

# Ledger Lines and the Grand Staff

This system of musical notation is a rather adaptable, open-ended system in order to notate music for any instruments or voices, in a variety of styles. Obviously there are more pitches than are indicated on the bass and treble clefs. To indicate pitches above or below the clefs, Ledger Lines are used. These lines (shown below) merely extend the clef, adding extra lines and spaces. Notice that the musical alphabet continues in consecutive order - - backwards if pitch is descending and forwards if pitch is ascending - - assigning a letter name to each line and space. It is possible to indicate any pitch using the bass and treble staves and ledger lines.

A musical staff with a treble clef. The notes are: G4 (first space), F4 (first space), E4 (first space), D4 (first space), C4 (first space), B3 (first space), A3 (first space), G3 (first space), F5 (second space), G5 (second space), A5 (second space), B5 (second space), C6 (second space), D6 (second space), E6 (second space), and F6 (second space). Ledger lines are shown below the staff for notes A3, G3, and F5.

G4 F4 E4 D4 C4 B3 A3 G3 F5 G5 A5 B5 C6 D6 E6 F6

Notice the octave designation (the number following the pitch name) changes at C, not at the beginning of the alphabet with A. Also, a pitch can be indicated using either clef.

A musical staff with a bass clef. The notes are: F3 (first space), G3 (first space), A3 (first space), B3 (first space), C4 (first space), D4 (first space), E4 (first space), F4 (first space), G2 (second space), F2 (second space), E2 (second space), D2 (second space), C2 (second space), B1 (second space), A1 (second space), and G1 (second space). Ledger lines are shown above the staff for notes G2, F2, E2, D2, C2, B1, and A1.

F3 G3 A3 B3 C4 D4 E4 F4 G2 F2 E2 D2 C2 B1 A1 G1

The piano has a large number of notes. Therefore, it uses both a treble and a bass staff simultaneously. These two staves are then bracketed together and called a Grand Staff. Below are notated the different octaves (and with the use of ledger lines there are many more) as they appear on the grand staff. C4 or Middle C can be notated on the ledger line below the treble staff or the ledger line above the bass staff.

A grand staff consisting of a treble clef staff and a bass clef staff. The notes are: C4 (first space of treble staff), C5 (first space of treble staff), C6 (first space of treble staff), C4 (first space of bass staff), C3 (second space of bass staff), and C2 (second space of bass staff). Ledger lines are shown above the treble staff for C5 and C6, and below the bass staff for C4 and C2.

C4 C5 C6 C4 C3 C2