MUSIC

IB

Mr. Martone
2013-2014

MUSIC IB

I. CHAPTER I ELEMENTS

1. Sound: Pitch, Dynamics & Tone Color

The three main properties of musical sounds:

A.	Pitch	-	the highness and lowness of sound
B.	Dynamics	-	degree of loudness or softness in music
	pianissimo	pp	very soft
	piano	p	soft
	mezzo piano	mp	moderately soft
	mezzo forte	mf	moderately loud
	forte	f	loud
	fortissimo	ff	very loud
	crescendo	<	gradually louder
	decrescendo	>	gradually softer
C.	Tone Color (*timbre*)	-	the quality that distinguishes musical sounds (e.g. bright, dark, brilliant, mellow & rich)

2. Performing Media: Voices and Instrument

A. Voices

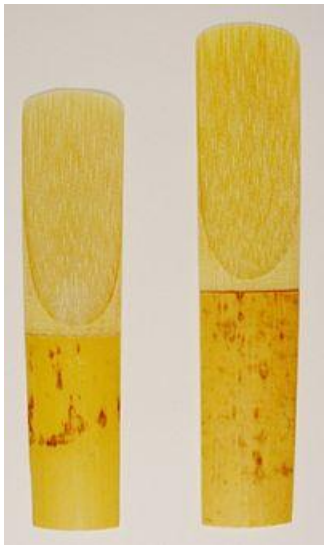
Women	Men	
soprano	*tenor*	high
mezzo-soprano	*baritone*	middle
alto (contralto)	*bass*	low

A. Musical Instruments (instrumental categories) DAY 02 (opt)

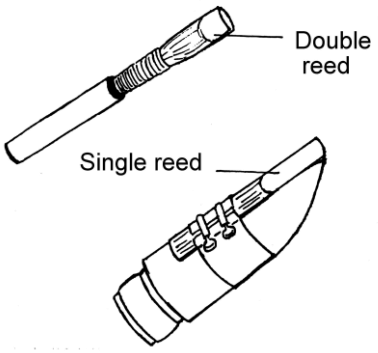
i. Strings: violin, viola, violoncello & bass

ii. Woodwinds: piccolo, flute, oboe, English horn, clarinet, bass clarinet, bassoon & contrabassoon

Mouth Pieces



Single Reed: Clarinets, Saxophones

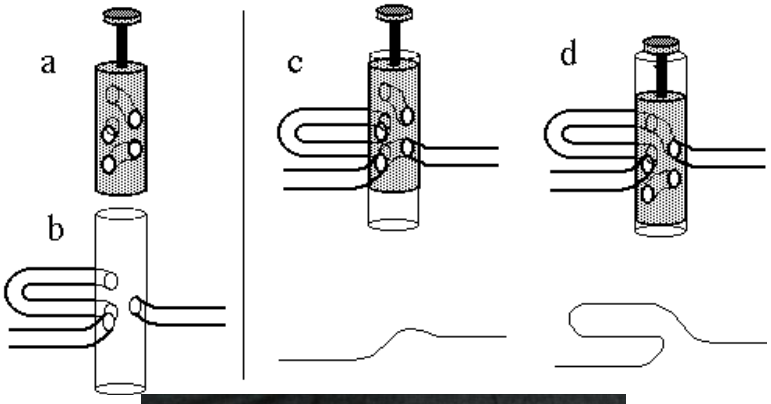


Double Reed: Oboe, English Horn, Bassoons

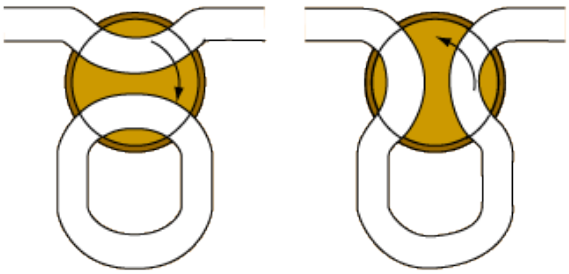
iii. Brass: trumpet, French horn, trombone & tuba

Mouthpiece

Pistons



Rotary Valves – French Horn



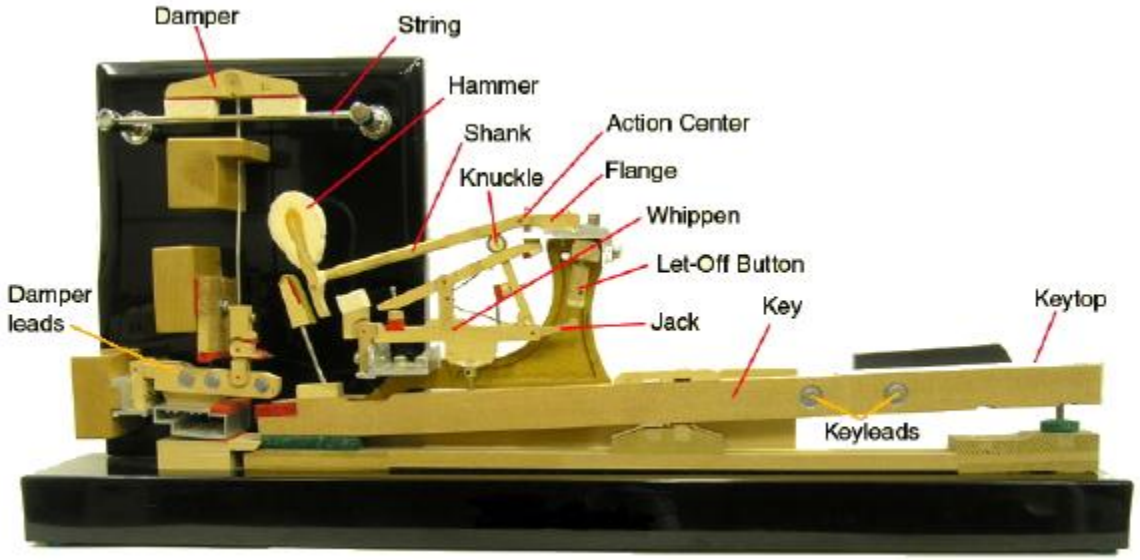
Rotary valve action

iv. Percussion:

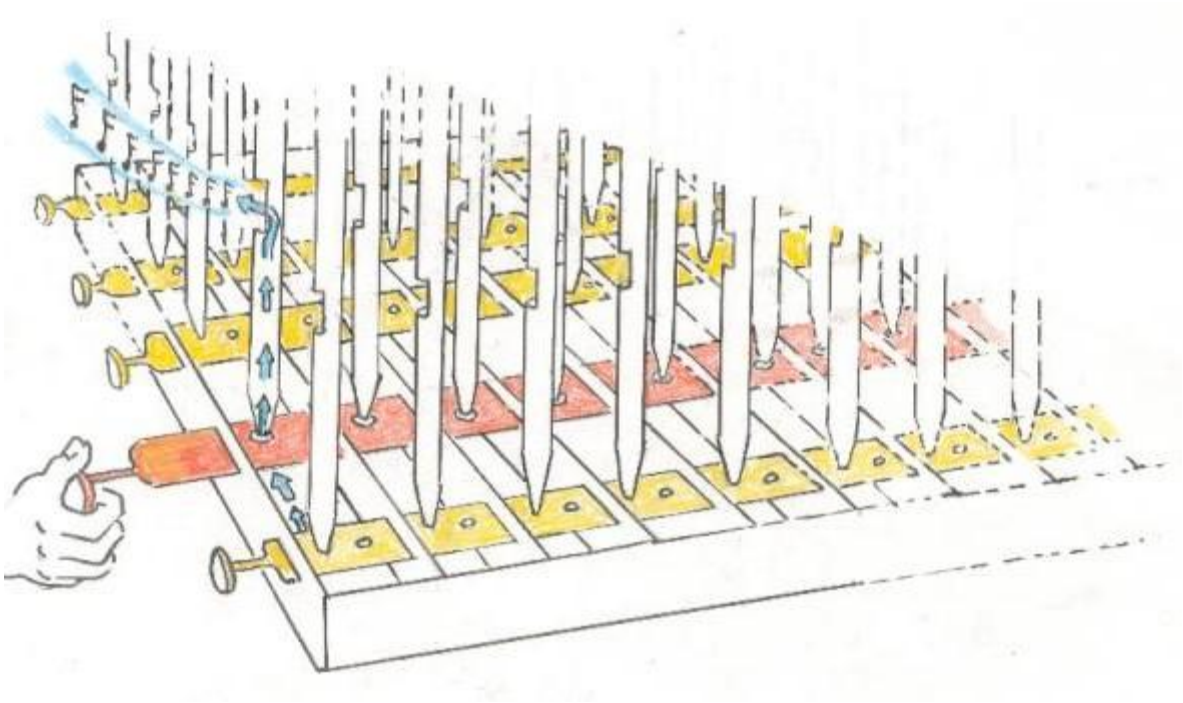
a. Definite Pitch: timpani (kettle drums), glockenspiel, xylophone, celesta & chimes
b. Indefinite Pitch: snare drum, bass drum, tambourine, triangle, cymbals & gong (tam-tam)

v. Keyboard: piano, organ, harpsichord

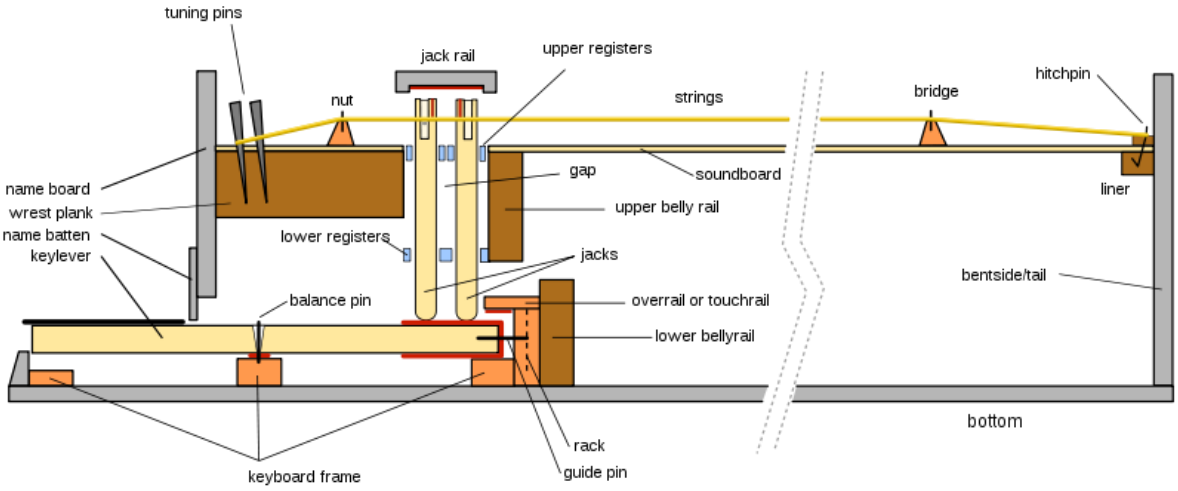
Grand Piano



Organ



Harpsichord



Ranges of Orchestral Instruments

This table is offered only to show general information about the performing ranges of particular instruments. There are a number of variations in the type and manufacture of instruments as well as the ability of different performers. More specific information can be found in Norman Del Mar's , *Anatomy of the Orchestra*; Gardner Read's , *Thesaurus of Orchestral Devices*; Kent Kennan's , *The Technique of Orchestration*; and Philip J. Lang's , *Scoring for the Band*. But, perhaps the best resource in a particular case would be the instrumentalists of your ensemble.

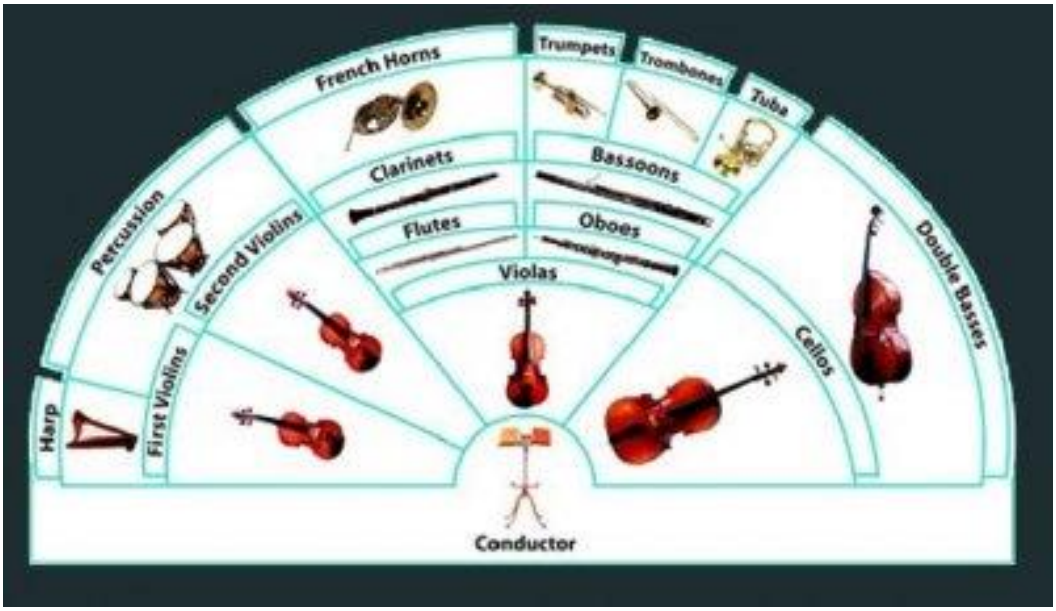
INSTRUMENT	CLEF(s)	WRITTEN RANGE (C4= middle C)	SOUNDING (transposition) ...than written	COMMENTS
WOODWINDS				
Piccolo	treble	D4-C7	C: 1 octave higher Db: minor 9th higher	
Flute	treble	C4-D7		Professional model flutes have a B-footjoint which allows them to play down to B3.
Alto flute	treble	C4-C7	a Perfect 4th lower	
Oboe	treble	Bb3-A6		
Oboe d'amore	treble	Bb3-E6	a minor 3rd lower	
English Horn	treble	B3-G6	a Perfect 5th lower	written in alto clef at concert pitch in certain Russian scores
Heckelphone	treble	A3-G6	1 octave lower	
Clarinet	treble	E3-C7	**Bb: a whole step lower** A: a minor 3rd lower D: a whole step higher Eb: a minor 3rd higher	
Basset-Horn	treble	C3-G6	a Perfect 5th lower	
Bass Clarinet in Bb	treble or bass	Eb3-G6	a 9th lower; a whole step lower when written in bass clef	There are examples in the classical literature, especially in 19th century works, for Bass Clarinet in A or C and written in bass clef or a mixture of bass and treble clefs. This is not advisable for the modern composer as these instruments are rare to non-existent and this will only cause problems for the player involved.
Bassoon	bass and tenor	Bb1-Eb5		
Contrabassoon (Sarrusophone)	bass, tenor(rare)	Bb1-Bb4	1 octave lower	
Saxophones	treble	Bb3-G6	Bb soprano: a whole step lower Eb alto: a 6th lower Bb tenor: a 9th	

			lower Eb baritone: 1 octave+6th lower Bb bass: 1 octave+9th lower	
BRASS	**Clef(s)**	**Written**	**Sounding**	
Horn in F	treble or bass	F#2-C6	a Perfect 5th lower	Horns may be written in a number transpositions: C, D, Eb, E, F, G, A alto, Bb alto, Bb basso, B(rare) Among horn players, transpositions are spoken of in terms of the Horn in F (ex. Horn in Eb is a whole step lower)
Tuben, Wagner tubas	treble or bass	Bb: C3-G5 F: F2-D5	tenor in Bb: a whole step lower bass in F: a Perfect 5th lower	Tuben or Wagner tubas are played by horn players. The sounding pitch of a Bb tenor instrument playing from a part written in treble clef, should be a 9th below the written note. However, the practical realizations of hornists are not entirely consistent on this point. ex. Stravinsky, Rite of Spring Tuben also have parts written in E-flat (sounding a 6th lower than written) in The Ring of the Niebelungen.
Trumpet	treble	F#3-D6	C: (as written) Bb: a whole step lower A: a minor 3rd lower G: a Perfect 5th higher F: a Perfect 4th higher E: a major 3rd higher Eb: a minor 3rd higher D: a whole step higher	for a detailed explanation of trumpet characteristics, see Del Mar, *Anatomy of the Orchestra*
Piccolo trumpet	treble	F#3-G5	Bb: a minor 7th higher A: major 6th higher	sometimes written F#4-G6 Bb: sounding 1 step lower A: sounding a minor 3rd lower
Alto Trombone	alto	A2-G5		Used primarily, but not exclusively, in 18th and 19th century German orchestral works.
Trombone	alto, tenor, bass *treble (see	E2-F5	*a 9th lower, when written in treble clef as a Bb	Pedal tones G1-Bb1 are possible. Use of the F-trigger facilitates pitches from F2 down to C2, or B1 with the F-

	note)		transposing instrument.	slide extended. *British Brass Band music for Trombones in Bb is written in treble clef where the sounding pitch is a 9th below the written pitch.
Bass Trombone	bass	Bb1-Bb4		
Contrabass Trombone	bass	Ab0-C5		Although the name implies an octave transposition - as in contrabassoon or contrabass - the contrabass trombone plays at concert pitch, no transposition. It is primarily called for in a few select works of Wagner, Strauss, Schoenberg and Puccini. Instruments are built with fundamental tones of F, E-flat, BBb, and others in first position. The shape and design varies from straight with slide handle extension to double valve and double slide models. The chioce of which instrument is most appropriate in any given situation is the players chioce.
Tuba	bass	D1-F4		Orchestral tubas play at concert pitch regardless of the pitch of a particular instrument. In the British brass band tradition, Eb and Bb tubas are written in treble clef. The Eb tubas sound 1 octave+a 6th below the written note while the Bb tubas sound 2 octaves lower than written. The Bb tubas are technically BBb (double-Bb) tubas.
Tenor tuba, Euphonium	bass or treble, sometimes tenor	Bb1-Bb4 in bass	Bb: a whole step lower in bass as a transposing instrument, a 9th lower in treble	This instrument should not be confused with the Bb Tenor Tuba (tuben) played by horn players. When writing for this instrument in bass clef, it is advisable to notate at concert pitch. Tenor clef may also be used. In orchestral works prior to the mid-20th century, the euphonium written in bass clef frequently employs B-flat transposition.
PERCUSSION	**Clef(s)**	**Written**	**Sounding**	
Timpani	bass	20": F3-C4 23": D3-A3 26-25": Bb2-F3 29-28": F2-C3 32-30": D2-A2		in some cases of older notation, timpani is written in C with the root pitch indicated (ex. Timpani in D)
Xylophone	treble	G4-C7	1 octave higher	

Marimba	treble, bass, or grand staff	(C2 to A2)-C7		some models of marimba have extended lower ranges
Glockenspiel	treble	G3-C6	2 octaves higher	when notes exceed the range of the instrument the effective transposition is 1 octave higher
Vibraphone	treble	F3-F6		
Chimes	treble	C4-F5		individual chimes may extend the range of a standard set of chimes
Guitar	treble	E3-E6	1 octave lower	
Harp	grand staff	Cb1-F#7		
KEYBOARD	**Clef(s)**	**Written**	**Sounding**	
Piano	grand staff	A0-C8		
Celesta	grand staff	C3-C7	1 octave higher	This instrument is sometimes refered to as the *Mustel celeste* in certain works of Tchaikowsky. Mustel was the original manufacturer.
Harpsichord	grand staff	F1-F6		
Harmonium	grand staff	F1-F6		
STRINGS	**Clef(s)**	**Written**	**Sounding**	
Violin	treble	G3-A7	no transposition, excepting scordatura	
Viola	alto, treble	C3-E6	no transposition, excepting scordatura	
Cello	bass, tenor, treble	C2-C6		
Double Bass	bass	C2-C5	1 octave lower	Double basses occasionally play in tenor or treble clefs(rare)

B. The Symphony Orchestra



Orchestra Seating

3. Rhythm: Beat, Meter, Accent / Syncopation and Tempo

A. Beat - regular pulsation that divides music into units of time

B. Meter - organization of beats into regular groups

i. duple meter **1** – 2

ii. triple meter **1** – 2 – 3

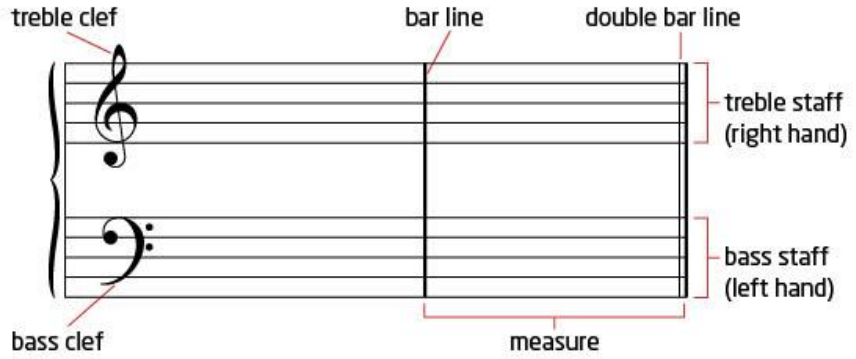
iii. quadruple meter **1** – 2 – **3** – 4

iv. sextuple meter **1** – 2 – 3 – **4** – 5 – 6

C. Accent / Syncopation - emphasis on a note / emphasis on a note that is on an unexpected beat

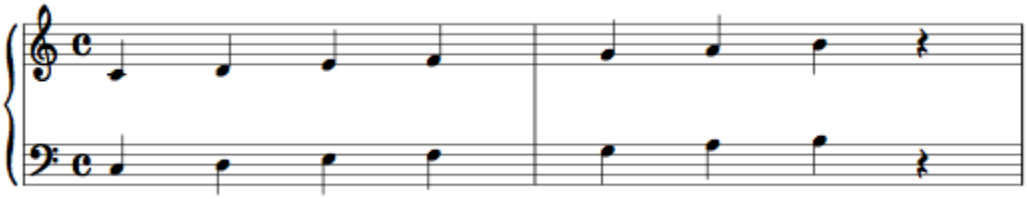
D. Tempo - the speed of the beat

Term	Meaning
largo	very slow
adagio	slow
andante	moderately slow
moderato	moderate
allegro	fast
presto	very fast
accelerando	becoming faster
ritardando	becoming slower

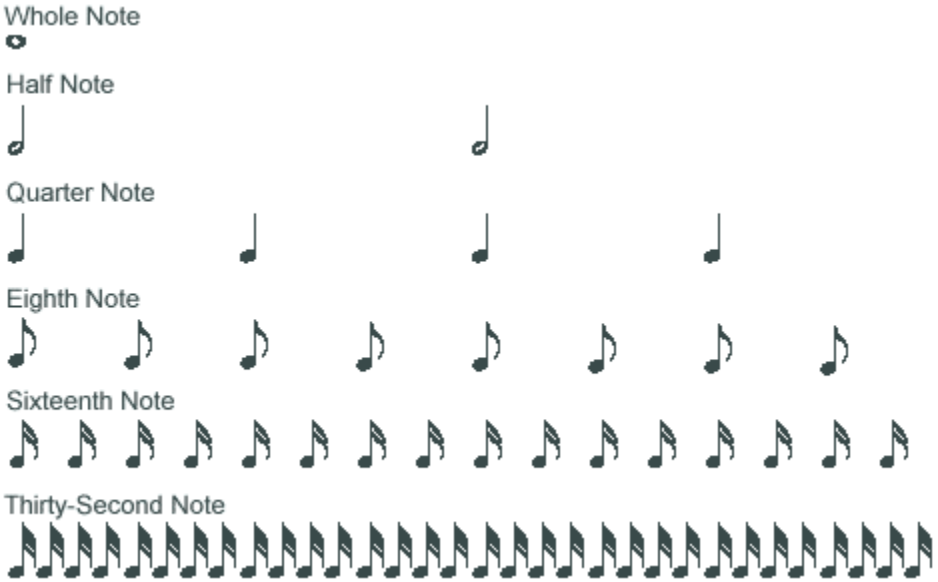


4. Music Notation - a system of writing music so that specific pitches and rhythms can be communicated

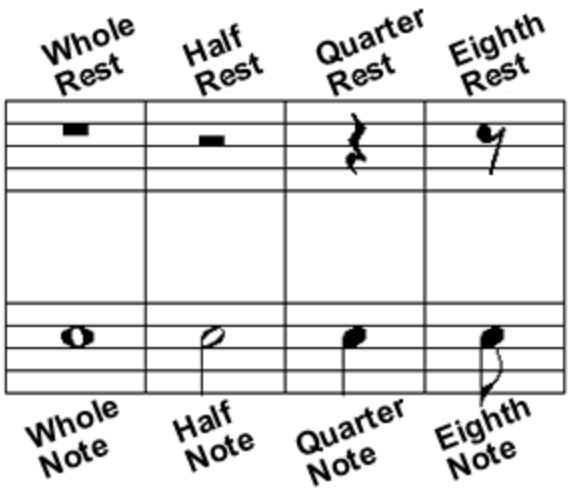
A. Notating Pitch note head, A-G, #/b's, clefs



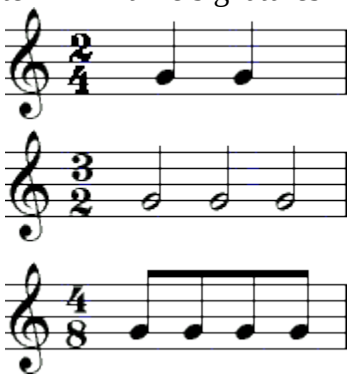
B. Notating Rhythm whole – 16th notes, dotted notes & triplets



C. Notating Rests whole – 16th notes



D. Notating Meter time signatures



5. Melody - a series of single notes that add up to a recognizable whole

Qualities of Melody:	Range	wide / narrow
	Length	long / short
	Register	high / low
	Direction	up / down
	Progression	step / skip

6. Harmony - the way chords are constructed and how they follow each other (progression)

A. Consonance & Dissonance stable & restful / unstable & tense

B. The Triad – alternate tones of a scale consisting of three tones

i. Tonic

ii Dominant

C. Broken Chords (Arpeggios) – individual tones of a chord sounded one after another

7. Key - a central tone which other tones gravitate toward

A. Tonic Key - the central key around which a the whole piece is organized

B. Modulation – the shift from one key to another in the same piece

8. Musical Texture – the number of different layers of sound heard at once

A. **Monophonic** – single, unaccompanied melodic line

VIDEO: http://www.youtube.com/watch?v=iIYCRqwHA94&feature=related (1:34)

B. **Polyphonic** – simultaneous performance of two or more melodic lines

VIDEO http://www.youtube.com/watch?v=6clTa8_QYQE (6:28)

C. **Homophonic** – one main melody accompanied by chords

VIDEO http://www.youtube.com/watch?v=IA7bY5GBQFw (3:31)

D. Change of Texture – a composition may contain different textures

Listening Outline: BIZET, *Faradole* from *L'Arlesienne* Suite No. 2 (1879)
CD#1/38 (3:08)
VIDEO http://www.youtube.com/watch?v=szGRG-6zcXE (3:13)

9. Musical Form – Organization of musical elements in time

A. Types of Musical Form

i. Three-Part (Ternary) Form: A B A

Listening Outline: TCHAIKOVSKY, *Dance of the Reed Pipes* from *Nutcracker* Suite
CD#1/43 (2:05)
VIDEO http://www.youtube.com/watch?v=dntCj0KWZs8 (2:27)

ii. Two-Part (Binary) Form: A B (or A A B, A B B or A A B B)

Listening Outline: BACH, Forlane from Suite No. 1 in C Major for Orchestra
CD#1/46 (1:07)
VIDEO http://www.youtube.com/watch?v=rnK-IlHwxRU (1:25)

10. Musical Style – characteristic way of treating the various musical elements

Middle Ages	(450 – 1450)
Renaissance	(1450 – 1600)
Baroque	(1600 – 1750)
Classical	(1750 – 1820)
Romantic	(1820 – 1900)
Twentieth Century to 1945	
1945 to present	

II CHAPTER II THE MIDDLE AGES AND RENAISSANCE

1. Music in the Middle Ages (450-1450)

-most medieval music is vocal, although it was accompanied by a variety of instruments.

-few manuscripts survive, but paintings allow us to see what instruments were used.

-Church frowned on instruments because of their background in pagan rituals.

a. Gregorian Chant – a monophonic melody set to a Latin text and sung without accompaniment.

Dominica in Albis – Alleluia (02-02)

b. Secular Music – Most music has not survived due to the lack of ability to notate it. The first abundant amount of secular music was composed by the *troubadours* and *trouveres*, French noble-musicians.

Troppo Perde 'l Tempo (02-03)

c. The Development of Polyphony: Organum

700-900: *Organum*: Gregorian chant with one or more additional melodic lines. These were at the 4^{th} or the 5^{th}.

900-1200: Chant becomes polyphonic with a melody added to the chant which was independent; differing in rhythm.

d. School of Notre Dame: Measured Rhythm – music received definite time values and a clearly defined meter.

e. Fourteenth-Century Music

1. The "New Art" (ars nova) in France – music was based on secular themes and syncopation became a common practice.
2. Guillaume de Machaut (c1300-1377) – wrote the *Notre Dame* Mass, the first polyphonic treatment of the mass ordinary.

Mass Ordinary – text that remains the same from day to day throughout the church year.

Kyrie	3 parts
Gloria	through composed
Credo	through composed
Sanctus	3 parts
Agnus Dei	3 parts

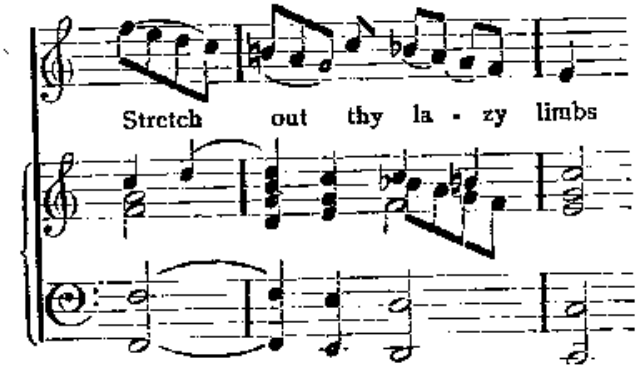
2. Music in the Renaissance (1450-1600)

- printing widened the circulation of music
- every educated person was expected to be trained in music
- musicians enjoyed higher status and pay than before.
- a large number of leading musicians came from the area of Flanders (Flemish).

a. Characteristics of Renaissance Music

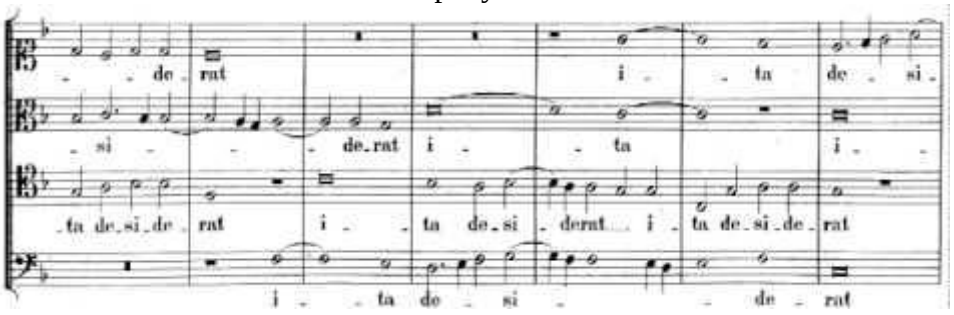
1. Words and Music – wrote music to enhance the meaning and emotion of the text.

Word painting – the musical representation of specific poetic images.



2. Texture – chiefly polyphonic.

- The "golden age" of unaccompanied music; ***a cappella***.
- Instruments were added to accompany to reinforce the vocal line.

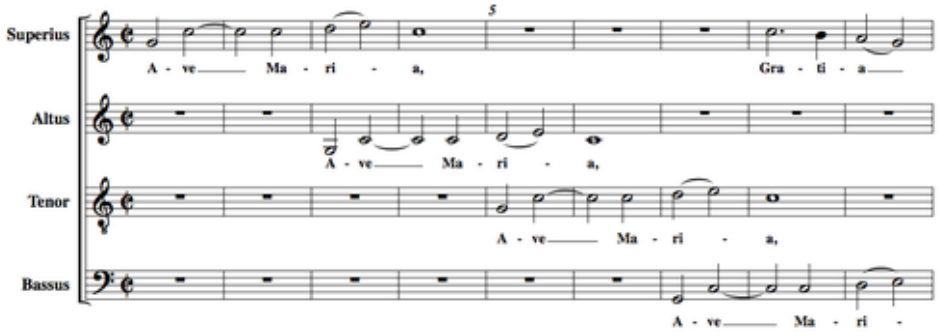


3. Rhythm & Melody – rhythm more gentle & melodies were easy to sing and in step-wise directions.

4. Dynamics – consistent

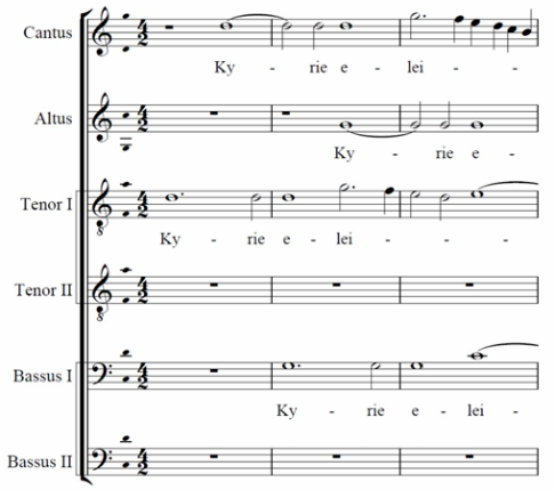
b. Sacred Music in the Renaissance – the 2 main forms of sacred music are:

Motet - a polyphonic choral work set to a sacred Latin text other than the ordinary of the mass.
1. Josquin Desprez (c1440-1521) and the Motet
Ave Maria...Virgo Serena (c1475) (02-08)



Mass - a polyphonic choral work set to the ordinary of the mass.
2. Giovanni Pierluigi Palestrina (c1525-1594) and the Mass
- important Italian composer, wrote in a clearer style that re-emphasized the text. (Council of Trent)
- e.g. *Pope Marcellus Mass* –

Kyrie – Palestrina (02-09)



c. Polychoral Style – Giovanni Gabrieli (Venice)
- 2 choirs in St. Mark's in Venice on opposite ends
- 1 choir might be brass & the second voice or any combination
Jubilate Deo – Gabrieli (02-10)
Score : http://wso.williams.edu/cpdl/sheet/gabg-jub.pdf

d. Secular Music in the Renaissance – became increasingly popular.
- Vocal Music

Madrigal – a secular piece for several solo voices set to a short poem. (Similar to the motet, combining homophonic and polyphonic textures but with an increase in word painting and unusual harmonies.)

April is in My Mistress' Face – Thomas Morley (02-11)
Fair Phyllis I Saw – John Farmer (02-12)
Weep O Mine Eyes – Bennet (02-13)

e. Instrumental Music – became increasingly emancipated from the vocal models, exploiting the capacities of individual instruments. Such instruments included the trumpet, shawm (oboe), lute, recorder and viols.

La, la, la, je ne l'ose dire – Instrumental (02-1?)

Lute Piece - Toccata No. 7 (02-18)

END