet parts become louder and the loudest parts softer.
EQ	Equalization, adjusting the volume levels of certain frequencies. For example, you can cut out the bass and boost the higher frequencies.
Reverb	One of the oldest of all audio effects, it aims to recreate the natural ambience of real rooms and spaces, almost like an echo.
Panning	The placing of sound within the stereo field (left/right speakers) 
Delay	An effect added which repeats a sound regularly creating an echo effect
Automation	The automatic adjusting of the dynamics, reverb, effects throughout a track by the DAW. You control these applications by using nodes 
Velocity	How firmly you press down the keys of a keyboard, it affects the volume. You can edit this
BPM	Beats per minute. The tempo
Processors, Digital, Analogue, Multitrack, Edit, Audio interface, Plug-in, Virtual instruments, Bit-depth, Sample rate, Stereo	

Challenge question

Can you create a song with Intro, Verse, Chorus, Verse, Chorus, Middle 8 & Chorus, Outro ?

Or can you import a sample of something you recorded on your phone and manipulate it in a track to incorporate it into your piece?

How to listen to music better - <https://www.youtube.com/watch?v=F5SkRijgFvU>

<https://www.youtube.com/watch?v=kpx2-EMfdbg>

<https://www.youtube.com/watch?v=IU8BEMi8UyM>

Suggested reading

<https://www.youtube.com/watch?v=4zG7zP2Zgk>

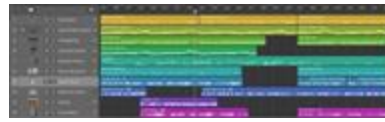
<https://www.youtube.com/watch?v=aHpP7cHez9Y>

<https://www.youtube.com/watch?v=tWNBd8STTsw>

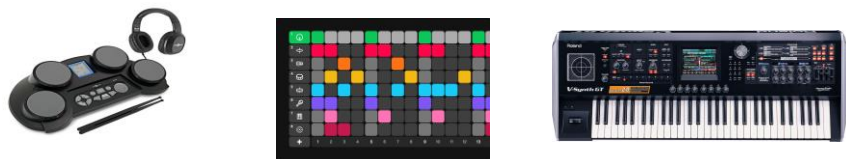
<https://www.youtube.com/watch?v=eTspznnBVDk>

https://www.youtube.com/watch?v=F_8msY0R9G4

D.A.W	Digital Audio Workstation – Electronic software used for recording, editing & producing audio files. Has meant a generation of “bedroom” producers has emerged
Sequencer	The sequencer allows you to organise your layers into an arrangement / structure This is where you move blocks around to produce the whole piece
Audio	Real sound which has been recorded in using a microphone or DI. It looks like a soundwave
Track	Each track contains audio or midi sounds
Looping	Repeating a pattern again and again
MIDI	Musical Instrument Digital Interface, this is a digital instrument. Computer information translated into music (opposite of audio). It can be changed after it is input
Sampling	The reuse of a sound recording in another piece of music
Quantisation	using a DAW you can quantise notes, this means if you played them out of time they can be automatically placed in the correct location (in time).
Synthesiser	A technique of generating sound using electronic hardware from scratch. Replicates sounds. Can be a keyboard with a bank of sounds
Drum Machine	A programmable electronic device able to imitate the sounds of drum kits and beats (e.g. Beatmaker)



Some listening
Calvin Harris – We found love – feat. Rihanna – Scottish producer
Kraftwerk – Autobahn – the oldest & most important electronic artists
Bjork – Army of me – Icelandic musician, recorded this track in Chorlton
Billie Eilish
Charlie Puth
Olivia Rodrigo & Dan Nigro
Ebony Bones



4-to-the-floor	4 kick (bass) drum beats in a bar
Bass-line	Gives the groove & drive
Break	When all layers (except beat) disappear
Drop	A sudden change of rhythm or bass line, preceded by a build section & break

Digital Music – using Soundtrap

Effects / FX	Changing the way something sounds e.g. Reverb, Delay (Echo), Chorus, Distortion, Tremolo, Phaser
Mixing	Audio mixing is the process of assembling all the tracks and blending & balancing them together. Tracks are blended using various processes such as EQ, Compression and Reverb. Each input has a channel. Gain, Pan & EQ can be adjusted
Engineer	The engineer handles the sound using the mixer, the sequencer & the effects. They are responsible for the end sound
Technician	Is responsible for the equipment & makes sure it works, is in tune and placed correctly
Compression	this is the narrowing of the dynamic range of a recording. It is like squeezing the volume levels so the quiet parts become louder and the loudest parts softer.
EQ	Equalization, adjusting the volume levels of certain frequencies. For example, you can cut out the bass and boost the higher frequencies.
Reverb	One of the oldest of all audio effects, it aims to recreate the natural ambience of real rooms and spaces, almost like an echo.
Panning	The placing of sound within the stereo field (left/right speakers)
Delay	An effect added which repeats a sound regularly creating an echo effect
Automation	The automatic adjusting of the dynamics, reverb, effects throughout a track by the DAW. You control these applications by using nodes
Velocity	How firmly you press down the keys of a keyboard, it affects the volume. You can edit this
BPM	Beats per minute. The tempo
Processors, Digital, Analogue, Multitrack, Edit, Audio interface, Plug-in, Virtual instrumenta, Bit-depth, Sample rate, Stereo	

