

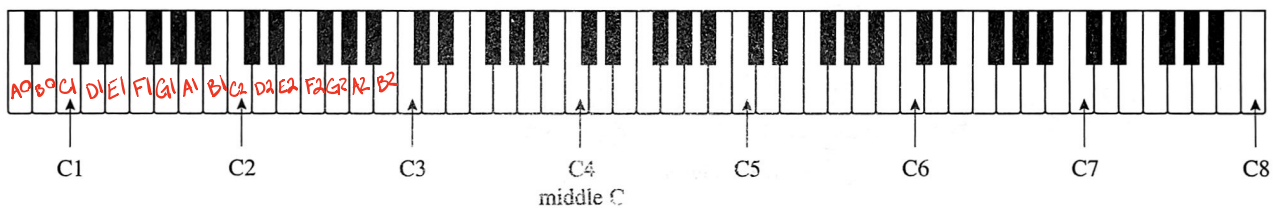
# Chapter One

## Elements of Pitch

### The Keyboard and Octave Registers

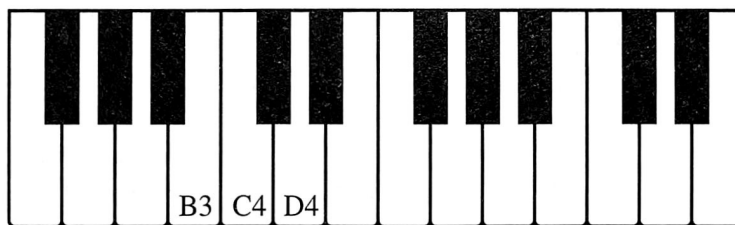
**Pitch** in music refers to the highness or lowness of a sound. Pitches are named by using the first seven letters of the alphabet: A, B, C, D, E, F, and G. We will approach the notation of pitch by relating this pitch alphabet to the keyboard, using Cs as an example. The C nearest the middle of the keyboard is called middle C, or C4. Higher Cs (moving toward the right on the keyboard) are named C5, C6, and so on. Lower Cs (moving toward the left) are named C3, C2, and C1. Notes below C1 are followed by a 0, as in B0. All the Cs on the piano are labeled in Example 1-1.

#### Example 1-1



From any C up to or down to the next C is called an **octave**. All the pitches from one C up to, but not including, the next C are said to be in the same **octave register**. As Example 1-2 illustrates, the white key above C4 is named D4 because it is in the same octave register, but the white key below C4 is named B3.

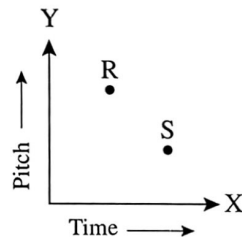
#### Example 1-2



## Notation on the Staff

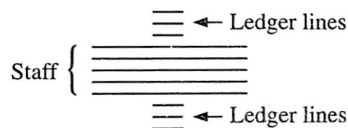
Our system of musical notation is similar to a graph in which time is indicated on the X axis and pitch is shown on the Y axis. In Example 1-3, R occurs before S in time and is higher than S in pitch.

### Example 1-3



A **staff** is used in music to indicate the precise pitch desired. A staff consists of five lines and four spaces, but it may be extended indefinitely through the use of **ledger lines** (Ex. 1-4).

### Example 1-4



A **clef** must appear at the beginning of the staff in order to indicate which pitches are to be associated with which lines and spaces. The three clefs commonly used today are shown in Example 1-5, and the position of C4 in each is illustrated. Notice that the C clef appears in either of two positions.

### Example 1-5

Generic name: G clef	F clef	C clef	C clef
Specific name: Treble clef	Bass clef	Alto clef	Tenor clef

Four musical staves are shown, each with a different clef. The first staff has a Treble clef (G clef) with a red box around it and a red 'C4' below it. The second staff has a Bass clef (F clef) with a blue box around it and a blue 'C4' below it. The third staff has an Alto clef (C clef) with a green box around it and a green 'C4' below it. The fourth staff has a Tenor clef (C clef) with a purple box around it and a purple 'C4' below it. Each staff has a scale of notes (A-G-A-B-A-G) written on it, with the C4 note highlighted in the respective color of the clef's box.

The clefs in Example 1-5 are shown in the positions that are in common use today, but you may occasionally find them placed differently on the staff in some editions. Wherever they appear, the design of the G clef circles G4, the dots of the F clef surround F3, and the C clef is centered on C4.

The **grand staff** is a combination of two staves joined by a brace, with the top and bottom staves using treble and bass clefs, respectively. Various pitches are notated and labeled on the grand staff in Example 1-6. Pay special attention to the way in which the

ledger lines are used on the grand staff. For instance, the notes C4 and A3 appear twice in Example 1-6, once in relation to the top staff and once in relation to the bottom staff.

**Example 1-6**

Musical notation for Example 1-6. The top staff (treble clef) contains notes F4, C4, E5, and A3. The bottom staff (bass clef) contains notes C4, F2, A3, and E4. The notes C4 and A3 are positioned on the same line in both staves, illustrating ledger lines.

**Self-Test 1-1**

(Answers begin on page 601.)

- A. Name the pitches in the blanks provided, using the correct octave register designations.

Piano keyboard diagram with handwritten pitch names and octave numbers for specific keys:

- Key 1: C1
- Key 2: E2
- Key 3: F3
- Key 4: B1
- Key 5: A5
- Key 6: G6
- Key 7: D7

- B. Notate the indicated pitches on the staff in the correct octave.

Musical notation for Self-Test 1-1 B. The top staff (treble clef) contains notes F4, B5, A4, A3, G2, D4, C4, G3, B4, C4, D3, F4. The bottom staff (bass clef) contains notes E4, A2, F3, C6, B3, G4, B2, E5, D3, C4, B1, G3, D5, F2, D4. Red dots indicate the positions of the notes on the staff.

Exercise 1-1 See Workbook.