

THIS BOOKLET WILL HELPYOU LEARN ALL ABOUT MODERN JS.

IT INCLUDES PUZZLES, WORDSEARCHES AND QUIZZES TO HELP YOU LEARN ALL ABOUT HOW MODERN DJS WORK, WHAT DJING IS, AND HOW IT ALL STARTED.

ALL THE WORDS IN *ITALICS* ARE EXPLAINED IN THE GLOSSARY ON PAGE 14. ALL THE WORDS IN **PURPLE ARE** QUESTIONS FOR YOU TO ANSWER.

DEFINITION: DJ STANDS FOR "DISC JOCKEY."

IT MEANS SOMEONE WHO USES RECORDED MUSIC TO ENTERTAIN OTHER PEOPLE. YOU CAN ALSO SPELL IT DEE JAY.

PRODUCERS

DJs who make their own songs on computers or music technology.



THERE ARE LOTS OF OTHER DIFFERENT TYPES OF DJ.

CLUB DJS

DJs who blend music together to make new music at live events. They often choose exciting new music.



RADIO DJS

DJs on radio who tell jokes, may read the news and often have to play adverts.



TURNTABLISTS

DJs who use the DJ equipment as a musical instrument to play sounds with other musicians.



FUNCTION DJS

DJs who play at weddings, discos and birthdays – they use the microphone to do dance competitions, keep you excited and normally play chart music.



- 1 RUMENTS. Can you cross out the label to show which are electronic and which are acoustic instruments?

SOME ARE ELECTRONIC AND ARE USED BY DJS OR **PRODUCERS. SOME ARE TRADITIONAL INSTRUMENTS AND MIGHT BE USED IN ORCHESTRAS. WE CALL THE** TRADITIONAL INSTRUMENTS ACOUSTIC.

ACOUSTIC

ELECTRONIC

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ACOUSTIC	ELECTRONIC

The first one has been done for you.





ACOUSTIC



ACOUSTIC ELECTRONIC











TYPES OFDJ EQUIPMENT & COSTS.

A SET OF DJ EQUIPMENT NEEDS AT LEAST TWO WAYS OF PLAYING MUSIC AND A WAY OF MIXING BETWEEN THEM.

THE EQUIPMENT THAT DOES THE MIXING IS CALLED A DJ MIXER. IT HAS A VOLUME FADER FOR EACH MUSIC PLAYER AND A CROSSFADER TO SWITCH BETWEEN PLAYERS. SOME MIXERS HAVE SOUND EFFECTS.

EXAMPLE SET-UP 1 VINYL DJ.

VINYL TURNTABLES (also called record players) are the oldest way of playing music. Vinyl turntables have the largest discs to play with. They are easiest for "scratching." They are very fragile and vinyl discs are expensive.

EXAMPLE SET-UP 2 CD DJ.

CD TURNTABLES are the digital way of doing this, they are very strong but more expensive than vinyl turntables. They can have extra buttons, *samplers* and *sound effects* included. Buying new CDs is cheaper than buying new vinyl records.

EXAMPLE SET-UP 3 CONTROLLER DJ.

DJ CONTROLLERS are the newest way of DJing – they have two players and a mixer in one box. They need a computer and DJ software to work. The music you play is stored on the computer as *Mp3* files and is the cheapest to buy. The DJ software will have *sound effects*, *samplers* and all sorts of other options included with it.

EXAMPLE SET-UP 4 DVS DJ.

DVS DJ - Top level professional DJs often use a DVS system which combines turntables, computers and software. DVS means "*Digital Vinyl System*." Some DJ mixers have DVS systems built-in.





MUSICAL DEFINITIONS

DJS NEED TO DESCRIBE MUSIC WHEN THEY TALK TO EACH OTHER OR **OTHER MUSICIANS. HERE ARE THE MOST IMPORTANT WORDS WE USE TO DESCRIBE MUSIC:**

DYNAMICS TIMBRE

The volume of music during a song. A song may get quieter in the middle when some sounds stop, then it gets louder when more sounds come back in. DJs call this the **drop** but really it is a dynamic change.

The timbre of an instrument or sound source is what makes it sound different to other instruments. Everyone knows that a drum sounds different to a guitar. When a DJ blends or mixes two songs together they are choosing timbres that work well together.

MELODY

This is the tune or bit of a song you can hum or whistle. It is made up from musical **notes**. Some melodies make you feel happy, some sad, some angry or even scared.

HARMONY

Harmonies are the effects created by having several notes playing at the same time. When a DJ mixes they listen to the harmonies they create to double check their **mix** is working.

PULSE

This is the driving force behind all music. In most pop music and music that DJs use the pulse is clear and you can dance to it easily. Sometimes it is called the beat. It is what you can tap your foot or nod your head to.

RHYTHM

This is the effect created by combining sounds that all follow the same pulse. Some rhythms make you want to dance, some make you want to relax. When a DJ mixes two songs they create a **poly-rhythm** which means more than one rhythm - this should be exciting!

TEMPO

Tempo is the musicians' word for speed. When mixing two songs the DJ makes sure the tempos are the same. If the tempos are not the same the pulses won't match and people won't know which song to dance to!

STRUCTURE NOTES

The overall shape of a song – this could be a simple binary structuresuch as "verse, chorus, verse, chorus" like a pop song. Or it could be a more complicated structure such as in the song "Bohemian Rhapsody" by Queen.

A musical note is a single sound at a certain frequency or pitch which lasts for a certain amount of time.

I AM GOING TO DESCRIBE MY FAVOURITE SONG.



Underline all the adjectives in the text on the right.



List all the musical terms from the text on the right: (Hint – you may want to look at page 5 where we explain all the main musical terms and page 14 where we list all the other new words you may need.)

WHEN A MUSICIAN DESCRIBES A SONC WE CALL IT AN APPRAISAL.

My favourite song is "Happy" by Pharrell Williams. I love the way the *intro* is very short and gets me straight to the first **verse** with its happy bouncing **rhythm**. The *pulse* is so easy to follow it makes it easy to dance to it. I love the chorus because the melody and singing make me feel carefree, sometimes I even sing along. I like the *middle section* where most of the instruments stop and rest because then I really feel the change in the *timbre* and dynamics when the chorus comes back. The *chorus* is so good I even like that they repeat it twice. Then it plays a shortened version of the *middle section* and plays the fantastic *chorus* twice again!"



Describe your favourite song using as many of the words from Page 5 or Page 14 as you can.

My favourite song is...

DEFINITIONS OF WORDS THAT DJS USE.

HERE ARE THE MOST IMPORTANT WORDS THAT DJS USE:

CUE POINT

When a DJ chooses a place to start a song they have set a cue point.

NUDCE

A technique used by DJs to slow down or speed up a song while Beat-Matching.

LOOP

To repeat a small part of a song – this can be done digitally using buttons or by hand using platters.

TRANSFORM

A basic two handed Scratch technique.

BREAK

A part of a song where things change. A good break is normally a part that people want to dance to. Breaks have often been used as loops to create new music.

SET

The whole performance a DJ does.

BEAT-MATCHING

The technique DJs use to make sure two songs are at exactly the same speed so they can be mixed or blended without changing the pulse. If this is done properly people keep dancing as the songs change.

FADER

A control the DJ can use to change how loud a song is.

SPIN-BACK

A way of finishing a song with a flourish – The DJ grabs the platter and spins it backwards while fading the volume down.

SCRATCH

The technique a DJ uses to make instrumental sounds.

CHIRP

A very common two handed Scratch technique.

MIX

A DJ Mix can be:

a) The specific way a DJ blends two songs together.

b) A selection of songs put together by the DJ to make up a performance. This is also sometimes called a "set".

CROSS-FADER

A part of a DJ mixer used to switch between two music players.

PLATTER

The round disc used to control the playing music. The platter is essential for scratching.

CUT

A way of changing between two songs without Beat-Matching. A cut is very quick and will need to be used with a well chosen cue point.

FLARE

An advanced two handed Scratch technique.

DROP

A large dynamic change which follows a build up or quiet part of song.

WAVEFORMS

The coloured area is the waveform. It begins on the left hand side and ends on the right hand side. Each time the colour changes it shows you a large dynamic change in the music. If the waveform is narrower it is quieter, where it is wider it is louder.

IN DJ OR MUSIC TECHNOLOGY SOFTWARE WE CAN SEE A SONG OR SOUND SOURCE BY LOOKING AT ITS WAVEFORM.

DIAGRAM

Waveform of "Happy" by Pharrell Williams:



Look at the waveform of "Happy" above. Can you guess which parts are the verses or choruses? Cross out the label that is wrong for each one. We've done the first one for you.

Now can you see which parts are louder or quieter? Cross out the labels which are wrong.

DIAGRAM 2

012

Waveform of "Bohemian Rhapsody" by Queen



013	A .	Do you think "Bohemian Rhapsody" is more or less dynamic than "Happy"?	
Look at the waveform of "Bohemian Rhapsody" above.	в.	According to the waveforms which song is louder?	
	c.	What do musicians call the speed of music?	
	D.	Does a waveform tell you what tempo a song is?	





DJ TERMS WORDSEARCH.



DJ TERMS CROSSWORD.

*Some of these answers are further on in this booklet!

DOWN

The way DJs make sure two songs are the same speed.

2 A basic two-handed scratch technique.

A style of music invented in Chicago, USA in a club called The Warehouse.

The overall shape of a song, for example: verse, chorus, verse.

• The part of a DJ mixer used to switch between two music players.

 The word DJs and musicians use to describe the speed of music.

How loud or quiet music is.

A style of music invented in London by DJs combining Two-Step, Drum 'n' Bass and Reggae.

ACROSS

2 What makes each instrument sound different.

The way DJs change the speed of a song while they are beatmatching.

The place in a song that a DJ has set so it will start from there.

• The beat that drives all music. Without this there is no music!

Some of the first ever events where MCs worked with DJs. These were in Jamaica in the 1950s.

The tune of a song, the bit you hum along to.

NOW LET'S IMACINE YOU ARE THE DJ!

DJs don't normally play all of a song. They choose only their favourite parts. These may be verses, choruses or breaks. DJs also mix parts of songs together. In the questions on this page you will have to work out how long the parts you choose are and how many songs you can play in your DJ sets.



HISTORY & GEOGRAPHY OF DJING.

Human beings have always sung, whistled or hummed melodies. All over the world instruments and musical styles have developed over thousands of years. One of the biggest changes in music was when the tribal rhythms of Africa met the classical instruments of Europe. The printing press allowed music to be written down so it could be shared between musicians who didn't even know each other. Finally technology let people record music so it could be played anywhere, even without any musicians! Before the 1950s recorded music could only be heard on large discs called records. Since then there have been reel to reel tapes, cassettes and compact discs (CDs). Nowadays most music is stored on digital files called Mp3s. These can be heard on smartphones, tablets and computers.

BELOW ARE SOME OF THE MAJOR DEVELOPMENTS IN DJING TECHNIQUES AND MUSIC.

DATE	LOCATION	EVENT	BAND OR DJ	GENRE
1950's	Jamaica	Soundclash events have DJs playing records while MCs use micro- phones to entertain listeners.	Various	Ska
1969	Sanctuary nightclub, New York	First beat-matching attempted by a DJ using Soul, Funk and Salsa Records.	Francis Grasso	Soul
1973	New York	Block Party DJs use two copies of the same record to repeat their fa- vourite sections of songs. This becomes known as "looping" and usually repeats the "break" in a song.	Kool Herc, Africa Bam- baata & DJ Hollywood	Нір Нор
1970's	New York	Disco is invented by bands using Funk, Soul and Salsa.	Various	Disco
1974	New York	Grand Wizard Theodore accidentally invents scratching while DJing at a block party.	Grand Wizard Theodore	Нір Нор
1975	Germany	Kraftwerk play entirely electronic music on TV.	Kraftwerk	Electronica
1983	New York	DJs mix Disco records with sampled beats using electronic drum machines.	Larry Levan	Garage (not to be con- fused with UK garage)
Mid 1980's	Chicago	DJs mix Synth Pop and Disco in a club called The Warehouse - the name "House Music" is given to the new style.	Frankie Knuckles	House
Mid 80's to 90's	Detroit	DJs hearing Garage in New York and House in Chicago invent Techno in Detroit.	Derrick May, Juan Atkins	Techno
1988	USA	Soul and Funk use modern Hip Hop and Rap production techniques - Modern RnB is born.	Bobby Brown	RnB
1989	Manchester	Electronic and Indie bands join up to create "Rave" in the UK.	Paul Oakenfold, Graeme Park, Andrew Weatherall	Dance
1995	Birmingham	First Drum n Bass album released to real success.	Goldie - Timeless	Drum n Bass
1999	London	Two Step Garage becomes popular in London.	Artful Dodger, Craig David	Two-Step/UK Garage
1999	The internet	Peer to peer sharing of music for free breaks the law.		ALL
2000	Sheffield	Niche Nightclub sets the pace with Bassline music.	T2, Wideboyz	Bassline/UK Garage
Late 90's Early 2000	London	Two Step, Drum and Bass and Reggae are combined to invent Dubstep.	Distance, Digital Mystikz, Plastician	Dubstep
2001	London	Two Step and Dancehall are combined to invent Grime.	Dizzee Rascal, Lethal Bizzle	Grime
2003	The internet	Apple release the online music store iTunes.	Apple	Everything
2007	The internet	Soundcloud allow professionals and beginners to share their music for free, or charge for it.		Everything
2009	The internet	Skrillex takes Dubstep mainstream.	Skrillex	Dubstep
2009	The internet	David Guetta becomes the first global DJ phenomenon, the Americans call the dance music he plays EDM (Electronic Dance Music).	David Guetta, Tiesto, Avicii	EDM



Use the table on page 11 to fill in the dates for these events, we have done the first one for you:

WHAT	WHERE	WHO	WHEN
David Guetta becomes the first global DJ and Skrillex makes Dubstep go mainstream.	Worldwide	David Guetta and Skrillex	2009
Soundclash events have DJs working with MCs.	Jamaica	Various	
Block Party DJs start to loop their favourite parts of songs.	New York	Kool Herc	
Scratching is invented.	New York	Grand Wizard Theodore	
DJs use drum machines to add beats to the recordings that they are playing.	New York	Larry Levan	
Grime is invented.	London	Various Artists	



Now look at the table on Page 11 and fill in the blanks (where) on our map:



THE LAW: INTELLECTUAL PROPERTY AND SAMPLING

INTELLECTUAL PROPERTY:

If you invent something you own it. This could be a song, piece of writing, or picture. It is called your "intellectual property." Let's imagine you made a song. If other people want to listen to it you can play it to them, you can let them have it for themselves, or you can ask them to pay for a copy of it. Most musicians, bands and music producers earn their money by selling copies of their songs. If no one got paid for making music then musicians would be too busy doing other jobs to make music. This means no one would make music for us all to enjoy. This is why people who really love music always pay for it. If you copy a song that someone else wrote, but they didn't agree you can have it - you are stealing their intellectual property. This means downloading songs using pirate internet sites or youtube convertors is illegal. There are lots of other internet websites where you can buy music and who will make sure the money goes to the musician who owns the intellectual property. These include iTunes, Amazon, Beatport, Juno. Then there are legal websites that let you listen to music, for example Spotify and Apple Music. There are also websites where bands and musicians allow people to listen or even download their work for free. These websites include Soundcloud, Bandcamp, Hearthis.at.

SAMPLINC:

A sample is a part of someone else's music which you may use to help you make your own. If you use a sample in your creation then you are using someone else's intellectual property to help you make yours. If you are learning, experimenting, or just having fun then this is OK. If you earn money by selling it or you play the sample in public then you must ask for permission or have a license to use it. Some musicians will be happy to let you sample their work. Some will want a share of any money you earn by using it.

DJING WITH OTHER PEOPLES INTELLECTUAL PROPERTY:

If you want to DJ in public with a song that someone else wrote you need to have bought the song or agreed with the owner that it is OK to use it. You may also need to buy a license from PRS. Most of the places where music is played pay for the license. For example a concert hall, shop or music festival pay for a license so all the bands and DJs who play there don't have to. At private parties like weddings or birthdays you do not need a license because the party is not open to the public. The money spent on licenses is shared between all the musicians whose music is played in public.

> Please read the following descriptions and cross out the wrong label to show if they are legal or illegal uses of intellectual property:

Δ.	DJ Grinch downloads 10 songs using a you- tube convertor. He charges people to come	
A .	and listen to him play them at his DJ gig.	ILLEGAL
в.	DJ Fair pays for 10 songs using iTunes. She	
D.	charges people to come and listen to her play them at her DJ gig.	ILLEGAL
DJ Beats pays for ten songs then uses one of		LEGAL
C .	them as a sample in a remix she is making – she doesn't ask the person who wrote the sample for permission but starts to earn mon-	
	ey by selling her remix.	ILLEGAL
	DJ Bass pays for ten songs then uses one of	LEGAL
D.	them as a sample in a remix he is making – he doesn't ask the person who wrote the sample	
	for permission but he only plays his remix to himself at home.	ILLEGAL

CLOSSARY

ACOUSTIC - Instruments which are not electronic.

APPRAISAL - Defined on page 6.

AMPLIFIER - An electronic unit which increases the volume of music from the mixer before playing it through the speakers. Part of the Sound System.

ANALOGUE - Does not use computers, often sounds more like the original musicians would have done.

BLEND - Another word for "mix" it means to play two songs at once so they sound musical and keep people entertained.

CD/COMPACT DISC - A digital format for storing and playing recordings.

CHANNEL - Each DJ mixer has a channel for each music player attached to it. Each channel has it's own controls for volume so the DJ can mix between them.

CHORUS - The part of a song that repeats several times with the same music and words.

COPYRIGHT - Defined on page 13.

DECK - Another word for turntable.

DIGITAL - Uses computers.

DJ CONTROLLER - A digital unit for DJs which only works with a computer and software.

DVS (DICITAL VINYL SYSTEM) - See page 3.

FADER - The volume control for each channel on the mixer.

HEADPHONES - Every DJ uses headphones to check what they are preparing before they play it through speakers to the audience.

INTELLECTUAL PROPERTY - Defined on page 13.

INTRO - The beginning of a song.

MIXER - An electronic unit which the DJ uses to mix between several music players.

MIDDLE SECTION - A part of a song that joins two other sections together.

MUSIC TECHNOLOGY - Any unit or software used to make music on computers. All producers and DJs can be said to use music technology.

.MP3 - A lower quality and smaller digital file for storing and playing recordings on computers.

ORCHESTRA - A traditional group of acoustic instrumentalists normally playing classical music.

OUTRO - The end of a song.

SAMPLER - An electronic unit which is used to record and playback samples of other recorded music.

SAMPLING - Using a piece of recorded music to make new music using music technology. Also See page 13.

SPEAKERS - Part of the sound system – the speakers vibrate to play the sound.

SOUND EFFECTS - For example filters, echo. Sound Effects add creativity to a DJs sound.

SOUND SOURCE - Any instrument, sample, recording or other noise.

SOUND SYSTEM - The electronic units which play the music. A sound system is made up of speakers and an amp.

TURNTABLE - A music player with a platter.

VERSE - The parts of a song that repeat the same music but have different words.

VINYL - An analogue format for storing and playing recordings.

.WAV – The best quality but largest digital file for storing and playing recordings on computers.

WAVEFORM - See page 8.

OTHER WORDS TO REMEMBER FROM PACE 2: Turntablist, Producer.

OTHER MUSICAL WORDS TO REMEMBER FROM PACE 5: Dynamics, Drop, Timbre, Melody, Harmony, Pulse, Rhythm, Poly-Rhythm, Tempo, Structure, Binary Structure, Notes.

OTHER DJ WORDS TO REMEMBER FROM PACE 7: Mix, Set, Beat-matching, Cross-fader, Platter, Cue Point, Fader, Nudge, Cut, Spin-Back, Loop, Scratch, Transform, Flare, Chirp, Break, Drop.

School UK workshop. It contains lots of information on modern DJing and has plenty of literacy and numeracy demands. School teachers can use it as homework while consolidating the learning from the workshop.









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FOR FURTHER INFORMATION PLEASE VISIT WWW.DJSCHOOLUK.ORC.UK.