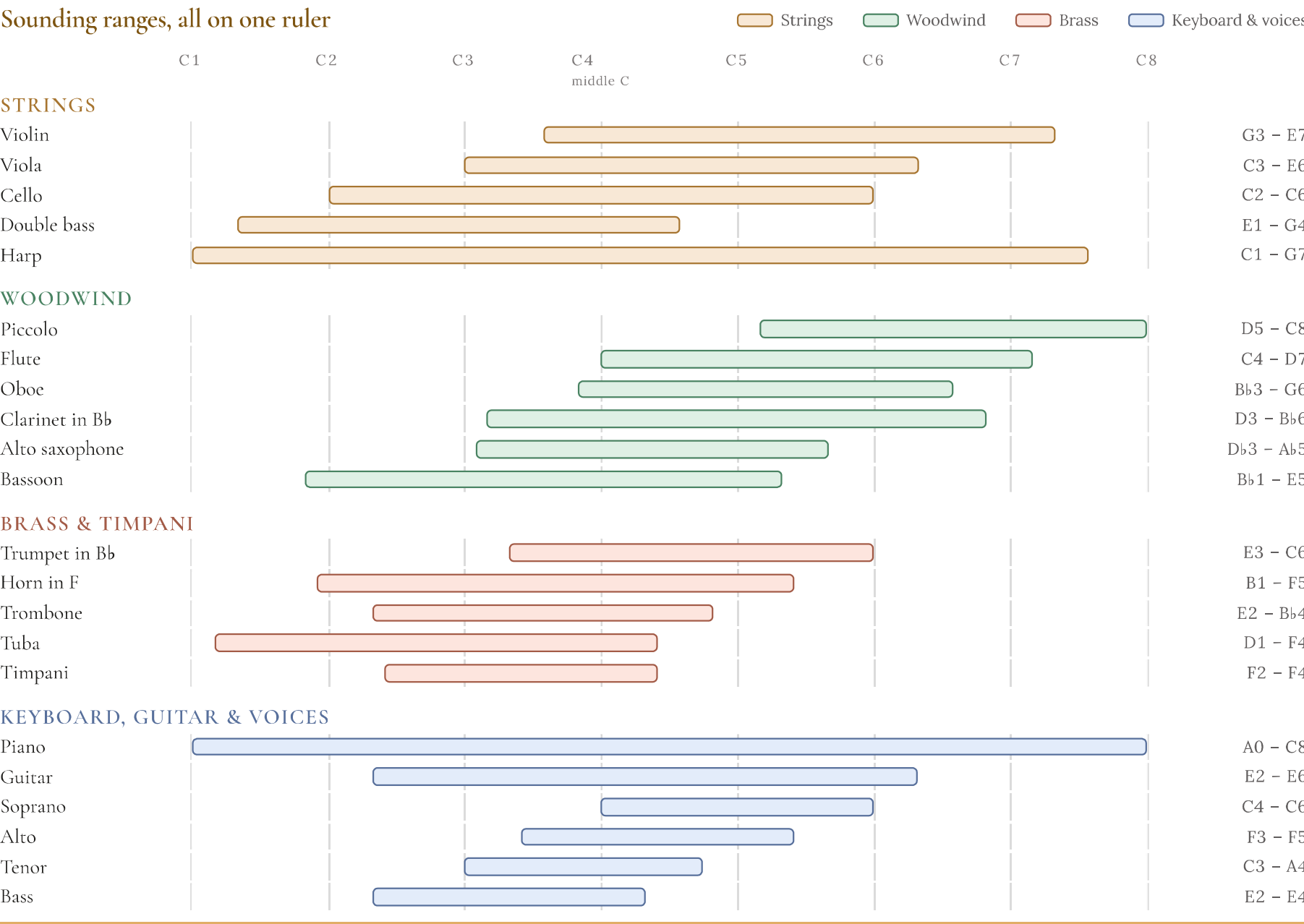


Instrument Ranges

Every instrument has a floor and a ceiling. Write below the floor and nothing sounds; write near the ceiling and a beginner will struggle. The bars below are drawn to one shared pitch ruler — seven octaves from low C to high C — so you can see at a glance who overlaps with whom, where the middle of the orchestra is crowded, and which lines only the bass instruments can carry.

Sounding ranges, all on one ruler



Transposing instruments What you write is not always what you hear

INSTRUMENT	WRITTEN C SOUNDS	TO GO FROM SOUNDING TO WRITTEN	WHY IT EXISTS
Clarinet in Bb · Trumpet in Bb	Bb below	Up a major 2nd	One fingering serves a whole family of differently-sized instruments
Horn in F · Cor anglais	F below	Up a perfect 5th	Inherited from the natural horn, before valves
Alto saxophone in Eb	Eb below	Up a major 6th	A player can move between saxophones without relearning
Tenor saxophone · Tenor voice	An octave below	Up an octave	Keeps the part on one staff instead of ledger lines
Double bass · Guitar · Piccolo	An octave away	Octave transposition only	The written notes stay near the staff and stay readable

Writing for real players Four habits that make a part playable

Live in the middle

The middle two-thirds of any range is the safe, full-toned part. Extremes are for a single effect, not for a whole melody.

Let wind players breathe

Anything blown needs air. Break the line every four bars or so; a rest is not a gap in the music, it is the reason the next phrase sounds alive.

Check the clef

Viola reads alto; cello, bassoon and trombone rise into tenor clef. Writing everything on ledger lines makes a part slow to read.

Score from the top down

Woodwind, brass, percussion, keyboard and harp, then strings at the foot — the standard order every player expects to find.