

Unit 11: Pitch Distance: Ideas

*Poets are like baseball pitchers. Both have their moments
The intervals are the tough things*

This quotation by the great American poet Robert Frost could apply to musicians as well as to poets or baseball pitchers. The two terms Pitch Distance and Musical Interval both refer to the aural distance between two pitches. On the viola and other string instruments they also refer to their physical or linear distance between two pitches. Learning to hear and perform them is an essential skill for any musician. Like intervals in baseball, they may also be tough things to learn.

Many music teachers recommend learning to associate pitch intervals with well-known melodies. Here is a short list of examples of ascending intervals with tune beginnings that could be used to learn the sound of some intervals. The intervals are produced by the underlined syllables in the tune title.

Perfect Unison (C C) “Hap - py Birthday”

Major Second (C D) “Fre-re Jacques” (“Are you sleeping?”)

Perfect Fourth (C F) “Here comes the bride”

Augmented Fourth (C F#) “Mar-ia” from Bernstein’s West Side Story

Major Sixth (C A) “My Bon-nie lies over the ocean”

If intervals are used for interval perception, each student should find a personal set of tunes to use for this purpose. This Chapter begins by learning the sound of intervals by associating the musical distance between two pitches with the physical or visual difference between two pitches.

The viola (or an other string instrument) is an effective instrument for the parallel development of the relationship between the visual sense and tactile sense of the fingers and the aural sense of pitch distance or pitch interval. This process may begin by learning three basic intervals:

Unison: the interval between two notes that have the same pitch and are played with the same finger.

Half Step or Minor Second: the interval between two “neighboring” fingers.

Whole step or Major Second: the interval is roughly twice the finger distance between the two fingers of the interval.

These descriptions are somewhat problematic because some people have thin fingers and others have thick fingers. However, once the violist has mastered the **sound** of half and whole steps, it should be easy to learn the **feel** of half and whole steps with the left hand fingers

Lesson 1: Diatonic Melodic Intervals in C major on One String in Position 3

Table 3A presents interval names beginning with the first note on middle C in position 5.

Table 3A
Ascending and Descending Intervals in Position 3

Ascending Intervals

Descending Intervals

Interval Name	Notes	Fingering	Interval Name	Notes	Fingering
Unison	C to C	G1 to G1	Unison	C to C	D4 to D4
Minor Second	C to Db	G1 to G2	Minor Second	C' to B	D4 to D3
Major Second	C to D	G1 to G2	Major Second	C' to Bb	D4 to D3
Minor Third	C to Eb	G1 to G3	Minor Third	C' to A	D4 to D2
Major Third	C to E	G1 to G3	Major Third	C' to Ab	D4 to D2
Perfect Fourth	C to F	G1 to G4	Perfect Fourth	C' to G	D4 to D1
Augmented Fourth	C to F#	G1 to G4	Augmented Fourth	C' to Gb	D4 to D1
Perfect Fifth	C to G	G1 to D1	Perfect Fifth	C' to F	D4 to G4
Minor Sixth	C to Ab	G1 to D2	Minor Sixth	C' to E	D4 to G3
Major Sixth	C to A	G1 to D2	Major Sixth	C' to Eb	D4 to G3

Minor Seventh	C to B\flat	G1 to D3	Minor Seventh	C' to D	D4 to G2
Major Seventh	C to B	G1 to D3	Major Seventh	C' to D\flat	D4 to G2
Perfect Octave	C to C	G1 to D4	Perfect Octave	C' to C	D4 to G1

Lesson 2: Diatonic Intervals in C Major on Two Strings (G and D) in Position 5

For perfect fifths on two strings, the player can use two different techniques.

1. Play the first note, then lift the finger and move it to the next string and then play the second note
2. Place the finger on both strings and just move the bow from one string to the other. This technique is somewhat more difficult (especially for violists with thin fingers) but it should be practiced because it can be more effective. Some violists flatten the finger slightly on the strings for this technique

In the following three lessons the student should transpose the patterns given in Lesson 3 to other positions and other strings

Lesson 3: Diatonic Intervals in C Major on Two Strings (C and G) in Position 0

Lesson 4: Diatonic Intervals in C Major on one string (G and D) in Position 0

Lesson 5. Diatonic Intervals in C Major on two strings (D and A) in Position 0

The following abbreviations are used in Lessons 6 through 9.

P1 = Perfect Unison,

m2 = Minor Second, M2 = Major Second,

m3 = Minor Third, M3 = Major Third,

P4 = Perfect Fourth, A4 = Augmented Fourth,

TT = (Tritone) Augmented Fourth or Diminished Fifth

P5 = Perfect Fifth, d5 = Diminished Fifth,

m6 = Minor Sixth, M6 = Major Sixth
m7 = Minor Seventh, M7 = Major Seventh
P8 = Perfect Octave

Lesson 6: Chromatic Intervals from P1 to P8 on one string, ascending and descending.

Lesson 7: Chromatic Intervals from P1 to P8 on two strings, ascending and descending

Lesson 8: Other Ascending Chromatic Intervals in Position 5.
For descending intervals read each measure in reverse order

Lesson 9: Ascending Compound Intervals in Position 0.

Compound intervals are intervals larger than a perfect octave. The following abbreviations are used for compound intervals
P8 (Perfect octave, usually not considered as a compound interval)
m9 (minor ninth), M9 (Major ninth),
m10 (minor tenth), M10 (Major tenth)
P11 (Perfect eleventh), A11, (Augmented eleventh)
D12 (diminished twelfth), P12 (Perfect twelfth)
m13, (minor thirteenth), M12 Major thirteenth)
m14 (minor fourteenth), M14 (Major fourteenth)
P15 (Perfect fifteenth)

For descending intervals, read each measure in reverse order.

Lesson 10: Harmonic Intervals for Study and Performance

This is a challenging lesson in what are called “harmonic intervals” or “double stops” -- a series of two-note intervals written one above the other to show that they are played at the same time with the bow touching both strings.

Students may find it easier to first play the notes separately – sounding the lower note first and then sounding the second note of each double

stop. After they have gained some proficiency they can play the notes as written. We will be encountering double stops in several exercises in **Unit 3: Advanced**. Lesson 10 may be regarded as an advanced peek at this type of exercise.

Lesson 11: Melodic Intervals In Tune Excerpts

Listen to each tune several times. Play each tune several times. Identify each interval of each tune in order. Then skip from tune to tune and play or identify intervals at random. The tunes may be familiar to many violists. Here is a list of these tunes with the bar on which they begin.

Bar 520 "Happy Birthday," Bar 526 "Blue Danube Waltz,
Bar 530 "Somewhere over the Rainbow, Bar 539 Maria (from West Side Story)

Lesson 12: Your Tune Excerpts and Intervals

This is your chance to write tunes you know, identify the intervals, and then use these to help you develop your pitch distance memory.