UNIT 1:

QUALITIES OF SOUND

INDEX:

basic vocabulary

Acoustic pollution : contaminación acústica.

Crotchet, Quarter note : Negra

Echo: eco.

Clef (G): clave (de sol).

Duration (long/short): duración (largo/corto).

Frecuency : frecuencia.

Notes : notas musicales.

Intensity (loud / soft): intensidad (fuerte/suave).

Harmonics: armónicos.

Ledger lines : líneas adicionales.

Minim, Half note : blanca

Noise : ruido.

Pitch (low / high): afinación (grave/agudo).

Propagation : propagación.

Quaver, Eighth note: corchea

Rest: silencio (figura).

Reverberation: reverberación.

Semibreve, Whole note : redonda

Semiquaver, Sixteenth note : semicorchea

Silence : silencio (sensación).

Sonorous waves: ondas sonoras.

Sound : sonido.

Staff : pentagrama.

Timbre: timbre.

Vibration : vibración.

Exercise 1:

Complete the sentences using one of the words in the chart:

a) **People living in the city center complain about _____ at weekends.**

b) **_____, please. You are in a hospital.**

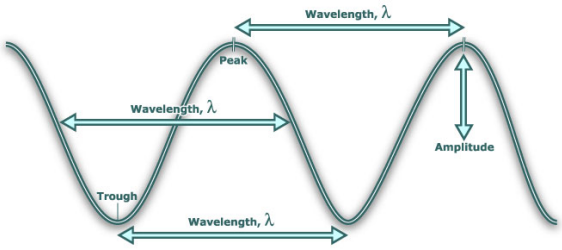
c) **Please be quite. There is too much _____ in the room.**

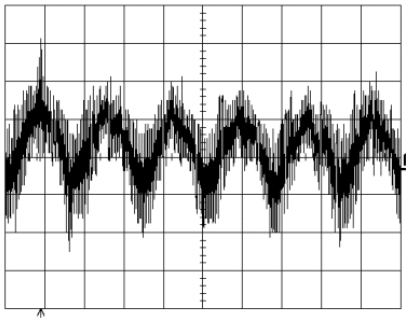
d) **Don't repeat everything I say. You sound like my _____.**

1. SOUND, NOISE AND SILENCE

Some interesting definitions…

Essentially, music is sound. SOUND is produced when an object vibrates and it is what can be perceived by a living organism through its sense of hearing. It travels through PHYSICAL MEDIUMS by sonorous waves and it is normally a pleasant feeling.





NOISE is a disagreeable auditory experience but this is a subjective definition (for instance, most of the percussion instruments produce noises when they are played). Anyway, the physical difference between sound and noise is the sort of waves: sonorous waves are regular and in a noise the wave is irregular (look at the pictures in your book).

Finally, SILENCE is the absence of sound or noise.

Exercise 2:

Ready to answer the questions? Have a try! If you don't know the answer, ask your teacher.

1.- Sound is a form of energy.

True/False

2.- Sound travels in _____.

a) waves b) streams c) rivers

3.- Sometimes you can feel sounds on your body (by the vibration). True/False

4.- Sound waves must travel to the _____ to be heard.

a)brain b) ear c) heart

5.- Noise is unwanted sound.

True/False Why?

6.- Damage occurs when sounds are very

a) high b) loud c) long

Exercise 3:

Group discussion

Considering everything you have learned, what do you think about the following ideas? Discuss in groups.

"Silence, an impossible treasure?"

I agree because …

I don't agree because …

"Acoustic pollution. A real problem?"

I think it is…

I think it isn't…

2. qualitiES of tHE souNd

There are 4 basic qualities:

PITCH (Hz) Low sound/High sound

DURATION (Sec.) Short sound/Long sound

INTENSITY (dB) Forte/Piano

TIMBRE (Harmonics) What kind of sound?

2.1. PITCH

This is the sound´s characteristic that tells us the difference between a high sound and a low sound. To represent the pitch we use the staff and the notes. The staff (plural staves) is written as five horizontal parallel lines. Most of the notes of the music are placed on one of these lines or in a space between lines. Extra ledger lines may be added to show a note that is too high or too low to be on the staff.

to surf the net!

We are going to look through an amazing music theory web! Look at this web site and choose the English version (for sure!):

www.teoria.com

(1) Tutorials

Click on... → **(2) Reading Music**

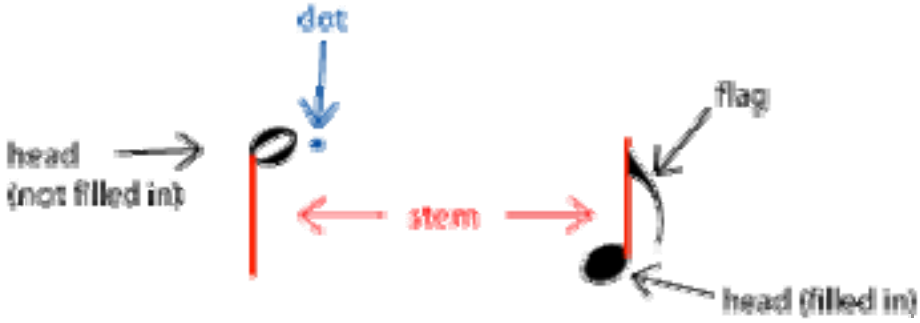
Click on... → **(3) Reading musical notes**

Click on the question to begin!!!

2.2. DURATION

This is the sound's characteristic that tells us the difference between a short sound and a long sound. The duration of a sound is indicated using several symbols. In standard notation, a single musical sound is written as a note.

The Parts of a Note



All of the parts of a written note affect how long it lasts.

2.2.1. Notes and values

Name (USA)	Name (England)	Duration	Symbol
Whole Note	Semibreve	4 beats	
Half Note	Minim	2 beats	
Quarter Note	Crotchet	1 beat	

Note the relationship of values between the different symbols:

Each whole note (semibreve): 

is divided into two half notes (minim).

And each half note (minim) 

is divided into two quarter notes (crotchet) 

Thus, each symbol will have half the value of the preceding shape.

The smallest value we have seen up to this point is that of the quarter note, which lasts for a whole beat. Of course, there are symbols for notes of shorter duration.

Here you can see symbols that take a half (50%) or a fourth (25%) of a beat:

Symbols	Name	Value
	Eighth note (quaver)	Half of a quarter note. We can have two eighth notes for each beat.
	Sixteenth note (semiquaver)	One fourth of a quarter note. We can have four of these for each beat.

It is a common practice to beam together the flags of eight notes and sixteenth notes that are part of the same beat, in order to facilitate reading.

2.2.2. Rests

In all music, silence is just as important as sounding notes. How do we notate silence? We do by using symbols called rest notes, or simply rests. There is an equivalent rest symbol for each note value. Below we can see the corresponding rest symbols for the note values we already know:

Note			Rest
Whole Note (USA)	Semibreve (England)		
Half Note (USA)	Minim (England)		
Quarter Note (USA)	Crotchet (England)		

There are also symbols to represent silence with the value of eighth notes (quaver) and sixteenth notes (semiquaver):

Note		Rest
Eighth (quaver)		
Sixteenth (semiquaver)		

2.3. INTENSITY

This is the sound's characteristic that tells us the difference between a loud sound and a soft sound. Dynamics are the loudness or softness of a composition. The term piano (p) is used to indicate softness and forte (f) to indicate loudness. Each of these is augmented if the letter symbolizing it is doubled or tripled (e.g. "pp" - "pianissimo", "very soft"; "ppp" - "pianississimo", "very, very soft"). Each one is also lessened if proceeded by mezzo (m) (e.g. "mf" - "mezzo forte", "somewhat loud"). Also included in dynamics are the crescendo ("slowly growing louder"), decrescendo ("slowly growing softer"), and the sforzando ("sudden loudness").

INTENSITY

It's represented by DYNAMICS

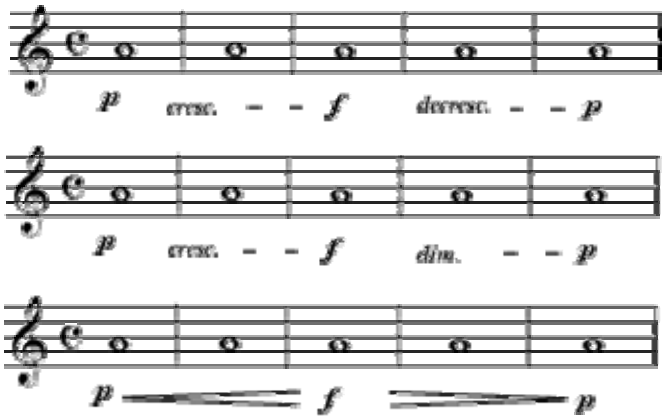
(No progressive) **(Progressive)**

LETTERS **ITALIAN TERMS / PROGRESSIVE SIGNS**

f, pp, mf...

crescendo **diminuendo**

Gradual Dynamic Markings



2.4. TIMBRE

One of the basic elements of music is called color, or timbre. Timbre describes all of the aspects of a musical sound that do not have anything to do with the sound's pitch, loudness, or length. In other words, if a flute plays a note, and then an oboe plays the same note, for the same length of time, at the same loudness, you can tell that the only difference in this: a flute sounds different from an oboe. This difference is in the timbre of the sounds. Timbre is caused by the fact that each note from a musical instrument is a complex wave containing more than one frequency. For instruments that produce notes with a clear and specific pitch, the secondary frequencies that are involved in the sound are called harmonics. The human ear and brain are capable of hearing and appreciating very small variations in timbre.