

Chromatic Modulation Challenge

Chromatic sequences and modulation

Game by Frank Nawrot, 2025

REQUIRED MATERIALS

- Printed modulation challenges (or a projected slide/list)
- Scratch paper or staff paper
- Pencil & eraser

Optional: A copy of the rules for each group

DESCRIPTION

This fast-paced game requires students to actively engage with chromatic sequences and modulation. Working in small groups, students must compete to find a harmonic sequence that uses the fewest number of chords to get from the tonic of one key to the dominant of another.

STEP-BY-STEP INSTRUCTIONS

1. Divide the class into small groups.
2. **Distribute or Display Challenges:** Share the list of modulation challenges (see below). Each team works on the same challenge simultaneously.
3. For each modulation challenge, the goal is to get from the tonic of a starting key to the dominant of a target key in as few chords as possible using a chromatic harmonic sequence, notated on a staff in root position with chord symbols. What this boils down to is selecting a model (the basis for and first iteration of the sequence) that results in fewer chords than other students within a three-minute timeframe. Progressions must meet the following criteria:
 - a. Starts on the tonic of the *starting key*
 - b. Ends on the *dominant* of the *target key*
 - c. Models must be 1 or 2 intervals long (e.g., $\downarrow m2$, $\uparrow M2$ or $\downarrow P5$, etc.). Models which are only 1 interval in length must use intervals larger than a 2nd.
 - d. Includes at least one repetition of the chosen model
 - i. For example, if modulating from $C \rightarrow B$, a model of ascending augmented fourths ($C \rightarrow F\sharp$) would immediately land you on the dominant of B, which is not allowed because your sequence must contain two or more iterations of the model.
 - e. The progression may end at *any* point if the dominant of the target key is reached and all criteria are met.

Note:

Chords may be of any quality.

Enharmonic respellings are allowed.

4. Do an example challenge as a class:

C (starting key) → F# (target key)

Example solution:

A sequence in which the model is: ↑P4, ↓m2 (ascending perfect fourth, descending minor second)

C - F - E - A - G# - C#

The musical notation shows a sequence of six chords on a treble clef staff in 4/4 time. The chords are: C (labeled 'I' below), F, E, A, G# (labeled 'F#: V' below), and C# (labeled 'F#: V' below). The notes for each chord are: C (C4), F (F4), E (E4), A (A4), G# (G#4), and C# (C#5). The progression follows the model: C to F is an ascending perfect fourth (↑P4), and F to E is a descending minor second (↓m2).

C# is the dominant of F#, so this is the end of the progression and *one* possible solution.

5. **Set the Timer:** Teams have up to **three minutes per modulation** to compose a progression that follows the pertinent criteria.
6. **Check With Instructor:** When a group believes they've found a valid solution, they may announce it to the class. If another team believes they've found a valid solution that has **fewer** chords, they may challenge the other team. The instructor checks for accuracy, awarding a point to the team who first puts forth the shortest valid progression for a given challenge.
7. If a point is awarded, players move on to the next challenge, repeating steps 5 and 6. If no team composes a sequence which meets the game's criteria after three minutes, players will move on to the next challenge.
8. Each correct sequence earns a point. The team with the most points at the end of the game wins.

Modulation Challenges

Each challenge requires modulating from the tonic of the first key to the dominant of the target key:

- $C\sharp \rightarrow A$
- $F\sharp \rightarrow E$
- $G\sharp \rightarrow B\flat$
- $D\flat \rightarrow C$
- $E\flat \rightarrow B$
- $D \rightarrow B\flat$
- $D\flat \rightarrow E\flat$

CONSIDERATIONS

- Encourage students to sketch out root motion paths before voicing chords. Finding viable solutions may require a simple “brute force” method in which students arbitrarily pick a model and begin applying it to the tonic of the starting key. For example, in the first challenge ($C\sharp \rightarrow A$), a student could decide to use $\uparrow P4, \downarrow M2$ (ascending perfect fourth, descending major second) as their model. They would immediately discover that this may be a poor choice of model because the dominant of the target key (E) is reached after a single time through the model: $C\sharp - F\sharp - E$. Because you need at least two instances of the model before reaching the dominant of the target key, this model would take far too many repetitions to be viable.
- If time allows, instructors should take some time to play/sing through some of the written sequences to marry the analytical domain with the musical. This also gives the instructor a chance to play around with adding chordal 7ths and experimenting with changing chord qualities—collaborating with students to make something that *sounds* good and/or interesting.
- Instructors could expand this activity by picking a sequence and writing it out using smooth voice-leading. For example, the voicing from the example in Step 4 could be changed to this:

