

unit 1:

qualities of sound

index:

1. sound, noise and silence

2. qualities of sound



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.

Glossy: brillante.

Notes : notas musicales.

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

Harmonics: armónicos.

Ledger lines : líneas adicionales.

Matt: mate.

Minim, Half note : blanca

Noise : ruido.

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

Propagation : propagación.

Quaver, Eighth note: corchea

Rest: silencio (figura).

Reverberation: reverberación.

Rough: áspero.

Semibreve, Whole note : redonda

Semiquaver, Sixteenth note :
semicorchea

Silence : silencio (sensación).

Smooth: suave.

Sonorous waves: ondas sonoras.

Sound : sonido.

Staff : pentagrama.

Timbre: timbre.

To beam: en música, unir varias figuras
mediante una barra.

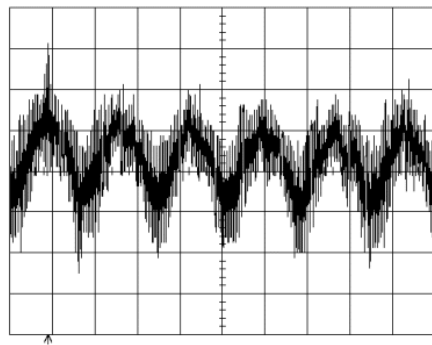
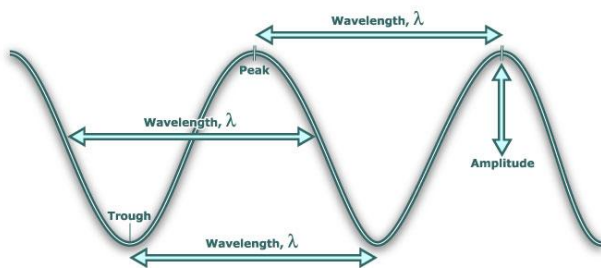
Tough: resistente, fuerte.

Vibration : vibración.

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 sound 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: sound 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.

2. qualities of 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

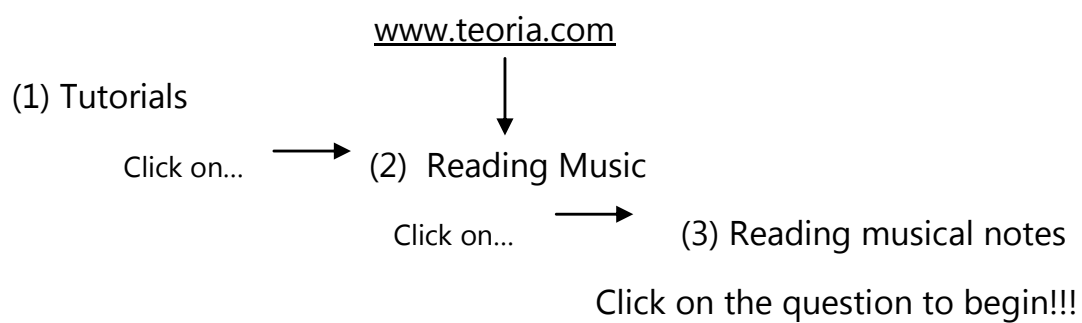


This is the the characteristic of sound that tells us the difference between a **high sound** and a **low sound**. To represent the pitch we use the staff and the notes. The staff (plural staves) is written as five horizontal parallel lines. Most of the notes of the music are placed on one of these lines

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 web!

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

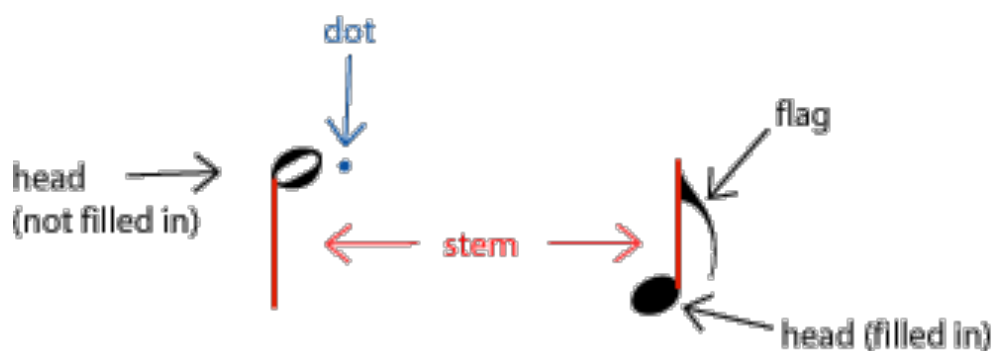


2.2. duration






This is the the characteristic of sound 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 audible notes. How do we indicate/show silence? We do so 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):

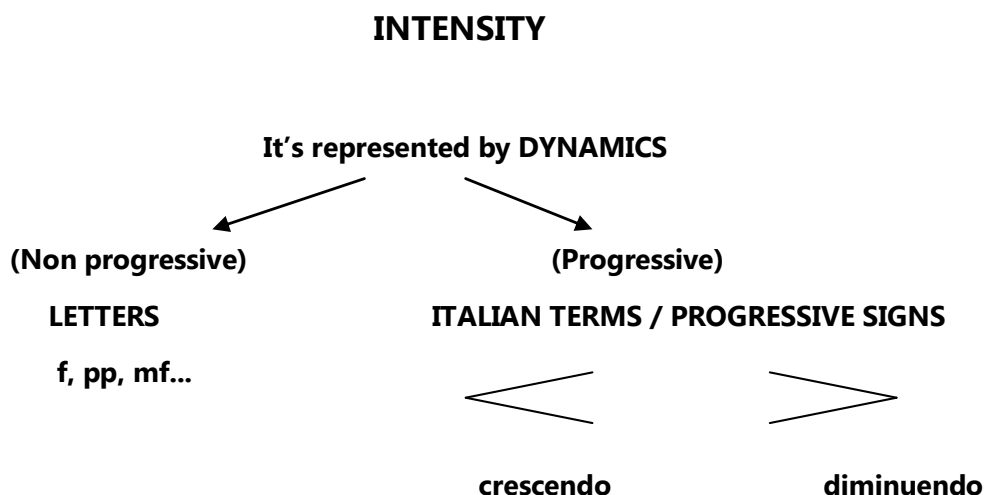
| Note | | Rest |
|---------------------------|---|---|
| Eighth (quaver) |  |  |
| Sixteenth (semiquaver) |  |  |

2.3. intENsity

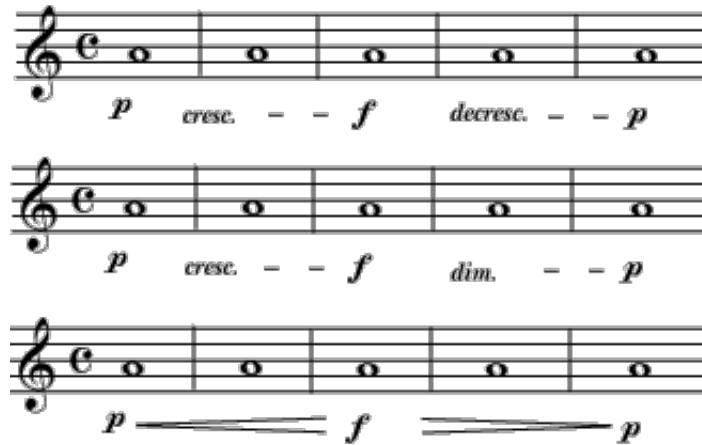


This is the the characteristic of sound that tells us the difference between a **loud sound** and a **soft sound**.

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").



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 its 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 is 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.

Another approach would make possible to look at and to touch music. You could refer to the colour of a given sound (light or dark), to its brightness (glossy or matt) and to its touch (smooth or rough), its weight (heavy or light), its width (wide or narrow), its consistency (soft or tough) and its temperature (warm or cold).

Unit 1

1. Vocabulary:

Contaminación Acustica:

Silencio (figura):

Clave de Sol:

Pentagrama:

Notas musicales:

Vibración:

Lineas adicionales:

Timbre:

2. Fill the gaps:

| | |
|------------------|-----------|
| Sound | low sound |
| Physical mediums | staff |
| high sound | notes |
| Perceived | |

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

Pitch is the characteristic of sound that tells us the difference between a _____ and a low _____. To represent the pitch we use the _____ and the _____.

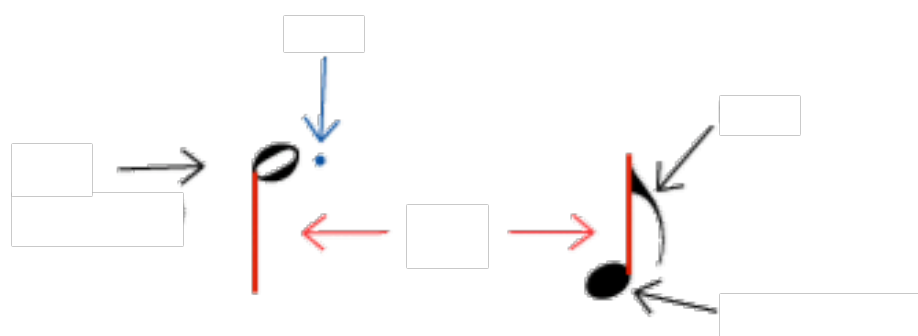
3. What is a ledger line?

4. Tell me the four basics qualities of the sound.

5. Write the name of the notes.



6. Complete.



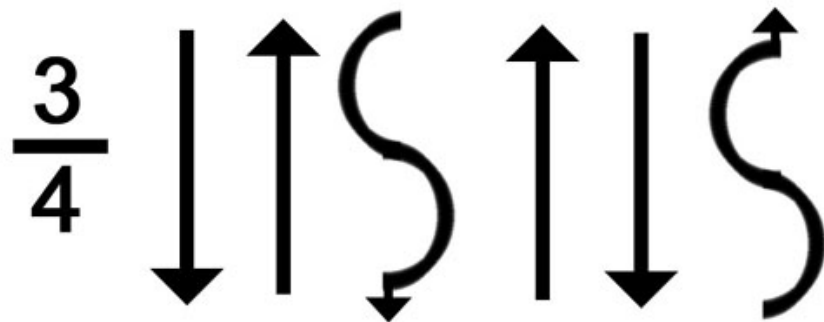
7. Complete

| Name (USA) | Name (England) | Duration | Symbol |
|------------|----------------|----------|--------|
| | | | |
| | | | |
| | | | |

Unit 2:

Rhythm

1. beat
2. tempo
3. accent, measure and rhythm



basic vocabulary

Time signature/Measure, Bar: compás.

Barline: línea divisoria.

Upper figure : numerador del compás.

Lower figure: denominador del compás.

Double meter : binario.

Triple meter: ternario.

Quadruple meter : cuaternario.

Beat: pulso.

Accent: acento.

Rhythm: ritmo.

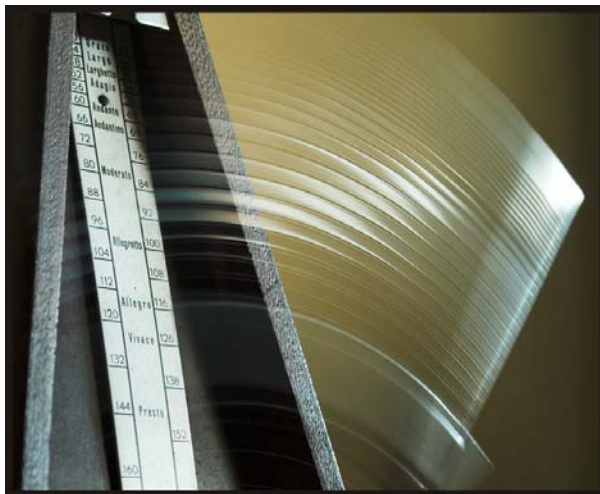
1. beat

Have you ever heard your heart beat? If you pay attention when you are alone you can hear a continuous ticking, each one being a beat or a pulse. When you listen to a song you can also feel the same thing, can't you?



When talking about music the pulse must be constant and regular.

2. tempo



The tempo of a piece of music is its speed, in other words, the beat speed. There are two ways of specifying a tempo. Metronome markings are absolute and specific, they are given in beats per minute. A metronome is a musical tool that can give a beat-per-minute tempo

as a ticking

sound or a pulse of light. Other tempo markings are verbal descriptions which are more relative and subjective. Both types of markings usually appear above the staff, at the beginning of the piece.



Four four time
(quarter note gets one beat)
88 beats, or 88 quarter notes, per minute



Cut time (two two)
(half note gets one beat)
120 beats, or 120 half notes, per minute



Six eight time
Probably dotted quarter gets one beat
80 dotted quarters per minute
(This would be the same speed as ♩ = 240 ♪)



Six eight time
148 eighth notes per minute
Could be conducted in a fast six (eighth note gets one beat)
or in a slow two (dotted quarter gets one beat: about ♩ = 50 ♪)

2.1 Tempo Terms

A tempo marking is a word or phrase that expresses the composer's idea of how fast the music should be felt. How fast a piece of music is felt depends on several different things, including the texture and complexity of the music. Tempo instructions are traditionally given in Italian. Some Common Tempo Markings are:

- *Grave* - very slow and solemn
- *Largo* - slow
- *Larghetto* - not quite as slow as largo
- *Adagio* - slow
- *Lento* - slow
- *Andante* - literally "walking", a medium slow tempo

- *Moderato* - moderate, or medium
- *Allegretto* - Not as fast as allegro
- *Allegro* - fast
- *Vivo, or Vivace* - lively
- *Presto* - very fast
- *Prestissimo* - very, very fast

Usually, tempo indications may be accompanied by other Italian words:

- *(un) poco* - a little
- *molto* - a lot
- *piu* - more
- *meno* - less
- *mosso* - literally "moved"; motion or movement



2.2 GRADUAL TEMPO CHANGES



Gradual changes in the basic tempo are also common in music, and these have their own set of terms.

Gradual Tempo Changes:

- *accelerando* - (abbreviated accel.) accelerating; getting faster
- *ritardando* - (abbrev. rit.) slowing down
- *ritenuto* - (abbrev. riten.) slower
- *rallentando* - (abbrev. rall.) gradually slower
- *rubato* - don't be too strict with the rhythm; while keeping the basic tempo, allow the music to gently speed up and relax in ways that emphasize the phrasing
- *poco a poco* - little by little; gradually
- *Tempo I* - ("tempo one" or "tempo primo") back to the original tempo (this instruction usually appears above the staff)

3. ACCENT, MEASURE AND RHYTHM

Measure organizes the beats or pulsations in groups of two, three and four. A measure (or bar) is such a pattern of a group of beats which begin with a stressed beat. This stressed beat is the natural accent of the measure and always falls on the first beat.



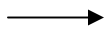
to SURF the NET!

Go to our favourite web and look at the examples moving the mouse into them!

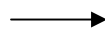
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Tutorials



Reading Music



Beats and Measures



Music cannot exist without time. The placement of the sounds in time is the rhythm of a piece of music. As music must be heard over a period of time, rhythm is one of the most basic elements of music.

It is very common to find measures having groups of two, three or four beats. We call them duple, triple and quadruple meters. The time signature appears at the beginning of a piece of music. The meter of a piece of music (the measure) is its basic rhythm; the time signature is the symbol that tells you the measure of the piece and how (with what type of note) it is written. To separate measures we use the barline.



The time signature tells you two things: how many beats are in each measure, and what type of note gets a beat.

Reading the Time Signature



This time signature means that there are three quarter notes (or any combination of notes that equals three quarter notes) in every measure. A piece with this time signature would be "in three four time" or just "in three four".

Other example: four four!

4 beats in a measure

4 quarters = two halves = one whole = 2 quarters and four eighths = and so on







A quarter note gets one beat

Remember...

One whole note = Two half notes = Four quarter notes = Eight eighth notes = And so on...

Exercise 1

Draw the missing notes and fill in the blanks to make each side the same duration (length of time).

| | |
|--|--|
|  = <input type="text"/> |  = <input type="text"/> |
| 1 whole = ____ quarters | 1 half = ____ quarters |
|  = <input type="text"/> |  = <input type="text"/> |
| 1 whole = ____ eighths | 1 half = 1 quarter + ____ eighths |
|  = <input type="text"/> |  = <input type="text"/> |
| 4 sixteenths = 1 _____ | 4 eighths + 1 half = 1 _____ |

Unit 2

1. Vocabulary:

Compás:

Línea divisoria:

Numerador del compás:

Pulso:

Denominador del compás:

Acento:

Ternario:

Ritmo:

2. Fill the gaps:

Heard
Ticking
Pulse

Regular
Beat

Have you ever _____ your heart beat? If you pay attention when you are alone you can hear a continuous _____, each one being a _____ or a _____. When you listen to a song you can also feel the same thing, can't you? When talking about music the pulse must be constant and _____.

3. Fill the gaps:

Pulse
Metronome
Tool

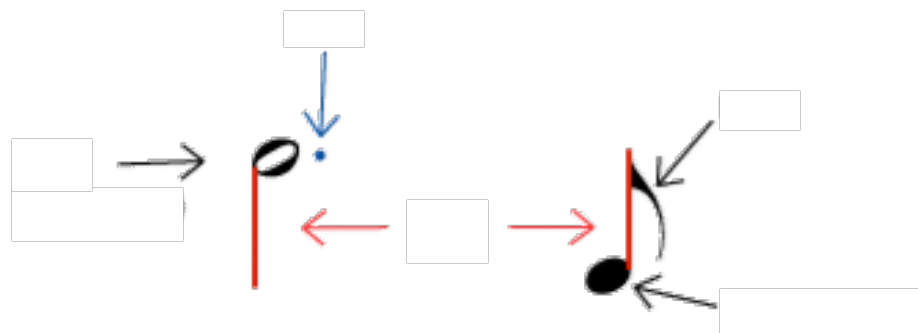
Specifying
Speed

The tempo of a piece of music is its _____, in other words, the beat speed. There are two ways of _____ a tempo. _____ markings are absolute and specific, they are given in beats per minute. A metronome is a musical _____ that can give a beat-per-minute tempo as a ticking sound or a _____ of light.

4. Write the name of the notes.

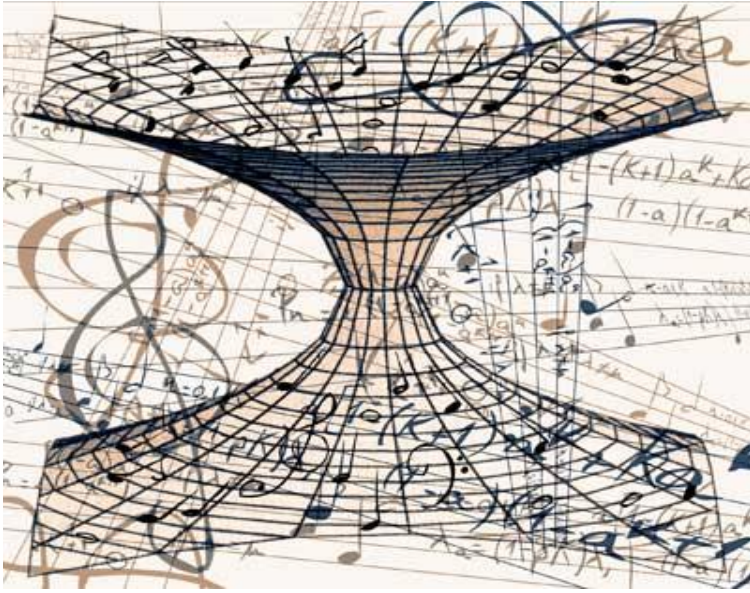


5. Complete.



6. Connect with arrows:

| | |
|-------------|--|
| Grave - | slow |
| Largo - | very slow and solemn |
| Larghetto - | slow |
| Adagio - | literally "walking", a medium slow tempo |
| Lento - | slow |
| Andante - | not quite as slow as largo |



unit 3:

MELODY AND HARMONY

3.1 MELODY

3.1.1 MUSICAL PHRASES

3.1.2 INTERVALS

3.1.3 SCALES

3.1.4 ACCIDENTALS

3.2 HARMONY

basic vocabulary

Accidentals: alteraciones accidentales.

Cadence: cadencia.

Chord: acorde.

Consonant: consonancia.

Dissonance: disonancia.

Harmony: armonía.

Interval: intervalo.

Melody: melodía.

Minor/Major: menor/mayor

Phrase: frase.

Scale: escala.

Whole/Half step: tono y semitono.

3.1 mElody

In music, a **melody** is a succession of sounds, normally with different pitches and durations, that express a musical idea.



3.1.1 musical pHRASES



Melodies are structured in sections called phrases. Phrases are separated by cadences as linguistic phrases are separated by punctuation marks. A phrase will end with a weaker or stronger cadence depending on if it is an antecedent

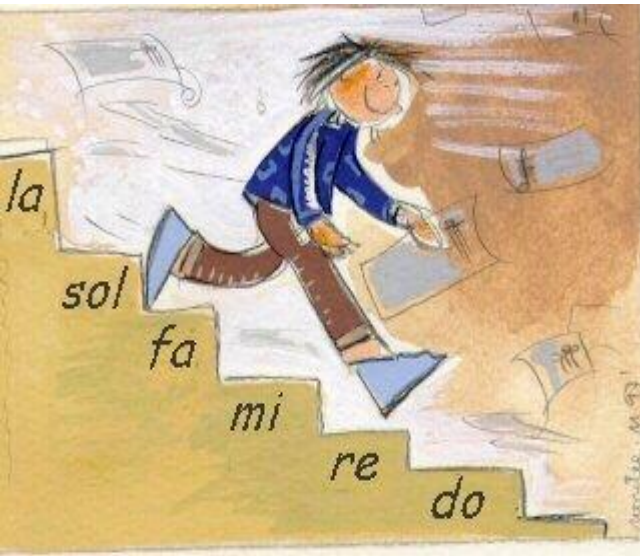
(when the musical idea is not finished) or consequent phrase (when the musical idea is finished).

3.12. intervals

An interval measures the distance between two notes. We obtain its name by counting the number of notes. The first and last note must be counted and you must know the order of the musical notes to be able to count the notes.

However, not all intervals of the same numerical classification are of the same size. That is why we need to specify the quality by finding the exact number of **whole** and **half steps** in the interval.


3.13. scales



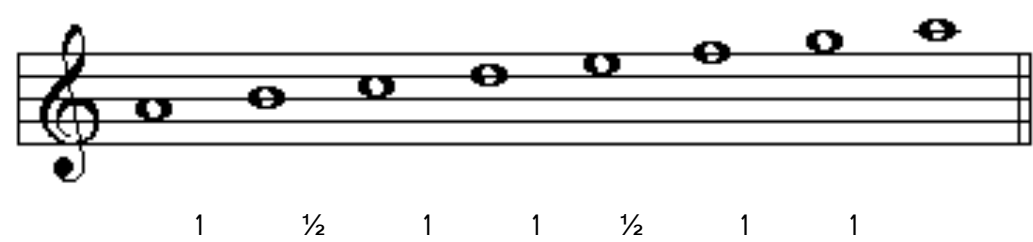
create it.

A **scale** is a series of notes arranged from low to high or vice versa. Most of the music written since the XVII century uses two types of scales: the **major scale** and the **minor scale**. What really defines the type of scale is not its first note but the intervals used to

Major scales have the following sequence of whole and half stops:



1 1 1/2 1 1 1 1/2




1 1/2 1 1 1/2 1 1

This is the natural minor scale. Can you see the differences?


3.14. accidENtals

Accidentals are symbols that modify the pitch. The sharp (#) symbol raises a note by a half-step, while the flat (*b*) symbol lowers the note, also by a half-step. The becuadro cancels the effect of the sharp or the flat.


Sharp



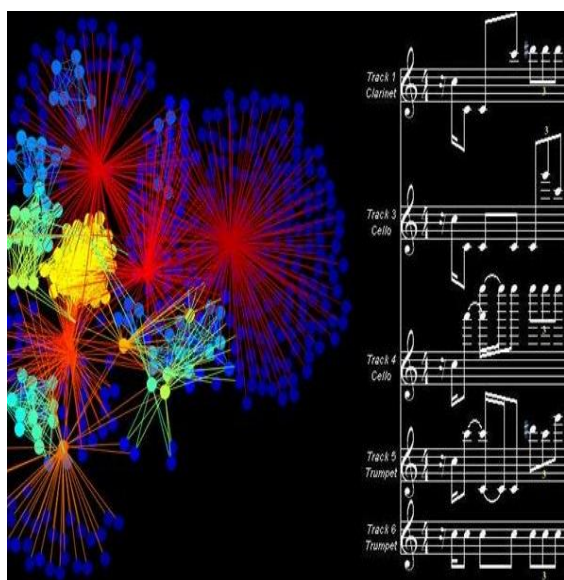
Flat



Becuadro



2. HARMONY



In Western music, **harmony** is the use of different pitches simultaneously and often refers to the "vertical" aspects of music, distinguished from ideas of melodic line, or the "horizontal" aspect.

Three or more notes simultaneously sounded form a chord. We can feel different sorts

of feelings when we hear a chord. Normally, we differentiate between consonant (relaxation) and dissonance (tension). Typically, a dissonant chord (chord with a tension) will become a consonant chord. A good harmonization usually sounds pleasant to the ear when there is a balance between the consonant and dissonant sounds. To simplify, that occurs when there is a balance between "tension" and "relax" moments. Due to this, tensions are usually 'prepared' and then 'resolved'.



Unit 4

1. Vocabulary:

Articuladores:

Laringe:

Pulmones:

Registro vocal:

2. Fill the gaps:

| | |
|--------------|-----------|
| Articulators | intensify |
| lungs | fuel |
| Vibrate | |

The _____ must produce enough airflow to _____ vocal chords (air is the _____ of the voice). The vocal chords are the vibrators that produce the fine pitch and tone. The _____ (tongue, palate, cheek, lips, etc.) articulate and filter the sound. Finally, the resonators amplify and _____ the sound: the end result of resonance is, or should be, to make a better sound.

3. The voice can be subdivided into four parts; Tell me them:

4. What's vocal resonance?

5. Tell me the four vocal males' ranges:

6. Tell me the four vocal males' ranges:

7. Write the name of the notes.

Canción de Cuna

Johannes Brahms

Lento

8

13

1. 2.

8. Tell me the four choir's types:

Recuperación Unidad 3

9. Fill the gaps:

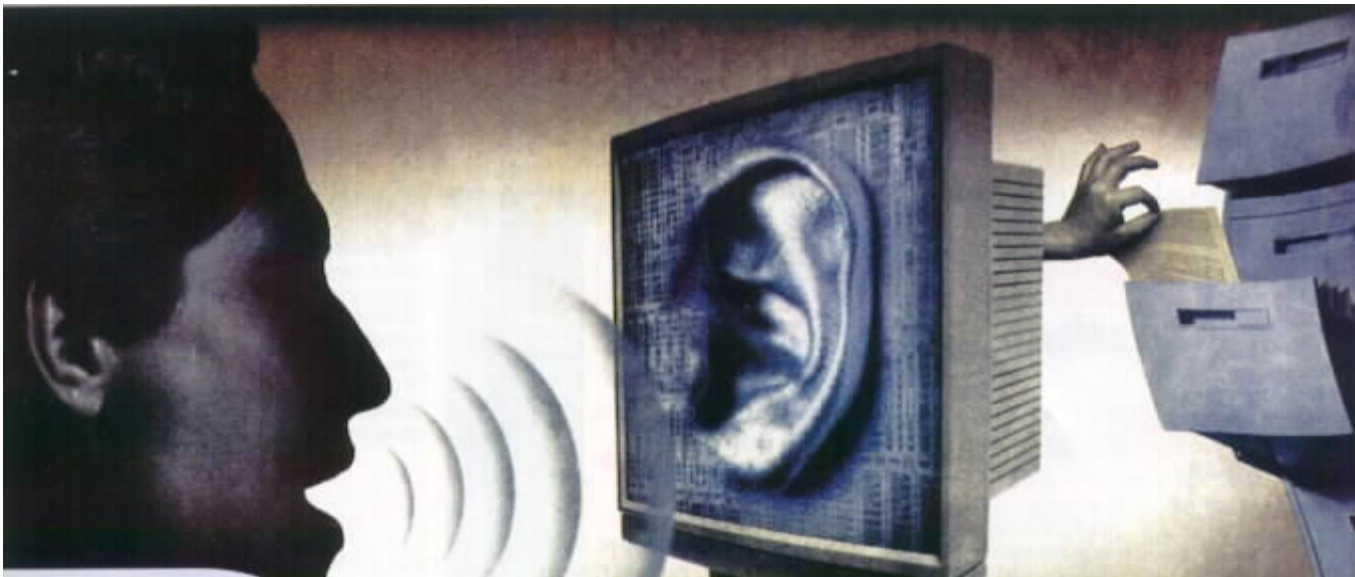
| | |
|----------------------------------|---------------------|
| Melodic Horizontal Western | Vertical Pitches |
|----------------------------------|---------------------|

In _____ music, harmony is the use of different _____ simultaneously and often refers to the "_____" aspects of music, distinguished from ideas of _____ line, or the "_____" aspect.

10. What is an interval?

Unit 4:

THE HUMAN VOICE



index:

1. THE HUMAN VOICE

2. vocal RESONATION, vocal REGISTRATION and vocal RANGES

3. CHORAL MUSIC

basic vocabulaRy

Articulators: articuladores.

Tone: tono.

Cheek: mejilla.

Tongue: lengua.

Chest: pecho.

Trachea: traquea.

Choir: coro.

Vocal chords: cuerdas vocales.

Larynx (voice box): laringe.

Vocal range: registro vocal.

Lips: labios.

Within: dentro de, en menos de.

Lungs: pulmones.

Nasal cavity: cavidad nasal.

Oral cavity: cavidad bucal.

Palate: paladar.

Pharynx: faringe.

Phonation: fonación.

Range: registro.

Resonators: resonadores.

Sinuses: senos sinusoidales.

To enhance: mejorar.

1. THE HUMAN VOICE

The **human voice** consists of sound made by a human being using the vocal chords for talking, singing, laughing, crying, screaming, etc. Generally speaking, the voice can be subdivided into four parts; the breathing, the vocal chords, the articulators and the resonators.

The **lungs** must produce enough airflow to vibrate **vocal chords** (air is the fuel of the voice). The vocal chords are the vibrators that produce the fine pitch and tone. The **articulators** (tongue, palate, cheek, lips, etc.) articulate and filter the sound. Finally, the **resonators** amplify and intensify the sound: the end result of resonance is, or should be, to make a better sound.

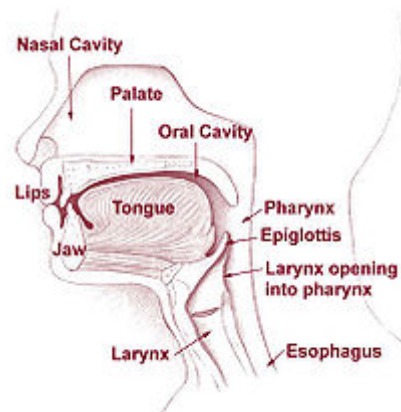
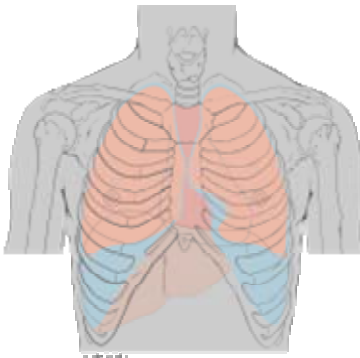
The vocal chords, together with the articulators and the resonators, are capable of producing a lot of sounds. The tone of voice may be modulated to suggest emotions such as anger, surprise, or happiness. Singers use the human voice as an instrument for creating music.



2. vocal REsonation, vocal REGistRation and vocal RAnGES

Vocal resonance is the process by which the timbre and/or intensity of the sound is enhanced by the use of the air-filled cavities in the body. There are seven areas that may be listed as possible vocal resonators. These areas are the chest, the trachea, the larynx (voice box), the pharynx, the oral cavity, the nasal cavity and the sinuses.

The vocal resonators



Vocal registration refers to the system of vocal registers/range within the human voice. A register/range in the human voice is a particular series of tones that possess the same quality.

-Vocal Ranges

A typical choral arrangement divides women into higher and lower voices and men into higher or lower voices too. The four main vocal ranges are:

-**Soprano** – A high female (or young boy's) voice.

-**Alto** – A low female (or young boy's) voice

-**Tenor** – A high (adult) male voice

-**Bass** – A low (adult) male voice



There are some ranges between the main ones:

-**Mezzo-soprano** – In between soprano and alto

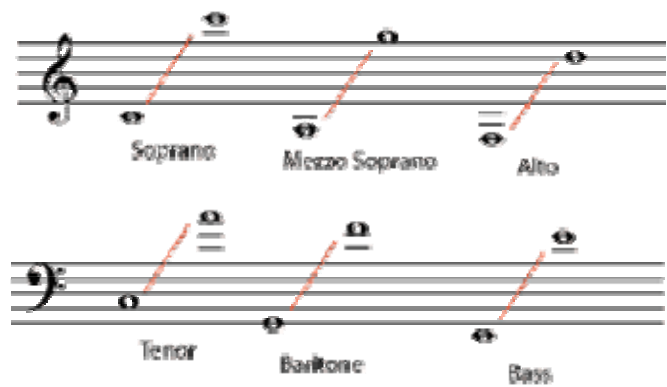
-**Contralto** – Contralto and alto originally referred to the same voice. But some people today use

"contralto" to refer to a female voice that is even lower than a typical alto

-**Countertenor** – A male voice that is unusually high, light, and agile, even for a tenor.

-**Baritone** – A male voice that falls in between tenor and bass.

Vocal Ranges



Voices are as individual as faces; some altos will have a smaller or bigger range, or the softest and strongest part of their range might be in a different place than other altos. These are approximate, average ranges for each voice category:

| | | |
|--------|---------------|---------------|
| VOICES | Male voices | TENOR |
| | | BARITONE |
| | | BASS |
| | Female voices | SOPRANO |
| | | MEZZO SOPRANO |
| | | ALTO |



3. Choral Music

A **choir**, **chorale**, or **chorus** is a musical ensemble of singers. **Choral Music**, therefore, is the music written specifically for a **choir** to perform. Choirs are often led by a conductor or choirmaster and can be categorized by the voices:

- **Mixed choirs** (i.e., with male and female voices). This is perhaps the most common type, usually consisting of soprano, alto, tenor and bass voices, often abbreviated as SATB.
- **Male choirs**, with the same SATB voicing as mixed choirs, but with boys singing the upper part (often called treble or boy soprano) and men singing alto (in falsetto), also known as countertenor. This format is typical of British cathedral choirs.
- **Female choirs**, usually consisting of soprano and alto voices, two parts in each.
- **Children's choirs**, often two-part SA or three-part SSA, sometimes more voices. This includes boys' choirs.



Unit 4

1. Vocabulary:

Articuladores:

Laringe:

Pulmones:

Registro vocal:

2. Fill the gaps:

| | |
|--------------|-----------|
| Articulators | intensify |
| lungs | fuel |
| Vibrate | |

The _____ must produce enough airflow to _____ vocal chords (air is the _____ of the voice). The vocal chords are the vibrators that produce the fine pitch and tone. The _____ (tongue, palate, cheek, lips, etc.) articulate and filter the sound. Finally, the resonators amplify and _____ the sound: the end result of resonation is, or should be, to make a better sound.

3. The voice can be subdivided into four parts; Tell me them:

4. What's vocal resonation?

5. Tell me the four vocal males' ranges:

6. Tell me the four vocal males' ranges:

7. Write the name of the notes.

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Lento



8. Tell me the four choirs types:

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9. Fill the gaps:

Melodic
Horizontal
Western

Vertical Pitches

In _____ music, harmony is the use of different _____ simultaneously and often refers to the " _____ " aspects of music, distinguished from ideas of _____ line, or the " _____ " aspect.

10. What is an interval?