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**Another ABC Presentation**

# American Band College





*ABC's*  
of the  
Overtone Series



# Overtone Series

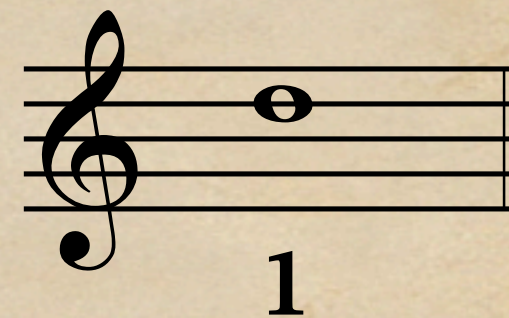
PITCH TENDENCY (PARTIALS + VALVES)



# Overtone Series

## Pitch Tendencies (partials + valves)

Trumpet



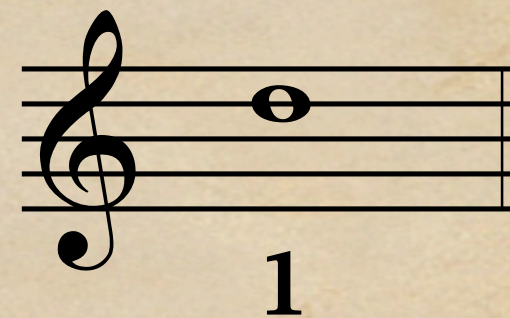
OPEN 2 1 12 or 3 23 13 #123



# Overtone Series

## Pitch Tendencies (partials + valves)

Trumpet



5, 10 = Flat

5th partials = flat  
valves = ok

overall pitch = flat

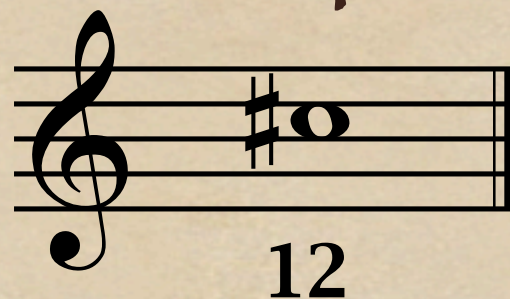
OPEN 2 1 12 or 3 23 13 #123



# Overtone Series

## Pitch Tendencies (partials + valves)

Trumpet



A diagram illustrating the overtone series for the trumpet, showing the relationship between the fundamental pitch and its overtones across seven measures. The notes are arranged in a grand staff (treble and bass clefs). The notes are labeled with numbers 1 through 13, indicating the partials. The notes are grouped by valve combinations: OPEN, 2, 1, 12, 23, 13, and 123. The notes are color-coded: red for the fundamental (1) and the 12th partial (12), green for the 5th partial (5), and blue for the 4th partial (4). The notes are labeled with their corresponding partial numbers: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13. The notes are grouped by valve combinations: OPEN, 2, 1, 12, 23, 13, and 123. The notes are color-coded: red for the fundamental (1) and the 12th partial (12), green for the 5th partial (5), and blue for the 4th partial (4). The notes are labeled with their corresponding partial numbers: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13. The notes are grouped by valve combinations: OPEN, 2, 1, 12, 23, 13, and 123.

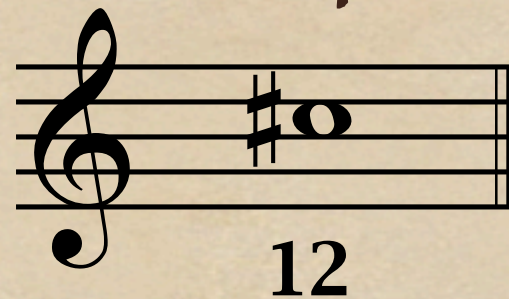
Diagram illustrating the overtone series for the trumpet, showing the relationship between the fundamental pitch and its overtones across seven measures. The notes are arranged in a grand staff (treble and bass clefs). The notes are labeled with numbers 1 through 13, indicating the partials. The notes are grouped by valve combinations: OPEN, 2, 1, 12, 23, 13, and 123. The notes are color-coded: red for the fundamental (1) and the 12th partial (12), green for the 5th partial (5), and blue for the 4th partial (4). The notes are labeled with their corresponding partial numbers: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13. The notes are grouped by valve combinations: OPEN, 2, 1, 12, 23, 13, and 123.



# Overtone Series

## Pitch Tendencies (partials + valves)

Trumpet



5, 10 = Flat

5th partial = flat

12 valve combo = #

Overall pitch = ok

A diagram of the trumpet overtone series. It consists of a grand staff with a treble clef and a bass clef. The treble staff contains seven groups of notes, each with a key signature (sharps or flats) and a set of notes. The bass staff contains seven single notes. Below the bass staff are labels for each group: OPEN, 2, 1, 12 or 3, 23, 13, and 123. A blue arrow points from the '5, 10 = Flat' text to the 12th partial note in the 12 or 3 group. A green arrow points to the 5th partial note in the same group. The 12th partial note is highlighted with a red box.

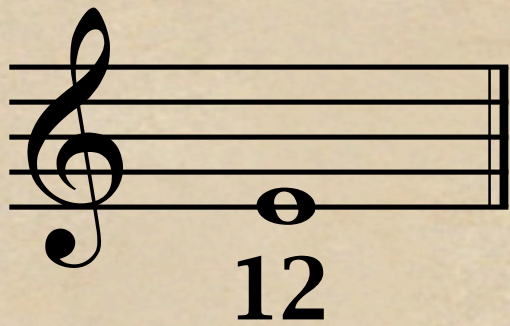
OPEN 2 1 12 or 3 23 13 123



# Overtone Series

## Pitch Tendencies (partials + valves)

Trumpet



3rd partials = 

valves = #

overall pitch =  $\Delta \#$

3, 6, 12 = Sharp

Musical notation for the first six frets of a guitar string. The notation shows the fret number and the fingerings for each fret:

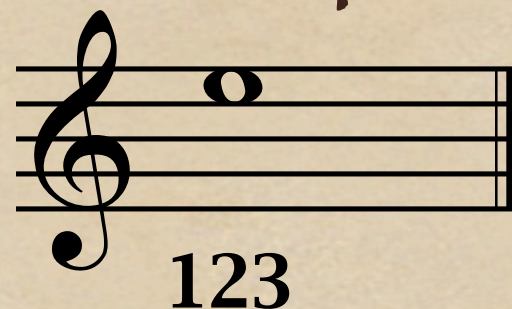
- OPEN
- 2
- 1
- 12 or 3
- 23
- 13
- #123



# Overtone Series

## Pitch Tendencies (partials + valves)

Trumpet



7th Partial Usage

A musical staff in treble clef showing the overtone series of the trumpet. The staff is divided into seven measures, each representing a different valve combination. The notes are grouped into pairs, with the first note of each pair being a half note and the second being a quarter note. The notes are labeled with numbers 1 through 7, indicating their position in the overtone series. The first measure is labeled "OPEN" and the subsequent measures are labeled with valve combinations: 2, 1, 12 or 3, 23, 13, and 123. A green arrow points to the 7th partial of the 123 valve combination.

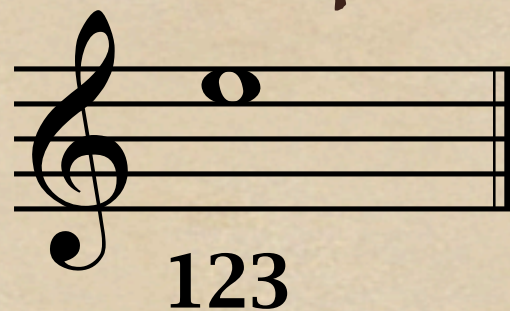
OPEN 2 1 12 or 3 23 13 123



# Overtone Series

## Pitch Tendencies (partials + valves)

Trumpet



7th Partial Usage

7, 14 = Very Flat

7th partial = very flat

123 valve combo = v. sharp

Overall pitch = ok

OPEN      2      1      12 or 3      23      13      123

6  
5  
4  
3  
2  
1