

Major Scale Formula

Music Theory Foundations — Quick Reference

Every major scale — in any key — follows exactly the same pattern of tones (T) and semitones (S). Once you know the formula, you can build a major scale starting on any note.



The Formula

T – T – S – T – T – T – S

Starting on C: C to D (T), D to E (T), E to F (S), F to G (T), G to A (T), A to B (T), B to C (S) — the white notes of the piano, with no sharps or flats needed.

Using the Formula in Other Keys

- Start on any note and apply the same T–T–S–T–T–T–S pattern.
- Where the formula calls for a tone but the natural note is only a semitone away, add a sharp or flat to correct it — this is exactly how key signatures are built.
- The semitones always fall between scale degrees 3–4 and 7–8, in every major key without exception.

Key Rules to Remember

- The pattern T–T–S–T–T–T–S never changes, no matter which note you start on.
- A major scale always uses each of the 7 letter names exactly once before repeating the tonic an octave higher.
- If you know a key's key signature, you already know its scale — just apply the sharps or flats as you play up the letter names.