#### f. interpolation \_\_\_\_ 6. from the very beginning 7. to cause excessive activity, to overwork g. vector h. overdrive 8. a progressive classification of size. amount, etc. i. transfer function \_\_\_\_ 9. broad, wide, having a great range j. aliasing \_\_\_\_ 10. an integer number that can be divided by a smaller number an exact number of times (without a remainder) C. Choose the correct word to fill in the blanks. aliasing, overdrive, vector, alter, from scratch 1. The quantities that have both size and definite direction in space are known as quantities. is one of the most common problems in the sampling of audio 2. Temporal

# D. Translate the following sentences from Greek to English.

and video signals.

the sound engineer.

5. Everything is wrong; we have to start

signal.

1. Η διαμόρφωση δακτυλίου ήταν μια από τις αγαπημένες τεχνικές του Karlheinz Stockhausen. Στο έργο του "Mantra" (1970) χρησιμοποιεί δυο πιάνα, τα οποία ελέγχονται από δυο διαμορφωτές δακτυλίου (ένας για το κάθε πιάνο).

3. Equalization can significantly \_\_\_\_\_ sounds, so it must be carefully used by

is a form of distortion that is often used for creative effect on an audio

- 2. Οι Black Sabbath χρησιμοποιούσαν συχνά διαμόρφωση διακτυλίου τόσο στα κιθαριστικά σόλο του Tony Iommi, όσο και στα φωνητικά του Ozzy.
- 3. Η σύνθεση Μετασχηματισμού κυματομορφής απαιτεί έναν μη γραμμικό επεξεργαστή, ο οποίος θα τροποποιεί την κυματομορφή ευθέως ανάλογα του κυκλώματος εισόδου.
- 4. Στο πεδίο της αριθμητικής ανάλυσης, η παρεμβολή είναι μια διαδικασία που βοηθάει στην αναλυτικότερη εξέταση μιας ομάδας πινάκων, δημιουργώντας νέα σημεία δεδομένων από ήδη υπάρχοντα.
- 5. Η Διαμόρφωση δακτυλίου είναι στην πραγματικότητα μια ειδική περίπτωση Διαμόρφωσης πλάτους.



#### Warm-up

& HISTORY

MUSIC THEORY

CHAPTER

- 1. What is an octave?
- 2. How many octaves are on a piano keyboard?

Lesson 1

Staves, clefs and notes

Music is like a language, though many people claim that it is indeed a language, since it shares a lot of common characteristics with spoken languages. As a language, it has its own 'alphabet' and rules. The alphabet is what we call scales in music and the notes are the letters. In fact, notes obey in rules, like words obey in grammar and syntax. We combine the notes according to a scale and create 'words' and 'sentences' or alternatively, the musical phrases and chords, respectively. Music is written on special notebooks, which contain sets of five parallel lines, called staves. We use staves to place notes on them and indicate their pitch. Staves commonly have a standard size, although there are also very large staves, especially designed for young children who start learning music. Sometimes, we may need extra lines above or below the stave (or else called staff) for our notes; these lines are called ledger lines. Moreover, we divide the staff into bars or measures to separate the divisions of time. There are various types of bar lines (standard, double, end, begin repeat, etc.) for different uses, depending on the composer's needs.

Notes have specific names, either letters (A, B, C, D, E, F, G) or syllable names (la, si/ti, do, re, mi, fa, sol). The aforementioned notes are also called 'white notes', because they correspond to the white keys of the piano keyboard. So, the natural C scale starts from C/do and goes as following:



An octave (C) (G clef)

An *octave* is a series of eight notes, in which the two extremes, the lower and the higher, share the same name: only that the higher one has double the frequency of the lower one or else the lower one has half the frequency of the higher one. *Frequency* is the objective term for pitch and is measured in Herz (Hz). The middle A/la or A4 has a frequency of 440Hz, so the next A, that is A5 will have 880 Hz and the A before the middle A will have 220 Hz.

The octave can also be seen as an interval; an interval is the distance between two notes. Consequently, if we have for example, the notes E4 (lower) and the E5 (higher), then we can safely say that the distance between them is an interval of an octave. It must be noted at this point, that the two staves on the above picture are connected in terms of the way the notes go up and down in pitch. To put it simply the clefs represent in one way the lower or higher octaves of a piano.

For instance, the C4 corresponds to the 4<sup>th</sup> octave of the keyboard counting the octaves from left to right, while the C2 corresponds to the 2<sup>nd</sup> octave counting the same way. Thus, notes have specific names and frequencies, occupying a unique position on the stave, according to the clef they follow. Furthermore, octave ranges have different names (sub-contra, contra, great, small, etc.) according to their position on the piano keyboard.

Usually, the symbol 8va is used, when notes extend on multiple ledger lines up or down and it is too difficult and confusing for the instrument player to read the notes. In that case, the 8va means that notes should be played an octave higher than written

# A. Reading Comprehension

- 1. An octave is a series of eight notes, in which the two extremes
- a. share the same name and the one extreme is twice higher than the other
- b. share the same name and have the same frequency
- c. have different names and have almost the same frequency
- 2. The distance between two notes with frequencies 196 Hz and 784 Hz is
- a. one octave
- b. two octaves
- c. none of the above
- 3. The natural C scale includes
- a. both the white and black keys of the piano
- b. only the white notes of the piano
- c. only the black notes of the piano

# B. Vocabulary practice

a. interval \_\_\_\_1. a set of parallel lines where we write notes assigning a specific pitch to them b. chord \_\_\_\_ 2. a small line above or below the stave to accommodate notes higher or lower than the range of the stave c. staff / stave \_\_\_\_ 3. the difference in pitch between two notes d. ledger line 4. a symbol that indicates the pitch of the notes corresponding to its lines and spaces e. clef \_\_\_\_ 5. a group of notes sounded together

# C. Circle the correct word for each sentence.

- The D letter note resembles/corresponds to the Re syllable name.
- 2. The distance between two notes is called interval/length.
- The C4 note is written on a hedger/ledger line.

#### D. True or False?

- 1 The distance between two octaves is called a 'musical phrase'. T F
- ? The words 'bar' and 'measure' mean the same thing in musical notation. T F
- 1 If the note G2 equals 98 Hz, then the G4 will equal 392 Hz. T F

#### F. Writing

"The stave of four lines is attributed to an Italian monk, Guido d'Arezzo, who used the initial letters of a hymn to give musical pitches their names. These names were ut, re, mi, fa, sol, la, while ut was replaced in most countries by do. Later, the note ti (or si in many countries) was added." Write a brief text (100-120 words) about the history of musical notation.



1. Why do you think we need intervals in music?

Intervals and accidentals

Lesson 2

2. What is an accidental in music?

As we don't just place words randomly here and there waiting for the meaning to come, in the same way we don't place notes here and there waiting for a song to be formed. Between any note and another one, there is always a distance or what is called an *interval*. An interval shows us how far a note is from one another and this is very important, because we use intervals to build melodies

But how exactly are the musical intervals structured? The smallest interval used in western music is the *semitone*. A semitone is the interval between two adjacent notes on a keyboard, regardless of whether they are black or white. As a matter of fact, two semitones make a whole tone (2 semitones = 1 tone).

As we have already mentioned, intervals are defined from the distance between two notes. This distance can be further extended or reduced by the use of specific signs called *accidentals*. Accidentals include the **sharp**, the **flat** and the **natural**. A *sharp* (#) raises the pitch of any note by a semitone and a *flat* sign (b) lowers the pitch of any note by a semitone. So, C# and

Db are the same note on the piano and are played by the same black key.

As far as the *natural* sign (4) is concerned, it cancels out the effect of a sharp or a flat. For example, if we have a scale in which the F note should always be played with a sharp, let's say the F# and in a specific point to the melody we have to cancel it out, just for that point, then we write the note with the sign of natural next to it.

Except for the above accidentals, there are also the double sharp (x) and the double flat (bb), which raise and lower the pitch of a note by a whole tone respectively, but they are rarely used in pop / commercial music. Finally, there is the double natural sign (\$ \$), which cancels out the effect of a double sharp or a double flat sign, though a single natural sign can also be used in that case.

Another thing about semitones is that they are divided into 3 categories: the chromatic, diatonic and natural. The chromatic semitone is the one that is denoted by two different notes, e.g. C-C# or A-Ab, while the diatonic is the one denoted by there are only 2 of them: a) E-F and b) B-C. You can remember them as natural, because they are the only ones in the piano keyboard that do not have a black key in between. Moreover, intervals have names. Depending on how small or large they are

we assign them some specific names.

The following table shows the names of the intervals in the first column (left), then the distance between the notes (measured in tones) and the third column represents the interval between two notes using the letter names and the accidentals, signifying in fact, the degree of scale; in this case for the C major scale. We should also keep in mind that an octave consists of 6 equal tones.

	Interval Guide	
Name	Distance (in tones) between notes	Degree of scale
Minor 2 <sup>nd</sup>		
Major 2 <sup>nd</sup>	1	<b>C-D</b>
Augmented 2 <sup>nd</sup>	1 1/2	<b>C-D#</b>
Minor 3 <sup>rd</sup>	1 1/2	C-Eb
Major 3 <sup>rd</sup>		C-E
Perfect 4 <sup>th</sup>	2 1/4	C-F
Augmented 4 <sup>th</sup>	3	<b>C-F</b> #
Diminished 5 <sup>th</sup>	3	C-Gb
Perfect 5 <sup>th</sup>	3 1/4	C-G
Augmented 5 <sup>th</sup>	4	C-G#
Minor 6 <sup>th</sup>	4	C-Ab
Major 6 <sup>th</sup>	4 1/2	C-A
Minor 7 <sup>th</sup>	5	C-Bb
Major 7 <sup>th</sup>	5 %	C-B

\* The interval between a note and the same note one octave higher, e.g. C4-C5 or E3-E4 or G#5-G#6. etc.

The reason why some intervals, like augmented 2<sup>nd</sup> and minor 3<sup>rd</sup> or augmented 5<sup>th</sup> and minor 6<sup>th</sup> are named and represented differently, while being the same size, is strictly related to the way the scales and their chords are built.

Intervals are really important for every musician; in fact, they are one of the first exercises a novice instrument player must perform, whatever the instrument is. There is a free online interval calculator in the following link: http://www.musictheory.net/calculators/interval (as of June 2016).



- 1. According to the text, accidentals
- a. only raise the pitch of notes
- b. only lower the pitch of notes
- c. change the pitch of a note
- 2. The interval F-A# is a(n)
- a. perfect 4<sup>th</sup>
- b. major 3<sup>rd</sup>
- c. augmented 2<sup>nd</sup>

- 3. The semitones A-Bb and E-F are respectively called
- a. diatonic and chromatic
- b. diatonic and natural
- c. chromatic and natural

#### B. Vocabulary practice

b. adjacent	1. to indicate, to mark
-g-re-care	2. a sign that alters a note by a tone or a
c. accidental (in music)	semilione or cancels a previous
	3. the smallest interval used in Classical
	Woodan : Wassical

Western music d. semitone \_\_\_\_4. to increase, to add e. augment

5. something that is close to or next to

# C. Circle the correct word for each sentence.

- 1. A semitone that contains two notes with the same letter name is called a diatonic/
- 2. If we have the D note and we want to raise it by a tone, we would use a sharp/
- 3. The interval F-Eb is a(n) minor 7<sup>th</sup> / major 6<sup>th</sup>.

#### D. True or False?

- 1. The natural sign can turn a flat into a sharp and vice versa. T F
- 2. The double sharp can be cancelled out by the natural sign. T F
- 3. The interval F-A is a major 3<sup>rd</sup>. T F

#### E. Writing

1. Identify the displayed intervals. Remember: Different clefs assign different pitch to

major 2<sup>nd</sup>, minor 7<sup>th</sup>, perfect 5<sup>th</sup>, minor 7<sup>th</sup>, perfect 4<sup>th</sup>, major 2<sup>nd</sup>, major 3<sup>rd</sup>, minor 3<sup>rd</sup>

2. Imagine you are a music teacher at a high school. You are given the terms sharp, flat, naturals, intervals and you have to teach these symbols to teenagers (13-15 years old). Write a short text explaining these terms, using examples when necessary. Remember that your target audience is young, so do not confuse them by using complicated words and exercises. You can add any kind of photos, video or sound to make your presentation more attractive to your teenage students.



#### Warm-up

**上の上の王** 

MUSIC THEORY

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CHAPTER

1. What are the names of notes in terms of their duration?

2. What is a *rest* in musical notation?

Lesson 3

Tempo, rhythm and dynamics

Songs consist of notes, which have a specific duration, giving shape to music. In fact, this is the reason why we recognize and remember various melodies. In western music, this duration has been standardized in such a way so that musicians have a common code to communicate their music. The following table illustrates the notes with their corresponding durations. For example, a whole-note, which has the longest duration, consists of two half-notes or four quarter-notes or eight eighth-notes, etc. The quarter note has become the standard one beat music note, as 4/4 time signature is the most popular.

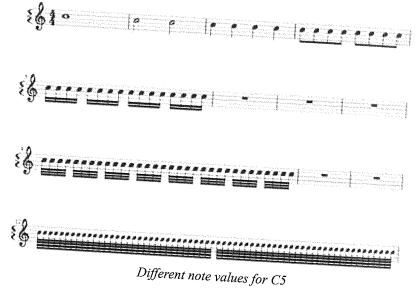
Obviously, a quarter note has a duration of one in 4/4 time signature. From the eighth to the sixty-fourth note, we use flags for these notes to denote their value, e.g. an eighth note or quaver has one flag, a sixteenthnote or semiquaver has two flags and so on. Furthermore, when we have two or more notes with flags one next to other, then we can join them together, using beams. Beams are horizontal lines that replace the flags, but we have to remember that the beamed notes should belong to the same beat.

For example, in 4/4 time signature, there are four beats in every bar, so that we could beam our quavers in pairs. Sometimes, it is also possible that a long series of eighth notes are beamed together in groups of four, usually because it is easier to read, especially when learning musical notation as a beginner.

Rhythm and time of the notes		
Number of beats	Note name (UK)	Note name (US)
4	Semibreve	Whole-note
2	Minim	Half-note
1	Crotchet	Quarter-note
1/2	Quaver	Eighth-note
<b>1/4</b>	Semiquaver	Sixteenth-note
1/8	Demisemiquaver	Thirty-second-note
1/16	Hemidemisemiquaver	Sixty-four-note

Apparently, from the above chart, we understand that a whole note consists of 2 half-notes or four quarter-notes or 8 eighth-notes or 16 sixteenth-notes or 32 thirtysecond-notes or 64 sixty-fourth-notes. Duration also exists in silence. We do use specific symbols to represent silence in music and there are different symbols for different durations of silence within a piece of music. So, silence in music is represented with rests.

Rests are very important for a melody because they can be used to express varied and often contradictory frameworks (taking a breath, slow down, create short vivid phrases, etc.) In the following example picture, we use one and the same vivid phrases, etc.) In the following example picture, we use one and the same vivid phrases, etc.) In the following example picture, we use one and the same vivid phrases, etc.) In the following example picture, we use one and the same vivid phrases, so that it is easier to understand how time is shared among the notes of different duration times. Of course, we could have notes of any pitch and duration in the same sures, as long as they comply with the time signature indicated, which in this case total number of notes/rests in a bar is equal to four crotchet/quarter-notes beats if the signature, as it is called, is e.g. 3/4, then we could use again any number of notes and rests, as long as the total number of notes/rests in a bar is equal to the crotchet/quarter-notes. The same rule applies for even more complicated the signatures, like 5/4 or 11/8 or 5/8. In the same picture, we can also notice how note are grouped together with beams.



Also, we can alter the duration of a note by using *dots*, which are written to the right side of the note and are called *dotted notes*. One dot next to a note increases the duration of that note by half of its original value, as shown in the following example.



The curved lines that connect the heads of the notes (notes of same pitch and name) are commonly known as *ties*. If we use a notation software, like the freeware than the one the time signature sets, it simply won't let us; it will automatically put the extra note(s)/rest(s) in the next bar. Moreover, if we put a smaller number of notes than the one that the time signature sets, that means that there is a time lapse in a bar that no note, no sound is heard, so the software correctly considers it as silence and puts the suitable rest symbol in that empty space. The following chart presents the

Whole rest	**************************************
Half rest	Accessors of the control of the cont
Quarter rest	
Eighth rest	Many has placed by the second of the second
Sixteenth rest	The state of the s
Thirty-second rest	A September 1995  - A Sept

	I mirty-second rest	The second of th
A. Reading Con		
1. A half-note or a four crotchets	minim consists of	
b. four thirty-sec	ond-notes	
c. four quavers  The time signs	atures 3/4 and 6/8	
a. sound the sam	e	
c. none of the ab	notes in every bar ove	
	the text, we can use beam	es to
	s smaller than a crotchet note with an eighth-note	
c. all note values	in order to organize rhyt	:hm
B. Vocabulary p	oractice (musical terms)	the emount and turn

b. vocabulary practi	ce (musicai terms)
a. time signature	1. it shows the amount and type of notes that
	each bar contains
b. beam	2. links two or more notes together
c. dot	3. shows an increase of note length equal to
	one half of its original value
d. tie	4. a half-note
e. minim	5. a curved line that connects the heads of notes

#### C. Circle the correct word for each sentence.

- 1. The number of beams indicates the note beats/value.
- 2. A quaver may be divided into two quarter-notes/sixteenth-notes.
- 3. The arc-shaped line that binds together two identical notes is called *bar/tie*.

#### D. True or False?

- 1. Silence has no duration. T F
- 2. We can group any notes together with beams. T F
- 3. A half-note can be divided into 32 sixty-fourth-notes. T F

#### E. Writing

1. Read the following letter about a friend of yours, who needs help in music theory Write a brief letter (80-120 words) in which you will answer his questions.

"Hello Mike,

I've been struggling the last two weeks to learn the values of notes and  $I'_{m,so}$ confused... My exams are so close and I find it really hard to understand how notes are divided and sub-divided. And what about the rests? Do they count as notes? would be great if you could explain as simply as possible, how things are... I hope you

Take care.

John'

The following sentences may also help you.

It was nice to hear from you again, I hope you find this information useful, Don't panic, It isn't as difficult as it seems

2. Identify the names of the notes and their value. The names of rests should be also mentioned. You can use both UK and US names. The words dotted and beamed should also be used, where necessary. You should also refer to the octaves.



From left to right: B4 (eighth-note), quaver rest, F4 (eighth-note dotted), D5 (half-note), semiquaver rest a

c







#### Warm-up

HISTORY

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5: MUSIC THEORY

CHAPTER

- 1. Can you distinguish between major and minor scales when listening to them? What do you think is their main difference?
- 2. Have you ever studied non-Western music theory? If yes, what differences do you identify in comparison to Western music theory?

Lesson 4

Major and minor scales

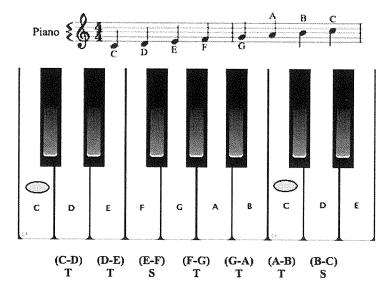
When we talk about scales, we usually refer to either the major or the minor scales. Major scales typically express a cheerful atmosphere, while minor scales convey a more melancholic mood, though sometimes, the lyrical content and the structure of a song may exceed any conventional concepts about scales.

All scales in Western music follow a specific pattern of intervals, which is different for major and minor scales. In particular, all major scales follow the pattern Tone - Tone - Semitone - Tone - Tone - Semitone, while all the harmonic minor scales follow the pattern

Tone - Semitone - Tone - Tone - Semitone - Tone & Semitone (i.e. 3 Semitones or else, one tone and a half tone (1 1/2 Tone) - Semitone.

Obviously, whether major or minor, a scale consists of 6 tones. Starting with major scales, their formula is T-T-S-T-T-S, meaning that on any such scale, the 1st note is distant by a tone from the 2nd note, the 2nd is also distant by a tone from the 3<sup>rd</sup> note, the 3<sup>rd</sup> note is distant by a semitone

from the 4th note, and so on. So, if we take the C major scale (the 'white notes' of the piano keyboard), which has no accidentals (no sharps or flats) in its key signature, we'll see that there is indeed the pattern of the major scale there.



Now, let's see what happens with the other major scales. Let's take the  $G_{major}$ scale for example. We should note here, that both major and minor scales can be divided into two categories, depending on whether they have sharp(s) or flat(s) as key signature: Sharp keys (sharp major or minor keys) and Flat keys (flat major or minor keys). We should keep in mind, that there is no way that a scale has both sharp and a flat at the same time as a key signature. In the following case, G major

As we can see, there is a sharp on the F note of the G scale. That means that F note will always be raised by a semitone in this scale, so that G scale has the notes G-A B-C-D-E-F#-G. But why is that happening? Suppose we didn't sharpen the F note and the G major was something like that in letter names G-A-B-C-D-E-F-G and like

In music score, we put a natural sign on F note, so as to cancel out the sharp that is imposed by the key signature of the scale.

Let's now calculate the intervals between these notes to see if they are in accordance with the major scale pattern:  $G-A \longrightarrow T$ 

$$A-B \longrightarrow T$$

$$B-C \longrightarrow S$$

$$C-D \longrightarrow T$$

$$D-E \longrightarrow T$$

$$E-F \longrightarrow S$$

$$F-G \longrightarrow T$$

We notice here that the last two intervals do not match the major scale pattern, so we should do something to correct it. If we sharpen the F note, then the last two intervals become:  $E-F\# \longrightarrow T$ 

$$E-F\# \longrightarrow T$$

$$F\#-G \longrightarrow S$$

... and everything seems and sounds ok! If we listen to and compare the G scale in both of the above cases, we will realize that without the F#, the scale sounds 'out of

The same concept is true for all scales; both major and minor scales must comply with their patterns. A key point that must be explained here is that the semitone F#-G is the same as Gb-G, but the reason why we do not write Gb-G, is that it is absolutely essential that every letter name (of a note) is present in a scale; we can't have two G notes (one natural and one flattened), because we won't have the F letter

This rule is very important because by naming the notes, we can define precisely the intervals, identify scales and create complex musical structures. Besides, musical emposition depends on putting things in order.

# Minor scales

Minor scales can be classified into three categories: harmonic, natural and melodic. All harmonic minor scales follow the pattern:

# Tone - Semitone - Tone - Tone - Semitone - Tone & Semitone (i.e. 3 Semitones or else, one and a half tone (1 1/2 Tone)) - Semitone.

Harmonic minors are used mostly in classical music and their basic characteristic is that except for the key signature, the 7th note of the scale is raised by a semitone.

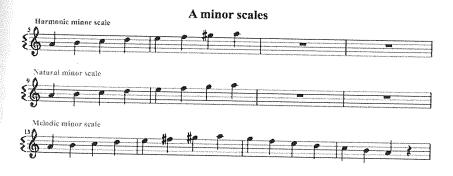
Natural minors are the same as the harmonic ones, only that there is no change on the 7th note, which means that the pattern here is:

# Tone - Semitone - Tone - Tone - Tone - Tone

Natural minors are all and more used in the contemporary rock and pop music genres. Melodic minors have a sort of a different variation:

The 6<sup>th</sup> and the 7<sup>th</sup> note of the melodic minor are both raised by the use of a sharp in the ascending scale and both are canceled out and restored to their natural form in the descending scale. This scale has a smoother sound than the harmonic one. Both melodic and harmonic scales are less used in rock/pop music, unless the artist wants to produce a different sound feeling, on purpose.

All the three different kinds of the minor scales are illustrated below:



All the aforementioned information applies to the Western music theory, as other countries, especially eastern ones, such as India, have their own traditions, systems and rules that may differ significantly in comparison to the Western one.

- 1. A minor scale
- a. consists of 6 tones and is often used to evoke gentle or sad feelings
- b. consists of 6 tones and has the same feeling when listening, to the major scale
- c. has the same formula (of tones and semitones) as the major scale

\_\_\_\_ 2. to rise to a higher position or become

higher in pitch

\_\_\_ 4. in agreement with

\_\_\_ 5. intentionally

\_\_\_\_ 3. to return to a former condition

#### Warm-up

1. What do you think is the main difference between a rock and a pop song in terms of both music and lyrics?

2. According to Nielsen's 2014 Year-End Report, jazz is the least appreciated music genre in the U.S.A. after children's music. Why do you think this is so, in a country where jazz was born a century ago? Do you think jazz is appreciated more in Europe than in the U.S.A.? Why? Why not?

Lesson 5

Differences in lyrics among different music genres

Although writing lyrics does not follow strict rules in terms of the procedure that is being followed, there are some basic characteristics that make a clear distinction among different music genres.

For example, pop lyrics are usually simple every-day words, easy-tounderstand and remember, sometimes trendy, and of course 'catchy'. Furthermore, it is also often in pop songs that some words or whole lines are repeated in the song, so it is easier for the listener to remember and sing along, even when listening for the first time. It is also common in pop songs that their messages are inspired from everyday situations, presented however oversimplified, so that it will be much easier for the listener to identify him/herself with the song. Generally speaking, pop songs do not intend to make you think further about the conveyed message of the song.

On the other hand, in rock songs, lyrics are usually emotionally charged, powerful, dynamic, passionate and versatile. These adjectives are not randomly selected; they represent the different 'emotional states' given in a 'rock' way. But what exactly is the 'rock way'?

'Rock' as a music genre developed out of rock'n'roll in the 1950s, but up to now, it has often been vague whether a song can be categorized as rock or pop, because it is very common for the musicians today to mix different music styles in terms of both melody and lyrics, making it quite difficult to label a song precisely. Actually, the true meaning of rock is still a controversial issue. However, if we try to give a definition, we could say that rock lyrics are more raw and direct, in the sense that the artist expresses himself as is, without trying to beautify meanings and situations. Some songs may also have swearing or other inappropriate vocabulary to express rage or sexuality. Rock songs are also versatile, which means that the rock artists can choose between different lyrical styles: they can be simple as in pop songs, tender and emotional, mostly for ballads, raw and aggressive or even provocative and revealing (e.g. in hard rock). The only thing the artist has to keep in mind is that music has to match the lyric content, so that the listener won't be confused trying to desperately connect the lyrics with the music. This is a rule for all kinds of songs, but it's more evident in rock songs. As far as jazz songs are concerned, the point here is that music is more important than lyrics. Jazz songs intend to attract a listener's attention and make him or her focus on the improvisational skills of the musician/singer.

# \_\_\_\_1. to move down or become lower in pitch

# C. Circle the correct word for each sentence.

- 1. In any minor scale, the 3<sup>rd</sup> note is distant by a *semitone/tone* from the 4<sup>th</sup> note.
- 2. Every letter name of a note should be present *once/twice* in a scale.
- 3. Harmonic minor scales have the  $7^{th}/6^{th}$  note raised by a semitone.

#### D. True or False?

1. C major has no sharps or flats. T F

2. Which note is the same as B#?

a. D, Eb, F, G, A, B, C#, D

b. D, E, F#, G, A, B, C#, D

c. D, E, F#, G#, A, B, C, D

B. Vocabulary practice

c. in accordance with

a. on purpose

b. restore

d. ascend

e. descend

a. C

b. D

c. A

- 2. The formula for the harmonic minor scale is T-S-T-T-S-TS-S. T F
- 3. In any major scale, the 5<sup>th</sup> note is distant by a semitone from the 6<sup>th</sup> note. T

#### E. Writing

In Pythagorean tuning, the intervals of the scales are derived from natural fifths. However, if we construct a sequence of natural fifths, starting e.g. from C and tune perfect fifths all the way around to B#, we will find out that, although C and B# are enharmonically equivalent notes, it doesn't sound in tune.

Actually, taking into account that a perfect fifth consists of 702 cents and an octave of 1200 cents, we can understand that 12 perfect fifths equal 8423.46 cents, while 7 octaves equal 8400 cents. This audible difference of 23.46 cents (8423.46-8400) is called the Pythagorean comma. So in the previous example, we find that B# is slightly higher than C by 23.46 cents or by almost 0.24 of a semitone.

Do some research (internet, books, ebooks, etc) and write a short text (100-150 words) presenting the concept of Pythagorean comma as clearly as possible, giving examples (text, pictures, etc). Optionally, you can make it in the form of a presentation and incorporate additional multimedia files (audio, video).



Lyrics here just escort music and sometimes their presence is not necessary at all that's why a vast majority of jazz compositions are instrumental.

However, if an artist wishes to add lyrics to a jazz song, he has to choose not only simple words, but words that fit in sound with the melody. For example, the word 'extravagant' won't be preferred in jazz songs, because it cannot flow musically with the melody. In general, words with many consonants are avoided, unless the artist wants to emphasize a specific word, accompanied with the appropriate instrumentation.

Rap songs on the other hand, are quite the opposite of jazz songs. They mostly focus on the lyrics, since music is usually an almost steady tempo. Some rap songs may also include musical elements derived from other musical genres; for example, the intro may be a separate melody, the main body remains the rhythmical rap part. the bridge may be a separate melody with or without lyrics with a distinct rock/ metal/pop/soul instrumentation and the outro can be rock, rap or metal rap.

# Choosing the appropriate vocabulary

Whatever the music genre, the lyricist must be careful with the choice of vocabulary. Not all words are suitable for all kinds of songs. In fact, you can say the same thing using different words, depending on the situation. A general rule (although it may not apply for rap or some rock songs) is to use natural words, familiar to most people, to avoid use of slang and overused or sophisticated words and to be careful when you use words that may mean different things to different cultures or words that may offend other cultures or groups of people; the meaning that your song will convey can be anything, but offensive. Of course, an exception to this rule are the 'rebel' songs that express the anger and aversion of the 'oppressed' against the 'oppressors', often by means of inappropriate words.

A very common strategy that many lyricists follow is to use overused rhyming word pairs, like 'heart-hurt, bad/hard-sad, day-say/pray, dawn-down, cry-try, awaystay, etc.' These pairs may seem convenient, but they totally eliminate the feeling of expectation in a song. This is the point where a rhyming dictionary will prove to be the lyricist's best friend. It is often believed that this technique is an easy and maybe safer way to approach listeners, but there is also the opposite point of view, which states that such word pairs may sound so trivial to the listeners that they may totally ignore the song. So, what is the best thing to do? The answer is always somewhere in the middle... some of these pairs can be used, but the lyricist should not overdo it; and the truth is that if we want our song to be a hit, we will have to think of everything from a more 'commercial' point of view. This 'commercial' thing, however, doesn't mean that the song has to be shallow in meaning or silly; it can still contain wonderful lyrics and messages, and yet be simple and direct. A great way to test that for a song of ours is to read our lyrics and then ask ourselves if we truly like them... would we pay any attention to that song if we listened to it on the radio? Is there anything we would like to change? Needless to say, we have to judge it objectively; as if it wasn't our song.

A. Reading Comprehension	
1. We understand from the text that rock songs in comparison to pop songs a are usually more straightforward with often rougher and more challenging b. contain simpler words and oversimplified meanings c. are more popular among teenagers	s ng lyrics
2. According to the text, lyrics in jazz songs a play a vital role in the final result b. usually include difficult words to pronounce c. simply accompany the music and are not as important as the melody	
3. When we write lyrics for a song, we should a. only use clichés, so as to ensure that the song will be a hit	

B. Vocabulary	practice
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c do none of the above

process and practice	
a. distinction	1. causing strong reaction (usually deliberately)
b. convey	2. a difference between two things
c. escort	3. variable or easily adapted
d. provocative	4. to transmit, to communicate
e. versatile	5. to accompany

b take into account prosody and avoid offending specific groups of people

# C. Circle the correct word for each sentence.

1. The song 'Norwegian Wood' (LP Rubber Soul, 1965) by The Beatles, which features/rejects a sitar played by G. Harrison, is acknowledged as a milestone in the later incorporation/resolution of Indian classical music into Western Pop.

2. Louis Armstrong, one of the best trumpeters of the 20th century, was the man with the characteristically soft/gravelly voice and leadership/charismatic personality who had a great influence/appearance on jazz.

3. Lesane Parish Crooks or more commonly known as Tupac Shakur, attended/ watched the Baltimore School for the Arts where he studied ballet, jazz and poetry. Because he was passionate/supportive about Shakespeare, he acted/performed in various Shakespeare plays.

# D. True or False?

- 1. Rap songs focus mainly on music and orchestration. T F
- 2. Listeners use prosody to identify the connection between music and lyrics and to eventually interpret the message. T F
- 3. Repetition is a very common method that is used in pop songs. T F



HISTORY

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THEORY

MUSIC

1. What are the different types of musical instrument families?

Lesson 6

. Music history

2. What is the main difference between Romantic and Classical music?

Musical instruments are not just objects that produce sound but are often considered extensions of the human voice. In fact, they can be a powerful means of expression for those who know how to play them, being an alternative way for an artist to communicate his experiences, emotions and thoughts in such a way that allows the listeners to interpret his various musical works in their own manner. Every instrument has its own musical 'fingerprint' and style, making it more or less suitable for different music genres. Fortunately, today, experimentation has broadened the use of these instruments, since new music genres have been created and digital instrumentation has mingled with analog sound, creating new soundscapes.

Nowadays, the classification of musical instruments as introduced by Erich Moritz von Hornbostel and Curt Sachs is widely accepted among musicologists as the most 'logical' one and includes five main categories: a) *idiophones*, that are made of naturally sonorous material and produce sound by their own vibration (further divided into plucked, struck, blown, friction), b) *membranophones*, that produce sound by striking a membrane fixed to a

frame (plucked, struck, friction, singing), c) chordophones, that use the vibration of strings to produce sound (simple and composite), d) aerophones, that produce sound through the vibration of air (free-reed, plosive, non-free, flutes and reed instruments) and e) electrophones (instruments which operate using electricity).

Although the concept of making a musical instrument exists since humans first appeared on earth, the evolution of orchestration and composition came gradually through the centuries, from prehistoric times to the 21st century. In particular, the large period between the Renaissance and the 20th century includes the most radical changes in the history of music. Musical instruments that appeared during the Renaissance were the evolution of prehistoric and ancient forms of instruments, while new instruments were invented as well. Instruments like the organ, the harpsichord, the spinet, the clavichord, the psaltery, the hurdy-gurdy, the viol, the cittern, the recorder, the theorbo, the harp, the lute, were the ancestors of most of the modern musical instruments we use today.

However, each one of them played a special role in the transformation of music through the centuries. For example, during the Renaissance (c.1430-c.1600), music mostly consisted of a simple melody with no or basic accompaniment.

Moreover, music became polyphonic, meaning that groups of instruments could play together different parts with independent melody and instrument families were extended, as various sizes of the same instrument were constructed. The Baroque era (c.1600-1750), which followed the Renaissance, was characterized by major innovations, since new ideas emerged and developed. The bass line became more independent of the melody and the consort groups (instrumental ensembles) that were very popular during the Renaissance were replaced by other forms of groups. like trio sonata or concerto grosso, while masterpieces of that era were the works of J.S. Bach and G.F. Handel. The Classical era (c.1750-c.1820), which came after the Baroque era represents the period when the musical scene was influenced by the social changes at the time. Although music compositions for the church and court were still available, the focus of interest was on large ensembles (string quartets were very popular) and public concerts. Music of the Classical period wasn't so complicated, but instead, it had a clearer melody and a more standardized structure that always 'followed the rules' in comparison to works of later centuries. As a matter of fact, that era was dominated by the marvelous works of F.J. Haydn, W.A. Mozart and Ludwig van Beethoven. As the Romanticism era (c.1820-c.1900) followed the Classic, people, and especially artists, began to express a deeper appreciation for the beauty of nature and of human emotions in an attempt to penetrate the human soul and personality and to discover new dimensions of the human spirit. The key element of that era was the free experimentation of music forms, which led to the creation of new musical structures inspired by themes like love, hatred, life, death, nature, magic and the supernatural. This large variety of inspirational themes increased the demand for a richer and more complicated timbre palette and as a consequence, many more different instruments, along with their variations, were being used. Some remarkable composers of that era were L.V. Beethoven, Franz Schubert, Hector Berlioz, Felix Mendelssohn, Frédéric Chopin, Robert Schumann, Franz Liszt, Richard Wagner, Giuseppe Verdi, Johannes Brahms, P.I. Tchaikovsky, Antonin Dvorak, Gustav Mahler and Richard Strauss.

Music has never stopped transforming all these years. The 20<sup>th</sup> century was defined by a rich mixture of eastern and western music, old and modern style, while at the same time, music obtained a ubiquitous role. This role is most apparent during the 21<sup>st</sup> century with the emergence of technology, which has made music serve various important purposes (from digital interactive projects and huge concerts to music for advertisement and Muzak (the latter is also known as 'Elevator Music').

# A. Reading Comprehension

- 1. During the Classical era, most musical works
- a. were more complex compared to the Romantic ones
- b. were characterized by clarity and simplicity
- c. were based on free experimentation

- 2. During the Romanticism era, composers
- a were mostly inspired by human feelings, nature and magic
- b. did not attempt any kind of experimentation
- c. focused on more minimal musical forms
- 3. One of the main characteristics of music in the 21st century is
- a. the prevalence of instrumental music
- b. the aversion to technology
- c. the combination of different music genres, styles and traditions

#### B. Vocabulary practice

a. mingle
b. plosive

1. to pass into and through something
2. the force that makes it difficult for one object to rub against the surface of another
3. a group of artists (musicians, dancers, actors) who perform together
4. to mix
6. penetrate

4. to mix
5. a sound produced by completely stopping the air flow out of one's mouth and then suddenly releasing it

# C. Circle the correct word for each sentence.

- 1. The musical style of the Classical period was *primary/predominantly* homophonic.
- 2. Tchaikovsky's works are characterized by *dispirited/exuberant* orchestrations and the power to *evoke/hinder* strong emotions to the listener.
- 3. Jacopo Peri was an Italian composer, largely known for this vast contribution to the *confinement/development* of opera. As a matter of fact, he is *sparsely/widely* known for composing what could be called the first opera, 'La Dafne.'

#### D. True or False?

- 1. Some chordophones may have no strings. T F
- 2. Large ensembles were really popular during the Classical era. T F
- 3. Frédéric Chopin was one of the most famous composers of the Baroque era. T F

#### E. Writing

What is your favorite music era? Write a text (150-200 words), presenting some of the main facts and key points about music either from the Renaissance period or from the Baroque, Classical or Romanticism era. Optionally, you can use presentation software and add pictures and audio examples to enrich your project.



1. How many different jazz genres can you name? What are their differences?

Lesson 7

2. Who are the most notable jazz musicians you know? What do you know about them?

Jazz music

Jazz music is a genre that has caused lots of controversy among musicologists in terms of providing an accurate definition, that would make a clear distinction of jazz from other kinds of music. However musicologists all agree on two points: that jazz was born in New Orleans during the late 19th and early 20th centuries and that the two basic elements of jazz is improvisation and the sense of swing. This swing mood is musically achieved by the use of a steady tempo, syncopated rhythm. swing quavers and a constant intensity variation. Notwithstanding, the reason why there is so much confusion about the pure origins of jazz is because jazz is based on a mixture of european and african music elements, that is difficult to be decomposed into pure european or pure african independent parts. Yet, this vague interference of european and african music led to the creation of blue notes, describing the notes that are produced 'between the cracks of the piano keys.' These notes represent the fine gradations of pitch that go beyond the standardized smallest interval of semitone and are usually generated by the use of wind instruments.

What is interesting though about jazz is the way that it musically unfolds. Jazz musicians are usually very inventive and well-trained, so that they can successfully mix different music styles, complex chord progressions, complicated rhythm patterns, fast tempos and real-time expressive sound effects (especially on wind instruments). Besides, it is well-known that jazz reflects the cultural transformation of musicians coming from different countries to New Orleans, allowing the transformation of jazz through the improvisation and experimentation on ragtime, blues, spirituals, and european hymns and marches, among many other forms.

An attempt to make just a short list of the most notable jazz musicians would be pointless, in that there are innumerable, remarkable artists who have influenced the jazz scene. However, we could mention some of them, knowing in advance that this is a tiny part of a huge list of saxophonists, trumpet players, pianists, guitarists, drummers, singers, big bands, etc who have vastly contributed to the creation of the various forms of jazz today. The following names are randomly listed, regardless of any chronological order or musical instrument classification or any other strict 'jazz' criterion, aiming only to 'trigger' the reader to search for further information.

This list includes Benny Goodman, Duke Ellington, Count Basie, Benny Carter, Art Frol Garner, Nat 'King' Cole, Charlie Christian, Django Reinhardt, Coleman towkins, Lester Young, Charlie Parker, Buck Clayton, Gus Johnson, Louis Armstrong, they Bechet, Jelly Roll Morton, Rufus Jones, Don Byas, Don Kirkpatrick, Al Grey, Morton, Curtis Fuller, Dexter Gordon, John Coltrane, Dizzie Glillespie, Miles Davis, Frank Rosolino, Stan Getz, Charlie Ventura, Thelonious Monk, Tadd Dameron, Jones, Sid Catlett, Charles Mingus, Bud Powell, Oscar Peterson, J.J. Johnson, Max mach, Kenny Clark, John Lewis, Lennie Tristano, Stan Kenton, Art Pepper, Paul Desmond, Hampton Hawes, Red Mitchell, Dave Brubeck, Carl Perkins, Bob Cooper, mmy Giuffre, Jim Hall, Carl Fontana, Sonny Rollins, John Gilmore, Oliver Nelson, Ina Brooks, Shirley Scott, Art Farmer, George Coleman, Clifford Brown, Wes Montgomery, Tommy Flanagan, Art Blakey, Cannonball Adderley, Thad Jones, Kenny Rarron, George Benson, Mike Stern, Herbie Hancock, Ron Carter, Tony Williams, Wayne Shorter, Ornette Coleman, Elvin Jones, Don Cherry, Albert Ayler, Sun Ra, Cecil Taylor, Bill Evans, Scott LaFaro, Keith Jarrett, Jerry Goodman, Al Dimeola, Kenny G, Chick Corea, Eddie Harris, John McLaughlin, David Sanborn, Michael Brecker, Don Ryron, John Zorn, Tito Puente, Eddie Palmieri, Lee Konitz, Carla Bley, Ella Fitzerald, Nina Simone, Dinah Washington, Billie Holiday, Bessie Smith, Etta Jones and the list

Some jazz covers or jazz-like pieces are popular today, because they are used for entertainment purposes, from parties to commercial movies, but the market share that represents the international jazz album sales and jazz songs radio broadcmasting is no more than 3%, according to recent research. Despite the jazz festivals and the numerous talented jazz artists, jazz remains up to date a music genre that represents a minority audience, consisting of dedicated jazz lovers, who indulge in the jazz listening experience.

- 1. One of the basic elements of jazz is
- a swing intervals
- b. free experimentation
- c. sound effects
- 2. Jazz was gradually developed as a result of
- a. a cultural mixture of various immigrants from New Orleans
- b. the many music festivals that were organized by the locals of New Orleans
- c. the 'blue notes'
- 3. According to the text, jazz music
- a. represents a minority audience
- b. has higher album sales than other music genres
- c. is mostly used for entertainment purposes

# B. Vocabulary practice

a. controversy	1. unclear, without detailed information
b. vague	2. a strong disagreement or conflict.
	especially a public one
c. gradation	3. a difference between two similar
	things or people
d. indulge	4. to let myself do something that I enjo
	very much
e. distinction	5. gradual progressions, especially
	between points on a scale

#### C. Circle the correct word for each sentence.

- 1. Although/In spite of jazz is considered a musical style for the wealthy and elite, its roots mention/indicate exactly the opposite.
- 2. Clarence Williams was the first jazz *musician/artist* to use the word 'jazz' in a song.
- 3. The major pentatonic scale *consists of/makes up* five notes and can be formed by taking the major scale and *transforming/eliminating* the 4<sup>th</sup> and 7<sup>th</sup> degrees.

#### D. True or False?

- 1. Jazz artists are usually resourceful, vivid and bold enough to experiment with and try out new musical ideas.  $T \cdot F$
- 2. Jazz music originated in New Orleans and is a mixture of Native American and European music. T
  - 3. Jazz music cannot be combined with other musical styles. T F

#### E. Writing

Look again at the names of the most important jazz artists listed in the text. Choose one of them and write a short biography for him/her. You should include information about his/her personal life, career (albums, collaborations, etc.) and maybe some interesting or even unknown facts. Optionally, you can create a dynamic presentation by adding pictures, audio files or even web links.



#### Warm-up

HISTORY

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THEORY

5: MUSIC

CHAPTER

- 1. How would you define 'rock music'?
- 2. Who is your favorite rock artist/band? Why do you like him/her/them?

Lesson 8

Rock music I

Rock music is a term which may mean different things to different people. Due to the fact that rock music includes various sub-genres that date back to the 1940s and that these sub-genres have often been developed into more or less independent categories, it is quite difficult to provide an accurate definition of 'rock music'. In fact, rock music has constantly changed, as new musical ideas appeared and social transformation influenced music in a way that each sub-genre carried elements from another, reflecting at the same time, the socioeconomic situation of the day. Some of the most well-known subcategories of rock music include rock and roll, classic rock, folk rock, soft rock, country rock, hard rock, heavy metal, funk rock, glam rock, progressive rock, psychedelic rock, experimental rock, jazz rock, blues rock, pop rock, punk rock, new wave, acid rock, indie rock, reggae rock, stoner rock and symphonic rock, with these genres to be further divided into more subcategories. Generally speaking, rock, also known as r'n'r, has its roots in the 1950s, when r'n'r became really popular, originally in the U.S.A.

This kind of music has been characterized as 'rebellious' and 'unconventional', often expressed within an anarchic system, 'allowing' the rock fans to act spontaneously, freely and occasionally dangerously or violently. Basically, rock 'n' roll served as a means for teenagers to differentiate themselves from the prevailing system their parents represented, a role that is still partly true for the rock fans. This role of rock music is actually the main factor that has affected society in many aspects, from fashion to political decisions. For many people, listening to rock music equals to living 'against the norm,' a concept that has been strongly supported all these years. However, as the rock sub-genres are increasing and expanding in terms of music style and lyrics, rock music is often thought of as 'mainstream' as an overall category, with its components to be more or less popular among the listeners.

But how did it all begin? In 1953, Bill Haley and His Comets were the first to hit the pop charts with "Crazy Man Crazy", an amalgam of country and r'n'b. In 1955, they had their first number one single in the U.S.A. and the U.K. with 'Rock Around the Clock', which is considered the starting point of what was later called the 'Rock Era'. One year later, in 1956, Elvis Presley had his first top chart song with 'Heartbreak Hotel' and from that point on, the term 'Rock 'n' Roll' took on a new dimension.

Successful artists of that decade were, among others, Little Richard, Jerry Lee Lewis, The Everly Brothers, Nat King Cole, Doris Day, The Platters, Harry Belafonte, Tony Bennett, Dean Martin, Eddie Fisher, Paul Anka and Neil Sedaka Unfortunately, the end of the 1950s is marked by a plane crash in 1959 that took the lives of Richie Valens, Buddy Holly and The Big Bopper.

The 1960s is the decade that rock became more careless and popular on the one hand, dominating the charts with Elvis' and Beatles' hit songs, while there were notable innovative facts, like the folk revival and the surf music. On the other hand it was a period that was characterized by an increase in social and political awareness, in which the young generation expressed doubt, disbelief and a strong wish for a better future. In fact, the hippie movement opposed to materialism and to U.S. involvement in Vietnam War, advocated peace and love, supported gender and racial equality and initiated a new epoch in music, film, literature and fashion.

Two major events that took place in the late 60s were the Monterey Pop Festival (June, 1967) that lasted three days and attracted more than 150,000 people and the Woodstock Music and Art Fair (August, 1969) that drew more than half a million people in a three-day festival. Some of the popular bands/artists of the 60s (in random order) were The Beatles, The Doors, Bob Dylan, Peter Paul & Mary, John Denver, Arlo Guthrie, The Supremes, Ben E. King, Beach Boys, Marvin Gaye, The Animals, The Kinks, Jimi Hendrix, Pink Floyd, Jefferson Airplane, The Love, The Cream, The Rolling stones, The Who, Led Zeppelin, Simon & Garfunkel, Elvis Presley and The Monkeys, among so many other significant artists, too...

The Woodstock Music and Art Fair changed to a great degree people's attitude towards war and materialism, when hippies communicated their concepts of flower power and peace through music, especially in a period, when USA was at war in Vietnam. Actually, it has been said that Woodstock festival was the unique event that changed the world for ever...

# A. Reading Comprehension

- 1. According to the text, what is true about rock music?
- a. It hasn't changed in any way over the past six decades
- b. It has unified young people against the 'establishment'
- c. Only young people are rock fans
- 2. 'Rock around the clock' is considered
- a. a milestone of r'n'r explosion
- b. just another commercial song from Bill Haley and His Comets
- c. better than Elvis' 'Heartbreak hotel'
- 3. The Woodstock Music and Art Fair
- a. wasn't as popular as the Monterey Pop Festival
- b. went against the beliefs of the younger generation
- c. had a great impact on music, artistic life and socio-political attitudes

B. Vocabulary practice	
accurate	1. reluctance to believe that something is true
h rebellious	2. to prove powerful or superior
nrevail	3. correct, exact
c. prevail d. disbelief	4. the concept that money and material goods are
	more important than anything else
e materialism	5. not complying with rules, fighting against the
	authority

#### C. Circle the correct word for each sentence.

- Bill Haley couldn't read music, but he had a(n) ear/taste for it and was able to play any orchestration/tune he wanted by ear.
- 2 The only tool/weapon hippies had was music.
- 3. Hippies tended to be dropouts/criminals from society. They were strong supporters of peace, love and social laws/justice.

#### D. True or False?

- 1. Rock music is thought by many as a challenge to society's status quo. T F
- 2. The Woodstock Music and Art Fair took place in 1967. T F
- 3. Elvis had a major influence on rock and roll. T F

#### E. Writing

Write a text (120-200 words) about the history of the Woodstock Music and Art Fair (1969). Don't forget to mention why it was organized and by whom, which bands and solo artists participated and of course, any interesting facts that happened during those three historic days. Optionally, you can add photos to enrich your presentation.



1. How were the 1970s different from the 1960s in terms of music?

Lesson 9

Rock music II

2. What were the major changes in music during the 1970s?

The decade that follows, the 1970s, was marked by the breakup of the Beatles in 1970, the death of Elvis Presley in 1977 and the deaths of the '3 Js', that is Jimi Hendrix, Jim Morrison and Janis Joplin. Although psychedelic music was fading out at the time, new morphs appeared, such as progressive rock, hard rock and heavy metal. This decade is also memorable for the large concerts in sports arenas and stadiums, the Glam Rock, the Disco and the Punk, the latter which was a sort of reaction to the other two genres. There were significant innovations regarding harmony and expression during that decade, such as the extreme use of distortion, fiery chords, powerful guitar riffs, very emotional lyrics and last but not least, the extensive use of the synthesizer. Bands (in random order) like Jethro Tull, Pink Floyd, Led Zeppelin, Grateful Dead, Kansas, Moody Blues, Yes, Genesis, Black Sabbath, Can, King Crimson, 10 CC, Deep Purple, Joy Division, Steely Dan, Emerson Lake & Palmer, Kraftwerk, Rainbow, Rolling Stones, Supertramp, Camel, Soft Machine, Dire Straits, Electric Light Orchestra, Lynyrd Skynyrd, Uriah Heep, Fleetwood Mac, The Doors,

Creedence Clearwater Revival, Canned Heat, Blue Oyster Cult, Blood Sweat & Tears, Steve Miller Band, Scorpions, UFO, Allman Brothers, The Police, Santana, Ramones, Sex Pistols, AC/DC, ZZ Top and artists like Frank Zappa, Captain Beefheart, Eric Clapton, Art Garfunkel, Diana Ross, Dionne Warwick, Donna Summer, Aretha Franklin, Michael Jackson, Elton John, Mike Oldfield, Neil Diamond, Joni Mitchell, Carole King and Al Green are some of those who either were already present during the 60s and went on having hits during the 70's, too, or had their first strong, overwhelming presence that decade, making their star shine...

During the 1980s things were completely different... John Lennon was shot dead by the fan Mark David Chapman on December 8, 1980, on the excuse that Lennon had insulted Christianity by stating that "Beatles are more popular than Jesus," although Chapman was a zealous fan of The Beatles. Many conspiracists believe that Lennon was under government surveillance at the time and his political activism and anti-war activity was considered a threat to the 'obscure' plans of U.S. government (including CIA and FBI). They also support that Chapman was a CIA hitman who was 'motivated' to shoot John Lennon. Although, as expected, this theory was never officially confirmed, there are still many people who believe in it...

As far as the music is concerned, the decade of the 80s is mostly remembered as the post-disco era, when different music genres, like dance-pop and glam metal, appeared as an inevitable evolution of previous genres. The sound in these various genres also had a mainstream version, through which bands and artists projected a more commercial musical profile. Furthermore, music videos appeared then for the first time, initiating practically a new field in the music industry. The song "Video billed the radio star" (1979) by Bruce Woolley and the Camera Club (Trevor Horn, Geoff Downes, Bruce Woolley) was later recorded by The Buggles (consisted of Trevor Horn and Geoff Downes) and on 1 Aug. 1981, the MTV broadcasted it; it was the first music video in the channel's history. As a matter of fact, MTV channel had such an enormous impact on the music industry during the 1980s that getting a music video played on MTV became 'a must' for all those artists who wanted to ensure a high chart position. Moreover, digital recording was more widely used, especially by the use of synthesizers, leading to electronic music, which flourished during the early 1990s (though analog synths had already been used during the 1970s) and has generated dozens of different sub-genres till today. On the other hand, the 1990s seems to be a decade when alternative rock and its sub-genres became broadly popular and the musicians started gradually to become more independent since they could set up their own production without necessarily belonging to a record label. However, alternative bands like R.E.M., Red Hot Chilly Peppers, Nirvana and Soundgarden reached success addressing mainstream audiences.

From 2000 to the present, the explosion of digital music has further evolved by the latest innovations in music technology, offering digital tools available to almost anyone interested, either for free or for payment. Such significant innovations include new audio formats, digital music production and sound editing software, a large variety of digital tools and effects, further development of computer music, compression of sound, internet communication, streaming technology, legal and illegal distribution of songs through the internet, e-marketing, e-self-promotion, musicians in the role of producers (home or semi-professional studios), real-time interactivity, etc. In fact, every musician who is really interested in songwriting and/or music production could make his own musical works just by having minimal equipment, but lots of talent. Besides, innate talent, well-developed skills and strong will, have proven to be more valuable and efficient than anything else...

- 1. During the 1970s, music
- a. was almost the same as music from the 1960s
- b. underwent several important changes
- c. none of the above
- 2. During the 1980s,
- a. disco music dominated all other genres
- b. music videos played a major role in the music industry at the time
- c. music was less commercial

a. the 1990s

b. the 1970s

c. the 2000s

B. Vocabulary practice

J Practic	
a. morph	1. congenital, existing from birth
b. zealous	2. something that is the result of a gradual process
	of transformation
c. overwhelming	3. to develop or grow in a positive way
d. flourish	4. somebody who strongly supports something or
•	someone
e. innate	5. overpowering, of great importance

# C. Circle the correct word for each sentence.

- 1. Hip-hop was both a music genre and cultural motion/movement that gained/ earned popularity in the 1980s and 1990s.
- 2. In 1988, Nirvana's first single was circulated/released. Curt Cobain had given a reproduction/copy of that single to a local radio station to promote it. The radio station wouldn't play it, so he had to call and name/request the song himself.
- 3. Frank Zappa was one of the few self-taught musicians who created/embraced a wide variety of music genres through/throughout his career.

#### D. True or False?

- 1. During the 1990s, it was impossible for bands to have a hit unless they were broadcasted on MTV. T F
- 2. Digital sound was dominant in the music industry during the 1980s. T F
- 3. MTV had an immense impact on the music industry during the 1980s. T F

#### E. Writing

Draw a timeline for rock music from 1950 through today, focusing on the most important facts for each decade. Then, write a text (200-250 words) about the history of r'n'r. Don't forget to mention the different music genres and their trends, artists, innovations and any other information you find interesting.



#### Warm-up

HISTORY

ಹ

THEORY

5: MUSIC

CHAPTER

1. Can you name some artists or songs that were influenced by Indian music?

Lesson 10

World music

2. What do we mean by the term 'World music?'

Every human society has a sort of cultural structure that includes music. Although music is considered a 'universal language', the messages it conveys are not. People coming from different cultures give music different meanings, because as music is associated with religion, tradition, history, objects, environments and beliefs of a specific country, it is often difficult for people from other countries to interpret its content. That's the main reason why music genres are identified with music cultures and subcultures. Each of these subcultures encompasses specific characteristics that are recognizable by the people belonging to them, while the same people often feel perplexed when they are found outside their musical cultural environment. What is often heard of as 'out-of-tune' by western people when listening, for example, to music from India, makes absolute sense and sounds melodic for the people of India or for those from other eastern countries. Moreover, music may also be a mixture of various elements from many countries adapted, however, in a way that doesn't sound 'weird' to the western listener.

For instance, exotic scales and eastern melodic or rhythm patterns are regularly used in jazz or progressive rock music, yet, maintaining its 'western-like' style. Actually, the aesthetics of music, that is, what is considered as 'beautiful' in music, is a matter of great concern to many musicologists, as it is a multi-parametric subject consisting of criteria that interconnect or even overlap.

However, when we refer to the term World Music, we tend to imply non-Western music that carries a lot of traditional characteristics, like music coming from North America, Africa, India, China, Latin America and Arabian countries.

To begin with, music from North America or better yet, Native American music, includes many different styles and is actually unfamiliar to most non-native Americans. The music of native North Americans is mainly vocal (accompanying the dancers), full of passion, without any specific harmony, based on irregular rhythms and a sort of off-key singing style. Although instrumental music also exists in the Native American tradition, vocal solos and group singing are very common in both spiritual and secular contexts, especially by the use of non-lexical syllables or vocables, the latter which are closely connected to the communication of the performer with the spirit world.

Basically, discrete pitch, repetitive patterns and syncopation are the fundamental components of Native American music, while two of the most typical instruments used in this type of music are the drum and the flute. Generally, whatever the tribe, Native American music is indissolubly linked with the elements of nature in a way that human subordination and respect towards nature is evident.

African music is also intimately related to the interconnection of human beings and nature, only that it also reflects the traditional African life through communal dance call-and-response singing and the use of polyrhythm in instrumental performance African music is primarily based on complex and dense drumming patterns, varying in structure from country to country in the African continent. The talking drum is maybe the most famous instrument, a double-headed hourglass shaped drum, especially designed to imitate the rhythm and intonation of the human voice.

Music of India is much more complex comparing to the aforementioned traditions There are notable variations in Indian music, especially when it comes to South Indian and North Indian classical music. The North Indian classical music is called Hindustani, while the South Indian classical music is called Carnatic. Although they have some differences, they share two common elements: Raga and Tala. Raga is the melodic basis of Indian music (improvised or composed), which is characterized by the tone material, the pitch hierarchy, the solfege system, the mood of each raga and the magical powers ascribed by Indian musicians to some individual ragas. On the other hand, the Tala represents the rhythmic system of Indian music, which consists of specific elements: a fixed number of beats organized into a closed cycle, claps or waves followed by counts in order to 'keep the tala', grouping of beats into units and some words that represent drum strokes, known as bols. Indian music had a great influence on the rock music of the 60s, with bands like The Beatles, The Byrds, The Yes, The Doors, The Rolling Stones and The Grateful Dead among others, that incorporated a large amount of Indian music elements into their music, especially in the psychedelic genre, creating a more complex and melodic structure. Indian music has also affected jazz a great deal, enriching its melody, rhythm and harmony.

Regarding the music of China, it dates back to the early years of Chinese civilization. Chinese traditional music is typically played solo either on a guqin (a type of zither with 7 strings) or on a pipa (a type of lute) and is associated with poetry or philosophy. There are also many other instruments in Chinese music, including stringed instruments, flutes, drums and gongs, while their classification is structured according to their material (e.g. wood, metal, stone, skin, etc). Classical Chinese music was mostly played by educated people or monks as a means of soul purification and self-cultivation, distancing themselves from the role of 'professional' and differentiating at the same time themselves from musicians of lower social classes, who approached Chinese classical music in a more commercial way. To sum up, both western and eastern countries have influenced one another. Actually, many eastern countries borrowed some elements from western pop/rock music and lent simultaneously elements from their own, especially during the 1960s and 1970s, teading to new innovative music styles.

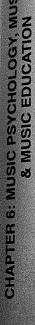
On the other hand, this intense inter-influence made the classical traditional music of eastern countries seem out of fashion or outlawed to the eyes of younger generations. As a matter of fact, modern music incorporates so many different roots that it is aften difficult or even unfair to generalize and characterize music only by listening to

just a small portion of it. intriguing challenge, sure	Digging deep into the music history of this world is a really not for everyone
A. Reading Comprehen	nsion
1. Raga and Tala in India a. religion and history b. harmony and melody c. melodic and rhythmic	an music represent respectively structures
<ul><li>2. Native American must</li><li>a. both divine and nonrel</li><li>b. explicit lyrics</li><li>c. the guitar</li></ul>	ic is closely associated with ligious backgrounds
3. <i>The Guqin</i> is a typical a. African drum b. Indian wind instrument. Chinese string instrum	nt
B. Vocabulary practice	
a. ascribe b. secular c. vocable d. indissoluble	<ul> <li>1. impossible to destroy or take apart</li> <li>2. lower in position or less important</li> <li>3. a word considered as a group of sounds or letters, with no specific meaning</li> </ul>
subordinate	<ul><li>4. to attribute something to somebody</li><li>5. worldly, nonreligious</li></ul>
C. Circle the correct wo	

- The 'talking drum' is the most openly/widely used instrument in Africa.
- 2. The music of India is generally considered more complicated/harder than the music of Africa.
- 3. Native American music is mainly/principal a vocal art.

#### D. True or False?

- 1. North Indian classical music is called Carnatic. T F
- 2. The influence of Indian music on rock music from the 60s was called 'Indian rock music'. T F
- 3. African music is principally based on sporadic rhythm and melody. T F



1 What kinds of music do you usually choose for your different emotional situations?

> Music and emotions I

Lesson 1

2 Can music change your mood? How often do you use music as a form of 'medicine' to overcome emotional challenges?

Music is a form of art, present not only in various real-life listening settings, such as shops, bars, supermarkets, but also in concert halls, homes, stadiums and studios, as part of a more refined kind of entertainment. Whatever the type, people always respond more or less to music, in their own unique way. In fact, response to music can be physiological, cognitive or affective. Firstly, the physiological response depends on the level of engagement and on whether listening is active or passive and may include reactions like higher heart or breathing rate, increased body temperature, dilation of pupils or even chills. Secondly, the cognitive response is related to the attention, memory, perception, coding and expectation of the listener to the music information. Affective response is associated mostly with the emotional responses and the cultural context of the listener and much less with the inherent traits of music.

Except for the above elements, music response is also affected by the gender, age, nationality, social class, the level of musical knowledge, individual's unique experiences and emotional profile of the listener.

Of course, the distinctive characteristics of each music piece, such as melody, lyrics and mood, also play a great role in the emotional arousal. As a matter of fact, all these parameters have different levels and types of interaction among one another, leading to a pattern of 'mutual action.' Due to the fact that it is a quite intricate process to determine precisely the factors that affect music response and the extent to which they are implicated, experts often focus on a particular combination of factors (e.g. music response and gender or music response and age), as their research subject. After that, meta-research may be conducted in order to compare the different scientific data and draw conclusions from them.

When we talk about 'response' to music, we usually refer to the emotional response of the listener. Although there may be some general common reactions from people when listening to a specific song (e.g. melancholy when listening to a sad pop ballad), the interpretation of the individual messages that a song conveys can differ greatly from person to person. As a matter of fact, a unique emotional response is triggered to each listener, depending on the way that each person perceives and decodes these underlying messages. The ability of music to induce emotions still remains a mystery and has fascinated experts and non-experts alike since antiquity,

though there have always been some skeptical scientists who doubt this particular ability of music. So, whether music can evoke 'real' emotions is a topic still dispute; however, scientists seem to agree when it comes to the characteristics and components of emotion. In fact, when a person is emotionally aroused from a musical stimulus, then there is a set of sub-processes that take place before the listener eventually expresses a specific behavioral pattern as a response to that stimulus. Such sub-processes include the brain activation (involvement of regions such as thalamus hippocampus and amygdala), subjective feeling of music (positive or negative), the various physiological reactions (e.g. changes in heart rate and respiration), expression of emotional behavior (e.g. people may cry, laugh, scream, dance, etc) and the regulation of emotions (people often comply in various degrees with the rules of their social environment, suppressing their emotional reactions).

Each of the above reactions can happen either independently or in combination with other reactions, according to current mood and the overall personality traits of the individual involved in the listening process. This flexibility is actually the main reason why more interdisciplinary research is demanded in this field, so as new findings are revealed, that will be able to explain this intricate human response to music.

# A. Reading Comprehension

- 1. The kind of response that is related to our respiratory rate is
- a. cognitive
- b. physiological
- c. affective
- 2. According to the text, response to music can also be affected by
- a. the chart position of the song
- b. demographic data
- c. the quality of the listener's audio equipment
- 3. The emotional response that is evoked in each listener when listening to a ballad
- a. is easy to predict and analyze
- b. is the same for all listeners
- c. is based on very complex processes

# B. Vocabulary practice: Match the words with their definitions in Greek.

a. refined \_\_\_ 1. αμοιβαίος b. cognitive \_\_\_ 2. εμπλοκή c. affective \_\_\_ 3. διαμάχη, αντιπαράθεση, διαφωνία d. mutual \_\_\_ 4. εξευγενισμένος, εκλεπτυσμένος e. engagement \_\_\_ 5. εγγενές χαρακτηριστικό f. dilation of pupil \_\_\_ 6. που αφορά στα συναισθήματα g. inherent trait \_\_\_ 7. γνωστικός h. dispute \_ 8. διαστολή κόρης (ματιού)

C. Fill in the	aps with the correct word to complete the phrases.  ulation, distinctive, convey, cultural  context
	characteristics
	a message
	of emotions
	response
D. Complete	he following crossword puzzle.
3	2 4
	5
Across	
3) Gender, a	e and nationality are data.
5) The emot	nal state of listeners influences their response.
6) A change	body temperature is a response.

#### Down

1)	Obviously,	music has the ability to	emotio	ns.
2)	Every listen	er has a particular behavioral		as a response to music
4)	Every song	a message.		

#### E. Writing

Some people willingly listen to music that makes them sad. Why do you think they do this? How can music affect our emotions? Do a little research online (ebooks, journals, articles) and write an essay (150-200 words) about the influence of music on human emotions. Don't forget to cite your sources.



# APTER 6: MUSIC PSYCHOLOGY, MUSIC THERAPY & MUSIC EDUCATION

#### Warm-up

1. Are music induced emotions related to personality?

Lesson 2

2. Do you think music with lyrics evokes more emotions than instrumental music?

Music and emotions II

Recent scientific studies have suggested that there are some specific possible mechanisms that may be involved in the eliciting of emotions when listening to music. In 2008, Patrik N. Juslin and Daniel Västfjäll suggested a model of six mechanisms that are implicated in the induction of emotions by music. Two years later, one more mechanism was added, ending up in the BRECVEM model, that is Brain Stem Reflexes, Rhythmic Entrainment, Evaluative Conditioning, Emotional Contagion, Visual Imagery, Episodic Memory and Musical Expectancy. First of all, it is the *automated* response of the brain (brain stem reflexes) to the sound properties of a specific musical stimulus that evokes particular behaviors (e.g. a sudden or dissonant sound may cause fear or discomfort).

Secondly, Rhythmic Entrainment describes the process when the internal bodily rhythm of the listener, such as heart rate, is influenced by the powerful rhythm of the music, causing a higher level of arousal. Thirdly, it is the repeated co-existence of a song with positive or negative events, also known as *evaluative conditioning*, which makes the listener assign a positive

or negative character to that song after a repetitive connection of that song with a specific event (e.g. listening to the same song every time we succeed in something will make us assign a positive character to it).

Furthermore, there is the *emotional contagion*, which refers to the process, in which the listener 'imitates' the mood of a song, without actually having a real reason to feel so (e.g. when listening to a slow tempo piece, with 'dark' orchestration, one might feel fear or sadness as a direct response without, however, an obvious cause). The fifth mechanism is called the *visual imagery*, referring to the ability of a listener to visualize sounds. For instance, an instrumental piece may create such an atmosphere that brings to mind images of beautiful natural scenery such as rivers, valleys, crystal sea, golden beaches or clear blue sky. Following this, the *episodic memory* is responsible for the connection that a listener had established between a song and a life event (e.g. the song that was playing when a man met the love of his life, will probably cause positive feelings every time he listens to it and remind him of that specific event).

Finally, the seventh mechanism is the *musical expectancy*, which is associated with the influence of musical structure (harmony and rhythm) on emotional response.

For example, if there is a dissonance in melody, the listener may feel surprised or if there isn't any return to the tonic chord of the key, then the listener may feel restless and 'incomplete,' as if things haven't really ended as expected. All these above mechanisms contribute a great deal to the process of listeners' emotional response to music and are offered for further research.

Except for the mechanisms mentioned above, there are also other external parameters that are considered vital for the determination of the factors that affect the evocation of emotion from music. These parameters have been built gradually through a person's development and include the family's taste of music, the traditional background, the music knowledge basis that one has acquired, the social class that a person belongs to and the general exposure of that person to a variety of music genres.

Undoubtedly, music is a powerful medium that can significantly affect human behavior. Today, music is an essential part of every form of expression (cultural, commercial, artistic, social, etc) proving that it can successfully serve multiple roles.

#### A. Reading Comprehension

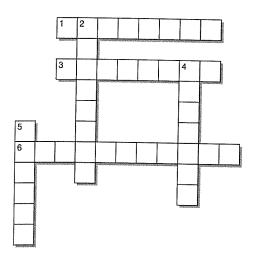
- 1. When we remember autobiographical events and connect them with a specific song, it is due to our
- a brain stem reflex
- b. musical expectancy
- c. episodic memory
- 2. The process of *emotional contagion* in music listening refers to the situation when the listeners
- a. misunderstand the initial message of a song
- b. visualize sounds and bring to mind images of natural scenery
- c. experience feelings according to the mood of a song without a specific reason
- 3. Musical expectancy describes the relationship between
- a. dissonant melodies and emotional response
- b. musical structure and emotional response
- c. none of the above

# B. Vocabulary practice: Match the words with their definitions in Greek.

a. elicit	1. προσδοκία
b. contagion	2. μετάδοση, εξάπλωση
c. conditioning	3. αναγκαίος, ζωτικής σημασίας
d. obvious	4. εκμαιεύω, αποσπώ
e imagery	5. προφανής, φανερός
f. expectancy	6. προκαλώ, φέρνω στο νου
g. vital	7. προσαρμογή
h. evoke	8. (νοητή) εικόνα

i the correct word to complete the phrases.
ontagion, visualize, expectancy
ning
ning

#### D. Complete the following crossword puzzle.



#### Across

1) Our immediate response to a sudden stimulus refers to the brain sten	1
mechanism.	_

3) The mechanism responsible for the connection that a listener makes between a song and a life event is the \_\_\_\_\_ memory.

6) When our bodily rhythm is influenced by the rhythmic vibrations of a musical piece, then we talk about Rhythmic \_\_\_\_\_\_.

#### Down

2) The general \_\_\_\_\_ of a person to a variety of music genres is also a factor that affects musically induced emotions.

4) The mechanism that refers to the creation of mental images when listening to music is called Visual \_\_\_\_\_.

5) Music is a powerful \_\_\_\_\_ that can affect human behavior.

# E. Writing

Often, listeners perceive the mood of a musical piece and mimic its emotional expression internally. This process is called *emotional contagion*. Write a text (120-180 words) based on scientific journals and reputable articles on 'music and emotion' and 'emotional contagion', explaining what it is, why listeners react in such a way and the factors involved that may affect such behavior. Don't forget to cite your sources.

#### Warm-up

- 1. Why do you like listening to music?
- 2. What kinds of feelings does music induce in you most frequently?

Lesson 3

Music listening and social expression I

During past centuries, there wasn't any way to record music, so the term 'music' meant exclusively 'live music.' Great composers always played their music live for the aristocracy. They also used to write their music in musical scores, much of which is available today. Lower social classes also had their own kinds of music, which were passed orally from one generation to another. As electronics and technology were evolving through the years, new inventions appeared, like the phonograph and later the gramophone. Nowadays, music has been digitized and transformed in many aspects (as genre, structure, product, audio form, etc.) in a way that affects more than one field of human action. But when do we actually listen to music? Music can be found in the background of various settings, serving to keep us company (in our car, on our iPod or smartphone with headphones, while we are walking, riding our bike, working, doing our chores, etc.). We choose to listen to music because we want to incite particular feelings, e.g. to relax, cheer up or cry. In all these cases, music plays the role of a 'psychologist' who knows exactly how to trigger our response to certain events, while we

have to be emotionally ready to accept this influence of music. Music can also have a 'supportive' role; it can either be used for improving our performance on specific tasks or as an alternative treatment for specific disorders. Music therapy as a field focuses on the healing properties of music since it is believed, and very often proved through research, that music improves equilibrium and contributes to psycho-physical harmony.

Another critical question is why we listen to music. Generally speaking, music gives us pleasure. It makes our brain release dopamine, a neurotransmitter or simply put, a chemical messenger that plays a vital role in a variety of behaviors, the most important of which are pleasure, movement, cognition and motivation. Music is also a fundamental channel of communication (social functions), which often serves a symbolic purpose: a) as an outlet for negative or controversial behavior, b) as a means of emotional self-regulation and mood regulation, c) as formation of self-identity, d) as a tool that can make people share emotions and meanings (interpersonal relationships) and e) to express universal values and religious beliefs (e.g. protest songs, rituals). Actually, listening is a dynamic process which does not refer exclusively to music listening, but it is also the most important part of speech

communication.

There are specific types of listening, according to the way it functions. For example, surface listening is when we decode the meaning of a spoken message literally. Deep listening is when the listener understands more than the obvious meaning, and responds accordingly, with openness to experience and self-awareness being the two fundamental elements of deep listening. In music, surface listening is when we don't pay any serious attention to music, while deep listening refers to a situation in which the listener is fully present, aware and involved in the music experience. Listening as a process can be further classified into five categories:

- A) Discriminative: The listener distinguishes sound from visual stimuli and understands that a kind of message is conveyed, either verbal or nonverbal, without taking into account the meaning.
- B) Comprehensive: This kind of listening focuses on understanding the message and doesn't include our reaction to that.
- C) Empathic: The listener, in this case, has a sympathetic attitude, showing his/ her interest towards the speaker, without much verbal response.
- D) Critical: This is an evaluation stage, where the listener has to judge what he/ she has already heard, respond to it and give his/her opinion. A critical listener has to be able to detect whether a suggestion is logical or not and if there are any 'hidden' indirect messages on behalf of the speaker. In music, this kind of listening is a sort of analytical listening, in which the listener detects, analyzes and decodes structural details of music like chords, pitch, harmony, tempo, lyrics, trying very often to discover the composer's 'hidden goals and messages.'
- E) Appreciative: This is the type that probably best suits the music. Appreciative listening focuses on the enjoyment of what is being heard, without necessarily analyzing its meaning. Our taste in music, perception and life experiences are three common factors that usually affect the process of appreciative listening. In fact, appreciative listening is what mostly happens in music listening. We don't always want to listen to music and 'struggle' to find out what is this song about, what is special with its structure or what the composer wants to say. Besides, we don't have to be 'experts' to listen to music; we just want to experience feelings, and why not, sing, dance, laugh or even shout.

# A. Reading Comprehension

- 1. According to the text, we usually listen to music because
- a. we need to experience various feelings
- b. music listening can restore our emotional balance
- c. all of the above
- 2. In critical listening, when pertaining to music, the listener focuses mainly on
- a. the lyrics
- b. the musical structure and possible underlying messages
- c. nothing special

which of the following statements can be de	scribed by appreciative listening?						
3. Which of the following statements can be described by appreciative listening?  a listening for pleasure							
h listening for analyzing the chords and dynam	nics of music						
c listening for understanding the speaker's inte	entions						
B. Vocabulary practice: Match the words wi							
a. exclusively 1. εκτιμά							
b. equilibrium 2. αμφιλε							
c. nonverbal 3. αποκλε							
d. controversial4. γνώση							
	που δείχνει κατανόηση και συμπάσχει						
h. appreciate 8. μη λεκ	νω / προϊδεάζω						
σ. μη κεκ	ιικος						
C. Fill in the gaps with the correct word to co	omplete the phrases						
regulation, empathic, trigger, interpersonal, hec	aling						
a to a response							
b properties							
c relationships							
d listening							
e. mood							
D. Complete the following crossword puzzle.							
, , , , , , , , , , , , , , , , , , ,							
	Down						
	1) It has been found that music						
2	improves						
3	3) In this type of listening, the						
	listener shows compassion for the						
5	listener shows compassion for the speaker.						
5	listener shows compassion for the speaker.  4) In music listening,						
5	listener shows compassion for the speaker.  4) In music listening, we don't pay much attention to						
5	listener shows compassion for the speaker.  4) In music listening,						
6	listener shows compassion for the speaker.  4) In music listening, we don't pay much attention to						
6	listener shows compassion for the speaker.  4) In music listening, we don't pay much attention to						
Across	listener shows compassion for the speaker.  4) In music listening, we don't pay much attention to music.						
Across 2) For many people, music is a way to express the	listener shows compassion for the speaker.  4) In music listening, we don't pay much attention to music.						
8	listener shows compassion for the speaker.  4) In music listening, we don't pay much attention to music.						

listening.

the meaning, then we talk about

Listening to music is a much more complicated process than most people think Actually, there are many different types of listening techniques to improve our music listening skills. Imagine you work as a newspaper journalist and you have to write an article (120-150 words) about the available methods that music listeners can use to improve their listening skills. Don't forget to cite your sources.



#### Warm-up

- 1. In what ways do you think music contributes to the socialization of teenagers?
- 2. Do you think that music can unite people of different cultural backgrounds? If yes, in what ways?

Lesson 4

Music listening and social expression II

Music is undoubtedly a multi-parametric medium of human expression. As it has already been mentioned in the previous lesson, music has also a significant contribution to the social aspects of human expression, especially through the interpersonal relationships. Today, it is very common for people to choose to join a social group according to their musical preferences. This is particularly true for teenagers, whose social criteria are more flexible and their music identity extends and defines their social identity.

Furthermore, music is also used as a means of regulating our mood and is very closely connected to the social environment in which listening takes place. From this aspect, our musical taste is associated with specific listening situations and social circumstances, in a way, that we create in our mind a chain of interconnection among music, emotions and social environment. Indeed, some experts believe that the individual's sense of identity is somehow linked to one's musical identity, in a way that a person is able to define, form and control his social functions.

From that point of view, music functions as a 'trial-and-error- mechanism', in which a person uses music for company, as a reason for socializing or even as an excuse to cry or draw other people's attention. So, if all these uses of music result in something positive for that person, then an attitude is formed in which music becomes a sort of rule that sets some of the standards, that our social behavior is made of.

Regarding the implication of music in an intra-personal and interpersonal context, there are two theoretical approaches that are often used to explain how the choice of specific kinds of music depend on the listening situation. These approaches are the arousal based model and the idea of appropriateness. According to the arousal based model, when we find ourselves in situations of a low arousal level, we would like to listen to complex or even arousing music, while when we find ourselves in situations of a high arousal level, then it is very possible that we would like to listen to more simple-structured music or no music at all. That could explain why we turn down our car radio when we come into heavy traffic. As far as the idea of appropriateness is concerned, it is a mechanism that helps us decide what kind of music piece is appropriate for a specific situation. However, what is considered as 'appropriate' or 'beautiful' differs among cultures, depending on the sound stimuli.

The majority of listeners in western countries are accustomed, to a varying degree to music structures, the origins of which date back to the forms of Classical Era. Most of the rock and especially pop songs share similar or often identical chord patterns, upon which the melody is built. But on the other hand, the rich variation of melodies and lyrics is the reason why people don't usually notice. Besides, the recognition of the emotional content of a song seems to be often irrelevant of the cultural background. In fact, as contemporary research has shown, people highly agree when it comes to recognizing the emotional content that is expressed by different musical pieces, even if they come from different cultures. But recognizing the emotional content of a song doesn't necessarily mean that we are actually moved by that song.

In conclusion, it's safe to say that music is a 'universal language', beyond words, that brings human communication to another level and dimension where listeners are able to handle sounds their own way, free from rules, limits or prejudices.

# A. Reading Comprehension

- 1. Many experts believe that there are people who use music to
- a. succeed in their job
- b. participate in social groups
- c. impose their opinion on other people
- 2. According to the arousal based model
- a. if we were stressed, we would probably choose to listen to powerful high tempo songs
- b. if we were anxious, we would like to listen to complex music
- c. if we were distressed, we would possibly listen to slow uncomplicated music
- 3. The idea of appropriateness
- a. dictates how people should react in specific situations
- b. helps us choose music suitable for a specific context
- c. helps us understand what kind of music is considered appropriate for other people

# B. Vocabulary practice: Match the words with their definitions in Greek.

a. medium \_ 1. αφύπνιση, ενεργοποίηση b. interpersonal 2. μέσο c. associate \_ 3. εμπλοκή, συμμετοχή / υπαινιγμός d. circumstances 4. προσοχή e. attention \_\_\_ 5. συσχετίζω, συνδέω f. implication 6. σύγχρονος g. arousal \_ 7. διαπροσωπικός h. contemporary \_\_\_ 8. συνθήκες

Fill in the gap  opropriateness, of sound	s with the congrousal, backs	rrect word	to complete uli, era	the phrases.
Classical				
based				
cultural				
idea of				
Complete the	following cro	ssword puz	zle.	
		1		
			2	
	3			

Across							
3) Most people can recognize	ze the e	motional	l		of	f a s	ong.
5) We can use music to	ou	r mood.					
6) Our preferences of music	are oft	en relate	d to	soci	ial _		
Down							
1) Music is often considered	1 a	lang	guag	e.			
2) Some people use music to	o draw o	other peo	ple'	s			
4) Music is a multi-parametr	ric	of l	ıuma	ın e	xpre	essic	n.
E. Writing							

Many experts believe that music can advance areas of child development, such as social, emotional, intellectual, motor and language skills. Furthermore, research has shown that when children are exposed to music early in their development, they are more likely to improve the aforementioned skills. Write a text (120-150 words) explaining how music can affect child development. You can present a general picture for each stage of development (infant, toddler, preschooler, school-age child and adolescent) or focus on only one of them.

1. How would you define 'musical expression?'

Lesson 5

2. Do you think personality is more important than talent in the musical expression of a performer?

Musical skills

Performers of music are often assigned different labels from the audience, according to the way they play and the feelings they transmit. The secret to a great performance seems to be found in *expression*. Expression could be defined as the ability of musicians to handle easily and accurately sound parameters like pitch, duration, loudness, attack and release, in their own unique style, of course, which encompasses specific subjective attributes. These attributes act like 'unconscious guidelines' that lead the performer to play or sing a piece of music in a particular way. For example, a gifted jazz saxophone player may sound unbelievably expressive and emotional when playing swings, making the audience 'escape into other dimensions', but when playing classical pieces, that same player could sound 'clumsy' or like he's 'just playing' in comparison to an equally gifted classical saxophonist.

dimensions', but when playing classical pieces, that same player could sound 'clumsy' or like he's 'just playing' in comparison to an equally gifted classical saxophonist.

Roughly speaking, expression is something that cannot be precisely measured or defined, because it simply depends on various factors (other than talent and training), which are greatly related to the different personality traits and psychological profiles that each performer embodies.

However, some tools have been suggested that can assess musical abilities objectively or create a profile of music perception skills. Furthermore, since expressivity and interpretation in music are based on the mutual communication between the performer and the listener, the listener's particular characteristics (personality, mentality, mood, knowledge of music, etc.) can also affect the way he or she appreciates a music performer. Although many people firmly think that the performer is the transmitter and the listener is the receiver, this is not always the case. In fact, performers in live concerts are very often driven by the audience's reaction to their playing, leading actually to a constant real-time feedback between them (performer-audience).

In reality, talent is not always enough to make a performer successful and distinguished in his/her field. As a matter of fact, the difference between a hugely distinctive performer and an average one includes many additional parameters, like the family environment, peer-group influences, mass media influence, music trends, hard work, constant training and a lot of experimentation. The latter three are considered absolutely necessary for developing music and performance skills

they are actually the 'practical' part of the music learning procedure.

Training is obviously the most important of the three since it helps aspiring since it helps aspiring to their musical potential.

Generally speaking, this framework aims to improve different types of abilities, such as the ability to internalize rhythm patterns, to read sheet music, to acquire a deeper understanding of music theory, to recognize elements of music they hear (key, hythm, chords, etc.), to play with other musicians as a group, to improvise as a response to a given piece of music or musical phrase and to compose original music at final stage of training.

To summarize, musical skills are obviously multi-parametrical and more complicated than they may seem, including endogenous and exogenous variables, which are often hard to be measured accurately. Although there have been various musical skill tests and models, which have investigated and interpreted some phenomena that are related to musical skills, it is still risky to extract safe conclusions about musical skills and generalize statistical results to large populations.

#### A. Reading Comprehension

- 1 Musical expression mainly depends on
- a the special characteristics of both the performer and the listener
- b. the personality of the performer
- c. the mood of the listener
- 2. Hard work, constant training and experimentation
- a. are less important than talent and family environment
- b. contribute greatly to the improvement of the musician's skills
- c. are as important as mass media influence
- 3. According to the text, musical skills
- a. can be accurately analyzed and measured using specific scientific tools
- b. cannot be precisely described, though they can be assessed to some degree
- c. are not as complicated as most people believe

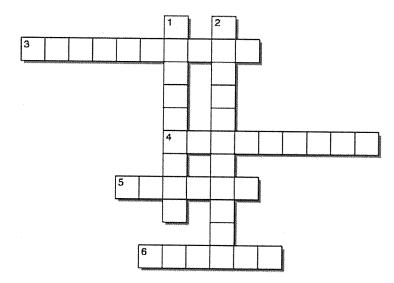
# B. Vocabulary practice: Match the words with their definitions in Greek.

a. accurately	1. χαρισματικός
b. guidelines	2. ακριβώς
c. clumsy	3. χαρακτηριστικός, ξεχωριστός
d. gifted	4. διακεκριμένος, διαπρεπής
e. distinguished	5. οδηγίες
f. aspire	6. εσωτερικοποιώ, ενσωματώνω
g. distinctive	7. αδέξιος
h. internalize	8. φιλοδοξώ

C.	Fill in	the	gaps	with	the	correct	word	to	complete	the	phrases.
----	---------	-----	------	------	-----	---------	------	----	----------	-----	----------

potential	, trends,	endogenous,	attributes,	transmi
l	_ feelin	gs		
. subject	ive			
. musica	l			
	_ variat	oles		
. music				

#### D. Complete the following crossword puzzle.



#### Across

3) Expression consists of many different subjective
4) Musical skills include endogenous and exogenous .

5) Expressivity depends on the \_\_\_\_\_ communication between the performer and the listener.

6) There are some tools that can \_\_\_\_\_ musical abilities objectively.

#### Down

- 1) Training can help aspiring musicians \_\_\_\_\_ their skills.
- 2) Training and hard work can improve \_\_\_\_\_ musical skills.

#### E. Writing

Write a text (100-120 words) about your most memorable concert or live performance (either as a musician or as member of the audience). What were your impressions? What were the reactions of the audience? How expressive were the performers? How enthusiastic was the audience?



Warm-up

1. Do you think music education in public schools should be included in the curriculum? Why or why not?

Lesson 6

2. Do you think there are structural deficiencies in the Greek educational system in terms of the music curriculum? Is there anything that should be improved or changed?

Music education in Greek primary schools

Music is a taught subject in most primary schools in the world today. As music is a form of art and not just a lesson that has to be simply read or memorized, it is often considered as a medium that contributes to the development of social, motor, perceptual, learning, communication and of course, music skills. This multiplicity of music is expressed at both an individual and group level, because music not only affects our moods and provides us with opportunities to experience various emotions or to be intellectually stimulated, but also plays a cohesive role in terms of group communication. As a matter of fact, music has been assigned a special role in modern society today, through which people recognize symbolic representations for a diversity of ideas and behaviors.

Consequently, taking into account the multifunctional role of music, it comes as no surprise that music is an obligatory subject taught in all school grades. Depending on the focus adopted by each educational system, children may learn different things about music, like reading musical notation, developing critical listening skills, learning about the history of music around the world, practicing on composition and improvisation by the use of an instrument, using music technology tools and developing performing and communication skills. Since primary schools deal with small children generally aged from 6 to 12, it is of vital importance that music is introduced at an early stage of human development when it is still feasible and easier to control, transform and promote existing abilities. Scientific studies have shown so far that since early infancy, human beings are exposed to musical and quasi-musical stimulli (e.g. lullabies sung by the mother) that play an important role in their musical development. In fact, infants have very well-developed systems for processing music. Although they are able to recognize simple melodic contour and rhythmic patterns, they need more time until they become older, so as to be able to analyze more complex compositions. The frequency of exposure to music stimuli plays a great role to the extent that these skills will finally develop. For example, infants 7-10 months old

can imitate the pitch of vowels that are sung to them and discriminate between a pair of tones an octave or about an octave apart. On the other hand, children between 4-12 years old have acquired the ability to break sequences of notes into two phrases, to organize songs around stable tonal keys, to follow simple and more

along and to recognize familiar tunes across different transformations.

Nowadays, most countries have included music in primary schools as part of the taught syllabus. Syllabi may differ across countries according to the way that each educational system is designed. In Greece, the official framework for teaching music in public schools is classified into three levels: a) the first level (kindergarten 1st & 2nd grade of primary school), b) the second level (3rd, 4th, 5th and 6th grade of primary school) and c) the third level (high school). Every level is designed in a way that fulfills specific purposes depending on the age of the students. Students that belong to the first level are expected to develop initially a positive attitude towards music, to respond to simple rhythmic and melodic patterns, to sing along as members of a band, to play at a beginner's level simple instruments like drums or the flute, to recognize and combine sounds, to be able to write small musical phrases in musical notation and organize music in plain structural elements taking into account pitch, tempo and dynamics. Students of the second level further improve their musical skills by playing, composing, experimenting and writing more complex musical ideas, by exploring the history of music, by analyzing more abstract pieces of music and by triggering their critical thinking with various individual or group projects. The goals mentioned above can be successfully achieved through well-planned lessons, tailored to the learning peculiarities and preferences of students and through the effective use of physical and technology tools.

Fortunately, these days, there are plenty of available such tools (ear training applications, free online audio recorders and notation software, online music games, etc) that not only facilitate the teaching process but also help students of different learning styles to improve their skills, express themselves and communicate.

- 1. We learn from the text that infants
- a. cannot process music in any way
- b. have mechanisms that can process music stimuli
- c. have no response to music
- 2. A child between 4-12 years old
- a. can analyze small melodic phrases and distinguish between songs in different keys
- b. can follow rhythmic patterns, but cannot understand tonal differences
- c. cannot sing or dance along
- 3. According to the text, the music syllabus for primary schools in Greece primarily aims to
- a. help students develop singing skills
- b. keep students engaged in music through singing and playing simple musical patterns
- c. teach students how to play musical instruments

B. Vocabulary practice: Mate	h the words with their definitions in Greek.
a. cohesive	1. ποικιλία, ποικιλομορφία
b. motor skills	2. συνεκτικός, ενιαίος
c. intellectual	3. υποχρεωτικός
d. representation	4. αναπαράσταση
e. diversity	5. βρεφική ηλικία
f. obligatory	6. περίγραμμα, σχήμα
g. contour	7. κινητικές δεξιότητες
h. infancy	8. διανοητικός, πνευματικός
stimuli, early, perceptual, conto a skills b listening skills c. musical d stage of development e. melodic	nt
D. Complete the following cro	ssword puzzle.
	1 2
3	
	4 5
Ī	<del>, , , , , , , , , , , , , , , , , , , </del>
<b>L</b>	
Across	
1) The subjects studied for a parti	cular course are generally called
5) Illiants can also between	een a pair of tones an octave apart.
the	Ditch of vowels sung to them
<b>Down</b>	n are to music at a very early age.
	•
5) When a behy learner to	relop a positive towards music.
SKIIIS.	movement of part of its body, then it develops
E. Writing	
	ing a comparison of the music education system
Greek and Sweden or Greek	ce and another country of your choice. Describe
the national compulsory school curric	ulum for music in each country and identify the
differences of the two systems.	Which of the two can be characterized as 'more
effective' for the students and why?	mo can be characterized as more

- 1. How important do you think music is for Greek high school students?
- 2. Do you think the Greek educational system needs urgent reform? If yes, what changes should be made?

Lesson 7

Music education in Greek high schools

A large amount of research has proven thus far that music education can benefit students not only in terms of musical skills development but also in terms of other different types of skills necessary for the creative, confident and innovative citizen of the future. Creativity in particular is thought to be an essential component of professional efficiency, as a mere accumulation of knowledge is no longer enough. The professional of the future, whatever the specialty, has to be resourceful, innovative and imaginative, capable of following the constantly changing socio-economic, cultural and technological system.

Unfortunately, public schools around the world often pay much less attention to music education because other subjects, like maths, physics and language, have been established as 'the most important school subjects' for one's literacy and numeracy, leaving far behind the subjects of art. This aspect actually ignores the fact that most research shows that high school students, who are somewhat involved in music, attain significantly higher scores on language and maths tests than students with no music involvement

whatsoever. Sadly, most high school students, especially those preparing for college/ university entrance exams, consider participation in music as a 'waste-of-time' activity, which takes away from time used for the aforementioned 'core' subjects and therefore prevents them from achieving in other fields of interest. Of course, this is far from the truth... Although most public high schools around the world include music education as a subject, there are important discrepancies in the way this music education is designed and delivered. Many countries enrich their music syllabus with traditional elements in order to strengthen the bond between students and their roots In Greece, the music education syllabus for high schools (3<sup>rd</sup> level) focuses mainly on music performance (playing instruments, singing, composing, improvising) and on the assessment of music works, either their own or works of famous composers. There are also more than forty music schools in Greece, where students are taught all the subjects of the National Curriculum for Secondary Education, plus extra music subjects specifically organized according to the music curriculum as proposed by the Greek Ministry of Education. Lessons, among others that are included in this music curriculum, are music theory and history, harmony, ear training, composing techniques, traditional music, choral music and music technology, which occupy additional hours in the school timetable.

Unfortunately, although students in Greece seem to focus mainly on subjects like language, maths and science, they don't seem to perform so well at these subjects in comparison to students from other countries.

In Greece, despite the efforts that individual teachers make, the current financial crisis, the government mismanagement of instructional and curriculum design and the lack of funds in education have all led to low student achievement in comparison to students from other countries. In fact, the results of the OECD's Programme for International Student Assessment (PISA), that is a triennial survey testing skills and knowledge of 15-year-old students (around 510,000 for the year 2012), have shown that the average Greek student scored 466; in reading literacy 477, maths 453 and science 467, which is lower than the OECD average of 497. Furthermore, according to the PISA 2012 results, girls perform better than boys in reading and science literacy, while boys perform better than girls in maths. Finally, Greece ranks 40th on the list in reading literacy and 42nd in maths and science literacy out of the 65 countries that participated in the survey, having an average score of 467, when Shanghai-China is first on the list with an average score of 588. It is interesting to note that Asian countries (Shanghai-China, Singapore, Hong-Kong-China, Taiwan, S.Korea, Macau-China, Japan) are amongst the top performing countries, clearly indicating the effectiveness of these educational systems.

The PISA tests are considered a valuable assessment tool, as their contents are not based on any school curriculum. On the contrary, their main purpose is to assess the ability of students to apply the knowledge they have acquired at the end of their compulsory education to real-life situations. More information about PISA can be found on the official website www.oecd.org.

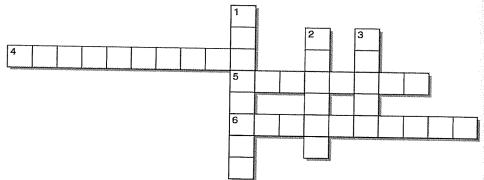
- 1. Students in high schools tend to
- a spend much time on all school subjects, including music
- b. consider music as an important school subject
- c. underestimate the importance of music education
- 2. Music schools in Greece
- a do not follow the National Curriculum for Secondary Education
- b. include additional school hours for extra music subjects
- c. focus mainly on ear training and choral music
- 3. According to the text, Greek 15-year-old students
- a. outperform Chinese students in PISA assessment
- b. have significantly lower scores than Chinese students
- c. have the same average score as Chinese students

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CIL

THE THE PARTY OF T
1. υποχρεωτικός
2. καταλαμβάνω
3. επινοητικός

MUSIC THERAPY

4. πρόγραμμα σπουδών
5. συσσώρευση
6. τριετής
7. εφευρετικός
8. διαφορά, ασυμφωνία
crect word to complete the phrases. on, occupy, literacy
ssword puzzle.



Across
4) The Greek \_\_\_\_\_ for Secondary
Education is designed and proposed by the
Greek Ministry of Education.
5) Most high seheal students for

5) Most high school students focus on preparing for university \_\_\_\_\_ exams and ignore music education.

6) PISA is a valuable \_\_\_\_\_ tool.

#### Down

1) The ability to do and understand basic mathematics is called \_\_\_\_\_.

2) In 2012, sixty-five countries participated in the PISA \_\_\_\_\_.

3) Lack of \_\_\_\_\_ in education is one of the factors that contributes to low student achievement.

# E. Writing

Write a text (100-120 words) suggesting a new Music Curriculum for high schools in Greece. You can include among others:

- a. how many hours the different music lessons (ear training, music history, harmony, etc.) will occupy the school timetable
- b. why you selected specific music lessons over others (supposing that no extra hours can be added to a non-music high school)
- c. what the benefits will be from this new reform for the students

#### Warm-up

1. Do you think that music could be used as a form of medicine?

Lesson 8

2. Why do you think music is considered particularly effective for those who are afflicted with mental disorders?

Health benefits of music therapy

According to the American Music Therapy Association (AMTA), music therapy is "the clinical and evidence-based use of music interventions to accomplish individualized goals within a therapeutic relationship by a credentialed professional who has completed an approved music therapy program." Although the effect of music on various diseases is often disputed, there is a large amount of literature and research which have clinically proven the benefits of music on human health. Besides, the healing power of music has been around since ancient times. In fact, the philosophy of music is exceptionally described in the works of Plato and Aristotle.

Today, music is believed to be a great medicine for a variety of illnesses, like heart disease, autism, depression, schizophrenia, anxiety and personality disorders or even cancer. It has to be clarified at this point that music hasn't been proven to *cure* serious diseases like cancer, but it is used to relieve and soothe the painful symptoms instead. As reported by AMTA, music can actually reduce muscle tension and anxiety, enhance interpersonal relationships, increase motivation and improve self-esteem.

Research has also shown that music therapy can relieve chronic pain, lower heart rate, blood pressure and breathing rate, in cases where there appear irregular patterns as symptoms of a disease. Regarding autism, it has been found that music therapy can promote social-emotional awareness, communication and interaction with peers in autistic individuals, helping them improve their abilities for daily routine tasks. Furthermore, music is believed to be beneficial in terms of academic strength, attention span, memory strength, pain management and motor skills and has also been used by therapists in cases of dementia or Alzheimer's, as a tool that unlocks past memories and promotes physical rehabilitation.

Obviously, music therapy is a medium with a vast range and scope not only in dealing with physical and mental pain, but also in facilitating the development of various skills. In order for that to happen, music therapy must always be applied by specialized therapists, called *music therapists*, who have the expertise to deal with music as a therapy medium. These professionals are responsible for designing, implementing and assessing music therapy programs according to the patients' needs. As a matter of fact, music therapy is an interdisciplinary subject based on a clinical, artistic and scientific background, combining treatment techniques from psychology,

pedagogy, music theory, medicine and social sciences.

Typical music therapy methods are group sessions and individual meetings (therapist-patient), during which patients have the chance to express themselves and release negative feelings through word cueing, playing instruments (drums are very common), singing, dancing or creating one's own music. Of course, these activities are not randomly and simply performed; on the contrary, they are precisely designed and organized in advance by the therapist in terms of rhythm type, music genre, duration, amount of patient's participation and expected objectives, so that they focus on the improvement of specific skills according to the targeted disease.

tools of on the bo ential has utical sol

body harmony as a whole	is undoubtedly one of the most promising therapeuticerful impact on emotions, moods and consequently. Music is for the body and mind and its healing pon the future as a particularly effective non-pharmaceusion
<ul><li>1. It has been found that r</li><li>a. cure autism</li><li>b. increase muscle strengt</li><li>c. ease pain and anxiety</li></ul>	
<ul><li>2. Research has shown that</li><li>a. regulate our breathing r</li><li>b. improve communication</li><li>c. do all of the aforemential</li></ul>	rate and lower blood pressure on skills and memory strength
<ul><li>3. According to the text, n</li><li>a. teach music notation</li><li>b. use medication</li><li>c. conduct group sessions</li></ul>	
b. dispute c. implement d. scope e. beneficial f. span g. self-esteem h. dementia	Match the words with their definitions in Greek.
C. Fill in the gaps with the awareness, interdisciplinary a. personality b. emotional	e correct word to complete the phrases. y, disorder, accomplish, span

c. attention	
dsubject	
egoals	
D. Complete the following crossword puzzle.	
Across  3) Music therapy can also promote physical  5) Music therapy can enhance	
<ul> <li>5) Music therapy can enhance relationships.</li> <li>6) A music therapist is a professional who has completed a program in music therapy.</li> </ul>	specialized
Down	
<ol> <li>People can relieve pain through music therapy.</li> <li>Many people believe that music can help in pain</li> <li>A music therapist must have completed an therapy program.</li> <li>Writing</li> </ol>	am.
Music therapy has been found to 1	
Music therapy has been found to be exceptionally effective in pain re	elief Write

a text (120-200 words) describing how music therapy actually achieves such a goal, explaining why it is considered beneficial, how such a program is organized by the music therapist (group sessions, musical instruments, physical activities with music, etc) and what are the expected results. Inevitably, you will have to search journals, articles or dissertations so that your text is based on valid, contemporary data. Alternatively, you can attend a music therapy session or watch one (there are plenty of available for free) on a video-sharing website (e.g. Youtube) and write a fext, based on your experience.

CHAPTER

Warm-up

- 1. Do you think people are aware of the dangers that come from noise pollution? What can people do to reduce noise pollution?
- 2. What are the most common sources of noise pollution and what kinds of problems do people suffer from as a result?

Lesson 9

Effect of noise on health

When we talk about noise, we usually think of something annoying, which causes us negative feelings and a sense of discomfort. That's true; noise is the unwanted and often harmful sound that interferes with normal human activities and causes more than just a sense of unpleasantness. Industrialization and poor urban planning have unfortunately intensified this phenomenon, diminishing one's quality of life.

Noise is almost everywhere and is emitted by various machines, devices and equipment like compressors, exhaust fans, wind turbines, or even a booming car playing extremely loud music, though the main source of it is the traffic noise. Other common sources of noise are loud music in clubs, industrial and aircraft noise. Research has shown that sound pressure levels higher than those suggested by the World Health Organization (WHO) that is less than 30dB(A) for community noise (during the night) and less than 35 dB (A) in schools, may cause auditory and non-auditory health problems, such as hearing impairment, heart disease, hypertension, mental fatigue and psychological distress.

In particular, noise can also lead to behavioral stress and has been found to have serious adverse effects on or can even damage specific organs such as the liver, brain, stomach and heart. Moreover, there is enough evidence, mostly through laboratory studies, that noise can impair one's performance during various types of activities, leading to a loss of productivity with serious economic consequences.

Unfortunately, noise pollution is quite an overlooked source of pollution, maybe because sound cannot be directly linked to the problems it causes. For example, when the air is polluted, then we cannot easily breathe or we can smell some of the pollutants. However, sound does not have a specific identity concerning specific symptoms. For example, we are used to daily traffic noise or to the voices of school children nearby and we do not realize that our annoyance or the sleep disturbance we may experience is due to that noise. Furthermore, there is an increase of evidence on the effects of environmental noise exposure on public health, with disquieting results. Another interesting aspect of noise is the low-frequency noise from about 10Hz to 150Hz. According to the WHO, 'health effects due to low-frequency components in noise are estimated to be more severe than for community noises in general.' Low-frequency noise can be either audible or non-audible, the latter which is called

infrasound and is mainly transmitted through the earth surface instead of being transmitted in the atmosphere.

As a consequence, the weather conditions, possible barriers, the material properties of interfering surfaces and the frequency spectrum of the source are the four main factors that can affect the intensity of a low-frequency sound that arrives at a given receptor. Low-frequency sound is usually produced by road vehicles, aircraft, wind turbines, industrial machinery, domestic apparatuses and ventilation devices.

Symptoms associated with low-frequency noise include among others headaches, dizziness, anxiety, fatigue, unsteadiness, frustration, nausea, reduced spatial skills, a sense of body vibration and difficulty in concentrating on a specific task, with an increase in the general annoyance level. People who are mostly affected by this kind of noise are workers handling industrial machinery and residents in areas near major airports (within a 3 to a 6-mile distance from flight paths). However, it is often difficult to measure the effect of low frequency on humans for a variety of reasons. Firstly, every individual handles sensitivity differently which means that it isn't easy for investigators to create a standard framework that would appeal to all people. Secondly, local authorities don't always have the right equipment to conduct lowfrequency measurements. Typical A-weighed, handheld, sound pressure level meters attenuate low frequencies by a large amount, so it is necessary that the instrument is set to linear if such function is available. Additionally, measurements must be made by the use of third octave or narrow band spectra and Fast Fourier Transform (FFT) and the analysis of the results should be made by specialized staff, a procedure that is quite costly. Thirdly, due to the nature of low-frequency noise, it is not always easy to locate the source, because it can be far away from the receiver and the type of source can significantly vary from a small air-conditioner apparatus in the next room to the faulty machines of a factory nearby.

Eventually, noise pollution is an issue that has to be taken into consideration seriously by both authorities and citizens, so that it can be resolved quickly. Reducing public exposure to constant high sound pressure levels must be the first and most important step, so that the quality of life for all residents who live in problematic sound environments can be eventually improved.

- 1. Noise pollution can affect
- a. only those living near an airport
- b. both physical and mental health
- c. only our auditory system
- 2. Most people don't realize the presence or effect of noise pollution, because
- a. they cannot identify the connection between their symptoms and the pollution
- b. they believe it doesn't exist
- c. they live in quiet areas

- 3. Infrasound cannot easily be assessed, because
- a. governments haven't taken any measures against noise pollution
- b. local authorities are unaware of the negative effects of low frequency noise on
- c. people react differently to it and it is often difficult to locate the source

В.	Vocabulary practice:	Match t	he words	with	thair	dofiniti		~	
а	discomfort		- II OX CAD	AATCHE	THULL	acminions	$\mathbf{I}\mathbf{M}$	Gre	ek

- a. discomfort \_\_\_ 1. ναυτία b. diminish \_\_\_ 2. επιδείνωση c. impairment
- \_\_\_ 3. εξαερισμός d. distress \_\_\_ 4. φράγμα, εμπόδιο e. ventilation
- \_\_\_\_5. δυσφορία, ενόχληση f. nausea \_\_\_ 6. χωρικός
- g. barrier \_\_\_ 7. ελαττώνω, λιγοστεύω h. spatial \_\_\_ 8. αναστάτωση, στενοχώρια

# C. Fill in the gaps with the correct word to complete the phrases.

exposure, fatigue, impairment, spatial, behavioral

- a. hearing \_\_\_\_\_
- b. daily noise \_\_\_\_
- d. \_\_\_\_\_ skills
- e. mental

# D. Complete the following crossword puzzle.

			1							
			2			I				
5	ĮŦ	<u> </u>		o <b>y</b> ndocentusee	angelous across sources		[4	1		
Ľ				<u></u>	<u> </u>					t
	6					 <u> </u>			904-MA	 t
										 d
										to
19937										t

#### Across

- 2) It is difficult for researchers to create a standard would appeal to all people in terms of their reaction to noise.
- 5) People appear to have different \_\_\_\_\_ to noise.
- 6) Noise pollution has also led to serious economic \_

#### Down

- 1) Low frequency noise is otherwise called as \_\_\_\_\_ 3) Traffic noise is primarily caused by road \_\_\_\_\_.
- 4) A-weighed sound pressure level meters \_\_\_\_\_ low frequencies significantly.

#### E. Writing

Governments around the world are supposed to take measures to regulate noise by adopting and enforcing noise ordinances. How the Greek government deals with noise pollution? Do local noise ordinances in your city exist? Does your city enforce the noise laws? How intense is the problem of noise pollution in your area?

Write a text (120-150 words) describing the current legal framework for noise control in Greece, whether or not these laws are enforced, to what degree and if they are eventually effective or not. Furthermore, you should mention how well-informed people are on the effects of noise on their lives and what additional measures should be taken in your opinion to abate noise pollution.



1. Have you ever heard of people with special mental abilities, often characterized as 'super-humans?' If yes, can you describe some of them?

Lesson 10

2. Stephen Wiltshire is often called a 'human camera'.

Can you imagine why?

Musical & other savants

Having a look at the music industry and at our environment, we can see a lot of talented people who have worked very hard and have devoted countless hours to practicing and experimenting with music. We have also seen mathematicians or other scientists discovering new things that seem impossible to us. But, how would it feel to be a 'natural genius' or to suddenly obtain exceptional abilities in a specific field without previous knowledge or practice? This is the case of a few prodigious savants, who exhibit extraordinary skills and abilities in a specific field (maths, music or language). For example, the most common type is the mathematical calculators who can solve complex equations in their head in just a few seconds, while others can make accurate calendar calculations instantaneously. In the case of musical savants, a special category for exceptionally, musically talented individuals, they can play a song on an instrument from memory after they have listened to it just once or recognize the exact note or key of a musical piece. Some of these musical prodigies have absolute pitch and an unbelievable memory.

However, it has to be noted that despite their phenomenal abilities, their mental age in some cases, may be no more than that of a three or four-year old child.

Initially, the full term was *idiot savant*, coined by John L. H. Down in 1887 to describe a person with a very low IQ who can be a prodigy in a specialized area. Later, that term was replaced by the term *autistic savant* and today, by its generic name *savant syndrome*. Autistic individuals suffer from a condition called *autism*, and have specific symptoms that are related to coordination and social behavior problems.

In particular, these individuals often exhibit an isolated attitude that lacks in interactivity, while sometimes they may behave in an exaggerated or inappropriate way. Although autism is a chronic condition quite common today, savant syndrome which is comorbid with autism is very rare; today, fewer than 100 prodigious savants are believed to exist worldwide (males outnumber females in both autism and savant syndrome). Savant syndrome can be either congenital or acquired through head injury with the latter being extremely rare. When congenital, the skills appear early in data that can accurately explain this phenomenon, except for educated guesses and occasionally opposed opinions.

The following brief list presents 12 of the few savants still living as of the book's of publication.

1) Rex Lewis-Clack: born with cerebral arachnoid cyst and a form of blindness, he monstrated spectacular musical abilities since the age of 5 when he first started lessons, although he had already been self-taught. Rex, as a musical prodigy, among others, instantly identify a note that is played, a talent only 1 in 10,000 ale have.

2) Stephen Wiltshire: born in London in 1974, he was diagnosed as autistic at the of three. Stephen has the unique ability to draw an accurate representation of a andscape from memory after seeing it just once. He often performs brief helicopter odes, during which he looks at the endless landscape beneath. These few minutes are more than enough for him to create accurate drawings of entire cities.

3) Tony Deblois: another musical savant. He is blind and autistic and has been playing the piano since the age of two. He has already mastered 12 instruments rumpet, violin, saxophone, ukulele, drums, guitar, mandolin, flute, etc.) and has received numerous awards.

4) Leslie Lemke: born in 1952, he had his eyes surgically removed in the first months of his life, as he was born with retinal problems and brain damage, which caused him kinetic and other problems. In fact, not until he reached the age of 15 was he able to walk. However, a year before at the age of 14, he played Tchaikovsky's Piano Concerto No.1 precisely, which he had heard only once on television. From that time on, he has never stopped playing live and composes his own music with excellent improvisational techniques, though he has never had any formal musical training.

5) Flo & Kay Lyman: autistic identical (women) twins, the only twins with savant syndrome in the world. They both demonstrate an unprecedented ability to calculate dates and remember every tiny detail of what has happened in their lives and whatever has been captured by their senses. These two twins, now in their late fifties, are also different from other autistic twins in that they are sociable, outgoing and talkative.

6) Alonzo Clemons: he is a peculiar case of a savant and one of the most talented mimal sculptors in their world. When he was three, he fell and suffered a head injury that changed his life for ever. That accident left him severely disabled and reduced his IQ around 40. However, it gave him a great gift. Clemons can create flawless replicas of animals made of clay just by bringing images of them to his mind. His sense of touch is so precise, that he can even make sculptures in the dark.

7) Jason Padgett: he is one of the forty estimated cases of individuals with acquired savant syndrome and synesthesia. After being attacked and hit on the head by muggers outside a club, his mind changed for ever. From that day on, he started literally seeing complex geometrical structures and mathematical formulas in everything around him. Although he was never good at algebra or drawing while growing up, today he seems to be a genius at both, creating astonishing drawings of the shapes he 'sees.' Amazingly, he went from a furniture salesman to a genius mathematician overnight.

- 8) Matthew Savage: he was born in 1992 and is another of the few autistic savant musicians. Matt was able to read by the age of one and a half, while at the age of six, he could read sheet music. In 1999, he began studying classical music at the New England Conservatory of Music in Boston, though his main focus was and remains on jazz. He started his international career at the age of eight and today he is an accomplished composer and musician, having produced more than ten albums so far.
- 9) Derek Amato: he is also one of the very few individuals with acquired savant syndrome. In 2006, he fell into the shallow end of a pool ending up with a concussion, 35% hearing loss in one ear and memory loss. After that, he woke up as a genius musical talent. According to his own words, he started "seeing black and white structures moving from left to right, which in fact represented in his mind, a fluid and continuous stream of musical notation." As a matter of fact, he started playing the piano instinctively, demonstrating exceptional skills on playing and improvisation, although he had never touched one in his life before or had showed any inclination to it.
- 10) Orlando Serrell: he was born in 1968, another case of an individual with acquired savant syndrome. In 1979, Orlando was hit by a baseball on his left side of his head. He didn't tell anyone about this; he just stood up and kept on playing baseball. After that, he suffered from headaches for a period of time and then the headaches disappeared, leaving to him nothing but an extraordinary ability to make complex calendrical calculations, recall the weather and remember all the facts for every day of his life since the accident.
- 11) Jacob Barnett: born in 1998, he was diagnosed with autism when he was two years old. Although the prognosis for his future was poor and hopeless, as doctors informed his mother that he would never talk or read, Jacob obviously had a surprise to all of them. Having the support of his mom, who homeschooled him instead of putting him full-time in a special school, he cultivated his exceptional mathematical skills and by the age of eleven he had already entered college. Barnett is now the youngest astrophysics researcher in the world.
- 12) Derek Paravicini: born in 1979, he is a blind, autistic savant and a musical prodigy with perfect pitch. He has the special ability to play a piece of music (from pop songs to concerts) flawlessly, after hearing it just once. In 2006, his first album Echoes of the sounds to be was released and a year later, his official biography In the key of genius was published.

Obviously, the more we read about individuals with savant syndrome, the more we realize that this surprising phenomenon in which disability and genius are accommodated in the same person continues to baffle both scientists and common people.

A. Reading Comprehensio	n 🔲
	ant syndrome have in common is
a. autism	
h brain injury	
c, a prodigious ability in a s	pecific domain
2. A main characteristic of a	
a. inability to make calculat	
b. limited social interaction	
c. spectacular musical abilit	ies
3 According to the text, De	rek Amato was special because he
a. was born autistic	•
	ical abilities after a head injury
c. could play long musical c	
B. Vocabulary practice: M	atch the words with their definitions in Greek.
a. prodigious	1. διάσειση
b. synesthesia	2. εγγενής
c. coordination	3. αψεγάδιαστος, χωρίς ελαττώματα
d. comorbid	4. περιστασιακά
e. congenital	5. συναισθησία (νευρολογική ανάμιξη τω
	αισθήσεων)
f. occasionally	6. τεράστιος, σπουδαίος, καταπληκτικός
g. flawless	7. συντονισμός, συγχρονισμός (π.χ.
	κινήσεων)
h. concussion	8. συννοσηρός
	correct word to complete the phrases.
· –	acquired, inclination, demonstrate
a. an ability to calc	
b. to perform calcu	ılations
csyndrome	

d. musical

e. to

exceptional skills