

## Learn Intervals and Use Them

The importance of knowing intervals and applying them to all aspects of piano technique cannot be overstated. A knowledge of intervals facilitates fingering, promotes a knowledge of the keyboard (visual and tactile), fosters aural awareness, and aids memorization. Once the player understands the keyboard through an awareness of intervals, he or she will begin to apply this awareness to technical approaches and solutions, and recognize melodic and harmonic patterns that appear in music.

A knowledge of intervals provides insight into practical fingering possibilities. For example, *thirds* (major and minor) often use 1 and 3, 2 and 4, or 3 and 5. After becoming familiar with the *perfect fourth*, the pianist will often make a connection between it and the typical fingering for it: usually 1 and 4, or 2 and 5. Other interval note pairs will produce similar connections to the fingers that are often used. In the beginning, for example, most students come to recognize what might be considered the most important interval on the piano: the octave. As a result, the player makes a connection between the octave and its typical fingering: 1 and 5 for a white key octave, and 1 and 4 for a black key octave. Moreover, before students gain a comfortable reading of the ledger line notes below the bass clef, once they understand how frequently octaves are played in the left hand, they grow comfortable at making assumptions about a note that might not be immediately recognized given its distance from one that is.

Take the time to notice, for example, the way that all of the major thirds appear in their white key/black key relationship. The major thirds of C to E, F to A, and G to B are the only three white key to white key major thirds. G flat to B flat is the only major third comprised of two black keys. A to C sharp, B to D sharp, D to F sharp, and E to G sharp are the four major thirds that have a white key on the bottom, and a black key on the top. Finally, the major thirds of A flat to C, B flat to D, D flat to F, and E flat to G have the black key on the bottom, and the white key on top. Once you have learned an interval, apply it to all of its possible manifestations of it on the keyboard. Moreover, notice the interval (along with as many others as possible) when they appear in pieces you are playing.

An awareness of the way that intervals appear in notation enhances one's music reading ability. Learn to recognize the line/space relationship of all of the simple intervals (intervals of an octave or less). Notice, for example, that all *seconds* involve two notes that move from a space to the very next line or from a line to the very next space. All *thirds* consist of two notes that occupy two adjacent spaces, or two adjacent lines. All *fourths* involve two notes that move from a space to a line (or a line to a space), while skipping a line and a space. All *fifths* move from a space to a space (or a line to a line), skipping a space (or a line). All *sixths* involve two notes that move from a space to a line (or a line to a space), while skipping two lines and two spaces. All *sevenths* move from a space to a space (or a line to a line), skipping two spaces (or two lines). Finally, *octaves* embody two notes that move from a space to a line (or a line to a space), while skipping three spaces and three lines. The visual note relationship on the staff for each of these intervals is shown below:

The image displays musical notation for various intervals on a single staff. The intervals are labeled above the staff: Seconds, Thirds, Fourths, Fifths, Sixths, Sevenths, and Octaves. Each interval is represented by two notes on the staff, with a double bar line separating each example. The notes are placed on lines and spaces to illustrate the interval's structure.

Interval	Notes (Line/Space)
Seconds	C2 (Space 1) - D2 (Line 1), D2 (Line 1) - E2 (Space 1), E2 (Space 1) - F2 (Line 1), F2 (Line 1) - G2 (Space 1), G2 (Space 1) - A2 (Line 1), A2 (Line 1) - B2 (Space 1), B2 (Space 1) - C3 (Line 2)
Thirds	C2 (Space 1) - D3 (Line 2), D3 (Line 2) - E3 (Space 2), E3 (Space 2) - F3 (Line 2), F3 (Line 2) - G3 (Space 2), G3 (Space 2) - A3 (Line 2), A3 (Line 2) - B3 (Space 2), B3 (Space 2) - C4 (Line 3)
Fourths	C2 (Space 1) - F3 (Line 2), D3 (Line 2) - G3 (Space 2), E3 (Space 2) - A3 (Line 2), F3 (Line 2) - B3 (Space 2), G3 (Space 2) - C4 (Line 3), A3 (Line 2) - D4 (Space 3), B3 (Space 2) - E4 (Line 3), C4 (Line 3) - F4 (Space 3)
Fifths	C2 (Space 1) - G3 (Space 2), D3 (Line 2) - A3 (Line 2), E3 (Space 2) - B3 (Space 2), F3 (Line 2) - C4 (Line 3), G3 (Space 2) - D4 (Space 3), A3 (Line 2) - E4 (Line 3), B3 (Space 2) - F4 (Space 3), C4 (Line 3) - G4 (Space 3)
Sixths	C2 (Space 1) - A3 (Line 2), D3 (Line 2) - B3 (Space 2), E3 (Space 2) - C4 (Line 3), F3 (Line 2) - D4 (Space 3), G3 (Space 2) - E4 (Line 3), A3 (Line 2) - F4 (Space 3), B3 (Space 2) - G4 (Space 3), C4 (Line 3) - A4 (Space 3)
Sevenths	C2 (Space 1) - B3 (Space 2), D3 (Line 2) - C4 (Line 3), E3 (Space 2) - D4 (Space 3), F3 (Line 2) - E4 (Line 3), G3 (Space 2) - F4 (Space 3), A3 (Line 2) - G4 (Space 3), B3 (Space 2) - A4 (Space 3), C4 (Line 3) - B4 (Space 3)
Octaves	C2 (Space 1) - C3 (Line 2), D2 (Line 1) - D3 (Line 2), E2 (Space 1) - E3 (Space 2), F2 (Line 1) - F3 (Line 2), G2 (Space 1) - G3 (Space 2), A2 (Line 1) - A3 (Line 2), B2 (Space 1) - B3 (Space 2), C3 (Line 2) - C4 (Line 3), D3 (Line 2) - D4 (Space 3), E3 (Space 2) - E4 (Line 3), F3 (Line 2) - F4 (Space 3), G3 (Space 2) - G4 (Space 3), A3 (Line 2) - A4 (Space 3), B3 (Space 2) - B4 (Space 3), C4 (Line 3) - C5 (Line 4)

With awareness and practice, the player becomes proficient at translating notational relationships into keyboard distances, patterns, and fingerings.

As your knowledge of intervals grows, become aware of the intervals that are embedded in common chords: triads (major, minor, diminished, and augmented) and seventh chords: (major seventh, dominant seventh, minor seventh, and diminished seventh). Be proactive in translating these chords (as interval relationships) into keyboard relationships. There are, of course, many other chords that have interval structures to become familiar with. Begin, however, with those that are most likely to show up in the style of music that you are playing.