

### Section 1.1

## STAVES AND CLEFS

### Elements of music

The fundamental elements of music are **pitch** (the highness/lowness of the notes), **duration** (how long the notes last), **timbre** (overall type of sound such as trumpet versus clarinet), and **dynamics/loudness**. Some authors add **frequency** (the speed of the physical vibration making the sound) and **texture** (see 5.1 Texture in Music).

### Staff

A **staff** (plural: **staves**) uses five parallel lines to notate (write down) the pitch aspect of music. Higher-pitched notes are written higher on the staff.

### Note names

Staff lines are numbered **1 to 5**, starting from the **bottom** line. **Note names** from low to high are the letters A, B, C, D, E, F, G, then repeating A, B, C...

### Clef Treble clef

A **clef** indicates which note names go on which lines (and spaces between the lines) on the staff. Clefs are written at the start of the staff. **Treble clef** designates the **second** line from the bottom as **G**. The lines in treble clef represent the pitches E, G, B, D, and F. The spaces are F, A, C, and E.

Diagram illustrating the treble clef staff. The staff is labeled "staff" and "treble clef". The notes are G, A, B, C, D, E, F, G. The lines are labeled "line 5" and "line 1".

Every **G**ood **B**oy **D**oes **F**ine      **F**-**A**-**C**-**E** spells **f**ace

lines: E G B D F      spaces: D F A C E G

### Bass clef

**Bass clef** designates the **fourth** line from the bottom as **F**. The lines in bass clef represent the pitches G, B, D, F, and A. The spaces are A, C, E, and G.

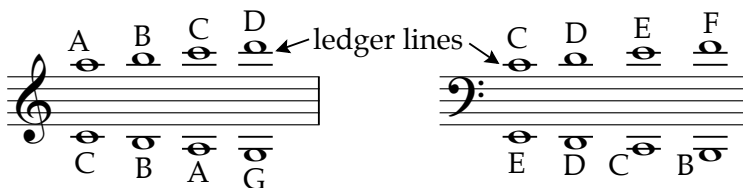
Diagram illustrating the bass clef staff. The staff is labeled "staff" and "bass clef". The notes are F, G, A, B, C, D, E, F, G, A, B.

Good **B**oys **D**o **F**ine **A**lways      All **C**ars **E**at **G**as  
All **C**ows **E**at **G**rass

lines: G B D F A      spaces: F A C E G B

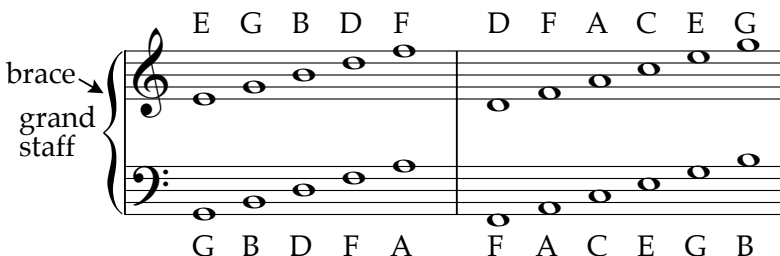
**Ledger lines**

**Ledger lines** are small lines that extend the staff higher and lower. They can be used with any clef. Ledger lines belong to a single note; they never connect to ledger lines for surrounding notes.



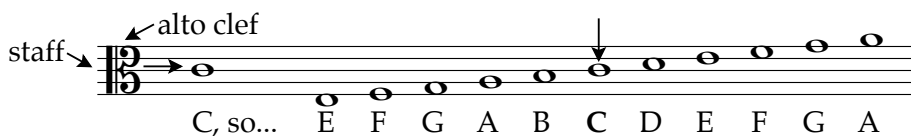
**Grand staff**

A **grand staff** is a treble clef staff and bass clef staff connected with a **brace**. Piano music uses a grand staff, along with instruments such as harp and marimba. Sometimes vocal (choir) music is also notated using a grand staff.



**C clefs**  
**Alto clef**

All **C clefs** indicate where C is on the staff. **Alto clef** is a C clef centered on the **third line** from the bottom, designating it as C. Parts for the viola (a string instrument in the violin family) almost always use alto clef.



**Tenor Clef**

**Tenor clef** is a C clef centered on the **fourth line** from the bottom, designating it as C. Bassoon and trombone music occasionally uses tenor clef, although both instruments more commonly read bass clef.

