## **B**<sup>b</sup> Trumpet Fingering Chart

E

(Notes on gray background are pedal tones -- younger players should use 1,2 3 for all pedal tones.) С C₿ Do D D# Eb E F 9 <u></u>**o**' ' o 00 bo To TO Ð σ Open 123 13 23 12 1 F# Gb G Ab G A₿ Bb Α В 200 Ð 00 10 bo ō σ To σ 123 13 23 12 or 3 1 2 С C₿ Eb Db D D₿ E F O 20 o 20 o o 0 Open 123 13 23 1 2 or 3 1 Gb F Ab G# Bþ G A A⋕ B to 20 20 0 20 lo 0 0 O 2 or 1 2 3 Open or 13 23 1 2 or 3 1 or 1 2 3 2 or 1 3 Db С C₿ D# Eþ D F E 20 0 20 0 0 o 0 0 Œ Open or 23 1 2 or 3 1 or 1 3 2 or 2 3 Open or 12 1 Gþ F G⋕ Ab G Bb A₿ A B 20 20 to Q lo • 0 2 Open or 1 3 23 1 2 or 3 1 2 C⋕ С Db Eþ D D E F ‡0 bo Ω ba Ð to Ω • - $( \bigcirc$ Open 2 2 or 1 2 Open or 1 1 Open

(When more than one fingering is shown, the first is the most common.)

## **Trumpet Harmonic Series**

The fundamental pitch of the trumpet/cornet is determined by the length of the tube. Its characteristic tone quality is determined not only by the size of the opening in the tube, but also the amount of conical tubing or flare.

Regardless of the length of tubing, a natural overtone series is produced when the air inside the tube is activated through the vibration of the lips. By changing the tension of the lips and air speed, the performer can move higher and lower within the harmonic series, without changing valves. Although the harmonic series is (in theory) endless, the chart below begins with the fundamental and continues through the 10th partial.

The 7th harmonic (partial) is so flat that it is unusable in the series (note the triangular shape of the note head). The 5th partial is noticeably flat while the 3rd and 6th harmonics are slightly sharp.

Although the first partial (fundamental) is included on this chart, the small bore of the trumpet/cornet does not allow these notes to be played with a characteristic tone.

