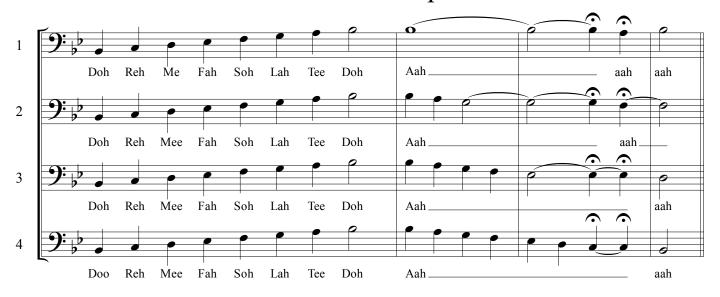
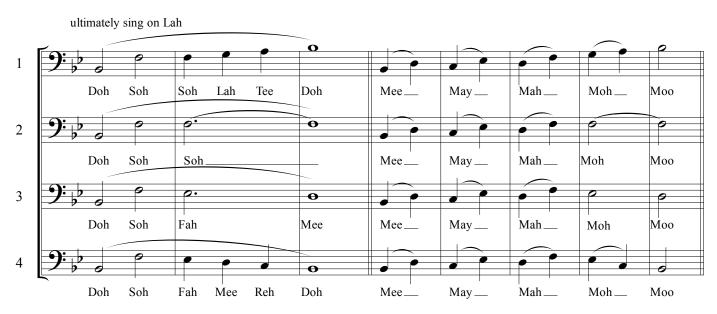
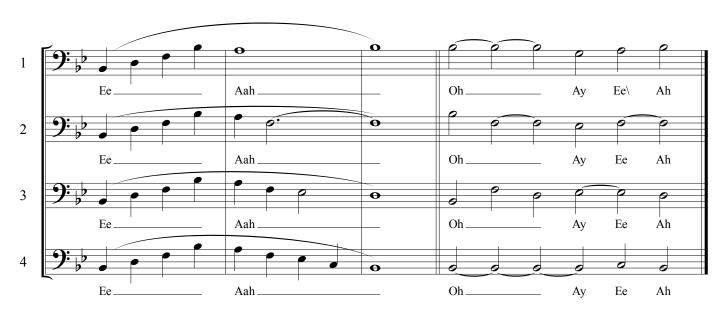
## Vocal Warmups







75

### **BREATHE!**

## **Zenith Exercises 2013-14**













# High Notes Aren't Hard! (but they aren't easy, either)

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High notes truly are aren't hard, but upper register control does require a consistent and sensible approach. Trumpeters of all ages are concerned with improving their control of higher pitches, so before you buy that miracle mouthpiece or start to sweat on those exercises guaranteed to add two octaves to your range, consider the following.

Consistent upper register control is a result of stabilizing an embouchure formation, placing the mouthpiece in a reasonable vertical and horizontal position, and moving the air stream efficiently. Embouchure formation and firmness requires the chin to be slightly pointed down and forward which aligns the upper and lower teeth, creating a flat surface on which to rest the mouthpiece and about an eighth of an inch gap between the teeth for the air stream to pass. The corners of the mouth are then contracted or firmed and the lips slightly rolled inward towards the teeth using the labial consonant "m". The setting or position for the corners of the mouth is achieved by pronouncing the word "dim" which avoids stretching the tissue as in a smile or unnecessarily compressing it as with pursed lips. If chin placement and muscular firmness are set, then the red tissue for both lips is equally exposed, and a U-shaped flat area is visible on the chin immediately below the lower lip. These aspects combined will produce a clearly apparent oval-shaped muscular outline around the entire mouth. An embouchure formed this way will provide a flat, firm base on which the mouthpiece can be positioned.

Determining vertical and horizontal mouthpiece placement is relatively easy. Set the mouthpiece so the opening of the lips, the aperture, falls within the center third of the cup diameter. Placing the mouthpiece too high or low, causing the aperture to be positioned in the top or bottom third of the cup diameter, will limit the ability of one of the lips to response freely as there will be too much rim contact. The horizontal placement should be centered between the corners, but individuals can shift the mouthpiece slightly away from a perfectly centered position to accommodate variations in tooth formation. Very few performers use a perfectly centered horizontal placement, however, extremely off-center horizontal positioning of the mouthpiece will cause problems.

Higher pitches or frequencies are the result of faster vibrations. Faster vibrations will occur only if air is moved more rapidly through a smaller aperture. A smaller aperture is created by setting firm corners and puckering the center of the lips slightly inward to compress the size of the aperture. Some individuals are successful at moving the air flow rapidly, but continue to struggle with the upper register by failing to firm their corners to create and control a smaller aperture. They literally blow their embouchure apart and compound the problem by applying excessive arm pressure, forcing the mouthpiece against the lips in a desperate attempt to hold the embouchure in place. To produce a sound an octave higher, the frequency must double, and this requires significant air energy. Many trumpeters would benefit significantly from practicing exhalation exercises that focus on moving the air flow rapidly using the strong abdominal muscles to comfortably, but energetically propel the air. Leave the instrument in the case when you do this; it is a breathing exercise, not a playing exercise. Remember the two key words here - fast and firm. The faster the air flow, the firmer the corners.

These prudent approaches can be significantly negated when excessive hand and arm force unnecessarily increases the mouthpiece pressure against the lips. We all use pressure, and the higher and louder we play, the greater the pressure, however, we should strive to use as little pressure as possible in producing the sound. Always keep the left hand as relaxed as possible and avoid placing the right hand little finger in the hook on the leadpipe. Rest the little finger on top of the hook instead of in it. To help reduce left-hand pressure, practice with the fingers and thumb completely extended (as in a "flat-hand" position) so the

bell rests on the tips of fingers. It may be difficult at first, but practicing with this hand position and concentrating on the three tenets of stable embouchure formation, sensible mouthpiece placement, and air velocity control will lead to upper register improvement.

Do not be discouraged if initially your ability to control your upper register is actually diminished after incorporating these concepts. You are training your body to change established physical habits which, though minimally effective, are thoroughly familiar. It takes hundreds, even thousands, of repetitions before a new approach will feel "normal" or comfortable. The ultimate goal is to play in as relaxed a manner as possible, but with enough effort to get the job done. Too little physical effort and we fail. Too much physical effort produces strain and we fail. Professionals spend a lifetime constantly fine tuning the balance between too little and too much in their quest for that performance nirvana. Be patient, be persistent, and remember high is a relative term. What it is a challenging upper register phase or pattern for Maynard Ferguson is entirely different for a high school sophomore.

Here are four practice approaches frequently recommended by professionals to improve control of the upper register.

- 1. Practice upper register exercises daily. A miracle is not going to happen in a performance. If you want that high "C" at the end of the solo, then you must practice producing high "C's" everyday.
- 2. Balance playing high notes with resting an equal amount of time. If you play an exercise in the upper register for 15 seconds, follow it with 15 seconds of no playing. As an alternative approach, some recommend playing an upper register pattern, rest an equal time, play a similar pattern in the lower register, and then rest an equal length of time. Continue with the pattern upward only as long as you can comfortably control the sound.
- 3. When practicing patterns, etudes, solos, excerpts from ensemble music, etc., stretch the highest note in a phrase or figure by placing a fermata (hold) on it. Challenge yourself. How long can you sustain that highest pitch with control and still have enough air left to complete the phrase?
- 4. Some performers recommend using a long "e" ("eee") syllable for higher notes. This raises the arch of the tongue, creating a smaller oral cavity forcing the air to move faster. The concept is similar to placing your thumb on the end of a garden hose to produce a more intensive stream of water. Some find an even more curled tongue position, as with the short "i" or "ih" syllable, helpful with extremely high pitches.

Here are four "do nots" when it comes to practicing upper register exercises.

- 1. Do not practice upper register when your embouchure is tired.
- 2. Do not force the upper register to respond by attempting to play too loudly or with too much mouthpiece pressure. It must sound unrestrained and be produced with a reasonably comfortable physical effort. Strive to develop a complete dynamic spectrum (pianissimo to fortissimo), but be satisfied initially with a moderate (mezzo forte) or even quiet sound volume.
- 3. Do not repeat an upper register pattern or exercise more than three times if the notes fail to respond. Move on to something else in your practice session.
- 4. Do not be impatient. Developing genuine control of the upper register is a very gradual process. Measure your progress in small steps. You will not increase your range a perfect fourth in one day!

In your quest to improve your upper register, realize you are joining the ranks of millions of trumpeters over hundreds of years who have been challenged by this aspect of performance. Those who combined a sensible approach with deliberate patience succeeded. Those who did not failed. Which will you be?

## Zenith Upper Range Exercise



- 1. Take a medium breath at the start and a big breath at the breath mark.
- 2. Play loud and go for it with only moderate pressure.
- 3. If you miss, do NOT retry the note on the same breath; instead start over.
- 4. Make up to three attempts. As soon as you are successful, go to the next arpeggio.
- 5. If you can't play the top note in three attempts, STOP. Wait one day.
- 6. You should play this exercise every day, but only ONCE per day.

### MICHIGAN SCHOOL BAND and ORCHESTRA ASSOCIATION SOLO and ENSEMBLE PROFICIENCY SCALES WIND and MELODY PERCUSSION INSTRUMENTS

#### Required Scale Rhythm:



Chromatic: Even Rhythm - Such as even eighth notes or triplets

Tempo: maximum controlled speed Articulation: All slurred or all tongued (adjudicator's choice)

Note: Proficiency examinations are cumulative, i.e., Proficiency II includes all scales listed in both I and II and Proficiency III includes scales listed for I, II, and III. All Scales must be memorized. You are allowed 60 seconds to look over music for the sight reading part of the examination. Upper case (B) indicate major scales, lower case (b) indicated melodic minor, and chr. indicated chromatic. Number after scale indicates number of octaves.

	Proficiency I	Proficiency II	Proficiency III
Piccolo	Bb2, Eb2, F2, C1	Ab2, G2, D2	A2, E2, B2, Gb2
	g2, c1, d2, a2, Eb chr.2	f2, bb2, e2, b2, G chr. 2	f#2, g#2, eb2, C chr. 2
Flute	Bb2, Eb2, F2, C2	Ab2, Db2, G2, D2	A2, E2, B2, Gb2
	g2, c2, d2, a2, Eb chr. 2	f2, bb2, e2, b2, G chr. 2	f#2, c#2, g#2, eb2, C chr. 3
Oboe	Bb1, F1, C2, G1	Eb1, Ab1, D2, A1	Db2, Gb1, E2, B2
	g1, d1, a1, e1, C chr. 2	c2, f1, b2, f#1, D chr 2	bb1, eb2, c#2, g#1, E chr. 2
Bb Clarinet	C2, F3, Bb2, G3	Eb2, Ab2, D2, A2	Db2, Gb3, E3, B2
(Eb Soprano)	a2, d2, g3, e3, E chr 3	c2, f3, b2, f#3, F chr. 3,	bb2, eb2, c#2, g#2, G chr. 3
Alto and Bass	C2, F2, Bb2, G2	Eb1, Ab2, D1, A2	Db2, Gb2, E3, B2
(Contra.) Clar	a2, d2, g2, e2, E chr. 2	c2, f2, b2, f#2, F chr. 2	bb2, eb1, c#1, g#2, G chr 2
Bassoon	Bb2, F2, C2, G2	Eb2, Ab2, D2, A2	Db2, Gb2, E2, B2
	g2, d2, a2, e2, A chr. 2	c2, f2, b2, f#2, Bb chr. 2	bb2, eb2, c#2, g#2, Bb chr. 3
Saxophone	G1, C2, F2, Bb2	D2, A1, Eb2, Ab1	E2, B2, Db2, F#2
(Alto, Tenor, Bari)	e2, a1, d2, g1, C chr. 2	b2, f#1, c2, f2, Bb chr. 2	c#2, g#1, bb2, d#2, F chr. 2
Cornet	C1, F1, Bb2, G2	Eb1, Ab2, D1, A2	E1, B2, Gb2, Db2
Trumpet	a2, d1, g2, e1, G chr. 2	c2, f1, b2, f#2, Bb chr. 2	c#2, g#2, eb1, bb2, C chr.2
French Horn	F2, Bb1, Eb1, C1	Ab2, Db1, G2, D1	A2, E2, B2, Gb2
	d1, g2, c1, a1, F chr. 2	f2, bb1, b1, e2, G chr. 2	f#2, c#1, g#2, eb2, C chr. 3
Trombone	Bb1, Eb1, Ab2, F2	Db1, Gb2, C1, G2	D1, A2, E2, B2
	g2, c1, f2, d1, F chr. 2	bb2, eb1, e2, a2, Ab chr. 2	b2, #2, c#1, g#2, Bb chr. 2
Baritone	Bb1, Eb1, Ab2, F2	Db1, Gb2, C1, G2	D1, A2, E2, B2
Bass Clef	g2, c1, f2, d1, F chr. 2	bb2, eb1, a2, e2, Ab chr. 2	b2, f#2, c#1, g#2, Bb chr. 2
Baritone	C1, F1, Bb2, G2	Eb1, Ab2, D1, A2	E1, B2, Gb2, Db2
Treble Clef	a2, d1, g2, e1, G chr. 2	c2, f1, b2, f#2, Bb chr. 2	c#2, G#2, eb1, bb2, C chr. 2
Tuba	Bb1, Eb1, Ab2, F2	Db1, Gb2, C1, G2	D1, A2, E2, B2
	g2, c1, f2, d1, F chr. 2	bb2, eb1, a2, e2, Ab chr. 2	b2, f#2, c#1, g#2, Bb chr. 2
Melody Percussion	C2, F2, Bb2, Eb2 a2, d2, g2, c2, Bb chr. 2	Ab2, Db2, G2, D2 f2, bb2, e2, b2, G chr. 2 Chord pro. C & F I, IV, V, I	A2, E2, B2, F#2 f#2, c#2, g#2, d#2, C chr. 3 Chord pro. G & Bb I, IV, V, I

NOTE: Sight Reading contains some alternate clefs.

There are Horn - bass clef, Bassoon - tenor clef, Trombone - alto/tenor clef

corrected 1/31/01