

The page is framed by a highly detailed, black and white woodcut-style border. It features several cherubs (putti) in various poses, some playing musical instruments like a trumpet and a drum. There are also depictions of musical instruments such as a violin, a flute, and a lute. The border is filled with intricate scrollwork, floral motifs, and classical architectural elements like columns and pediments. The central area is a plain white rectangle containing the title and author information.

FUNDAMENTALS

BUILDING A DAILY ROUTINE

MARTORANO'S LOW BRASS STUDIO

Compiled and Arranged by Dr. Guytano Martorano III

2023 — 2025

FUNDAMENTALS

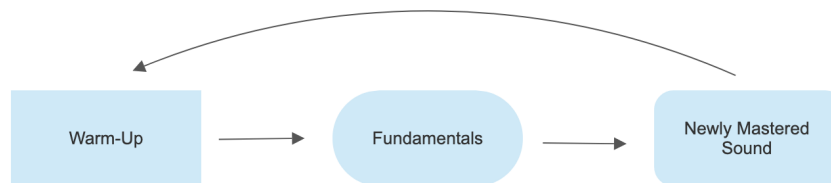
BUILDING A DAILY ROUTINE

“Success isn’t owned – its leased. And the rent is due every day.”

J.J. Watt

This book is a collection of exercises designed to help young musicians build and maintain their sound. As you begin to study these exercises on a regular basis, you will find a gained sense of effortlessness in performance. It is for this reason that sound control exercises are at the core of every elite musician’s daily practice. You might say they are *Fundamental* to their success!

Fundamentals, broadly defined, are exercises that target specific sounds at the edge of the user’s ability. This is contrary to the *Warm-Up*, which targets sounds within their ability and is used as preparation for practice & performance. In short, Fundamentals build sound; Warm-ups reinforce sound. The first paves new roads. The latter maintains them.



This relationship of building and maintaining is highly individualistic. What is a warm-up to one person, may be a fundamental to another. Additionally, what is now your current fundamentals, with practice, will become some version of your future warm-up. Designed under the theory of Neural Plasticity (i.e., *Muscle Memory*), exercises in this book can and SHOULD be modified to best fit your unique ability and needs. Long story short:

Start Simple → Go Complex

Simple to Complex is the key to any good practice session (see page 49, “Creative Problem Solving”).

Slow to fast; isolated to large sections; counting to playing; wind patterns to buzzing. These are all examples of how a musician might apply the philosophy of “Simple to Complex”. It is the HOW to the WHAT of fundamentals. The WHO is you, the WHEN is every day, the WHERE is the practice room. But the most important of these is the WHY. Why study fundamentals? Why create music?

“Music is the great uniter. An incredible force. Something that people who differ on everything and anything else can have in common.”

Sarah Dessen

There is something fundamentally human about music. Something that makes it a core part of who we are. Early human civilizations, independently from one another, have all created their own music. It is found in the frescos of Ancient Egypt (1350 BCE), the cuneiform tablets for Mesopotamia (1250 BCE), treatise of Ancient India (200 BCE), tablatures of the Chinese Dynasties (25 AD), and in the music notational systems of Ancient Greece (490 BCE). A child left to their own devices will bang on pots and pans, composing their own music (if you are reading this: Sorry Mom!).

Why do we create music? It is because we are ALL fundamentally musicians.

Singer of songs; Torches in the dark.

All resources not created by Myself are presented only in part, as a general overview of the available material. If you are interested in any of these fully published works, please reach out to their respective publisher/disruptor to purchase your very own copy. These people worked very hard to share their pedagogy with you, so show them your appreciation monetarily.

This work is dedicated to the following individuals who have made this kind of effort possible for me:

Cassie Martorano, my lovely wife and perpetual editor

Kevin Wass, for sprinkling magic dust on me and my horn

Donald Little, for taking me into his studio and keeping me humble

Joe Stites, for igniting my passion for music and performance

Chris McGee, my first tuba teacher and mentor

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CH. 1 - BREATHING

DiCesare Warm-Up Routine: "Breathing Exercise" by John DiCesare

Notes from Dr. Martorano:

"This exercise is designed to create an efficient inhalation over progressively shorter periods of time. Start this exercise at a relaxed tempo (quarter= 80 bpm). Once an even, and relaxed breath is achieved, repeat the exercises at faster metronomic markings (quarter=100, 120, 144). For greater efficiency, a breathing bag (6 liter) can be used with this exercise."

The Breathing Gym: "4s, 3s, 2s, & 1s" by Sam Pilafian & Patrick Sheridan

Notes from the Author:

"Maintaining a proper and consistent oral shape is essential for maximizing the benefits of these exercises. During inhale/exhale, the inside of the mouth should feel like a big yawn. The back of the throat is to remain open and unobstructed. All exercises are to be performed in a relaxed manner with no tension in the body."

Notes from Dr. Martorano:

"Light-headedness may occur periodically. If this happens, the following method is prescribed: sit down, inhale slowly through the nose, and exhale slowly through the mouth; repeat."

Unpublished Exercise: "Breathing Breakdown" by Dr. Guytano Martorano III

Notes from Dr. Martorano:

This exercise breaks down the perfect into three key stages: 1. Inhale, 2. Transition, 3. Exhale

Rather than focus on what mistakes are to be avoided, players should be goal oriented; that is, think about what they WANT to sound like, vs what they don't want to sound like.

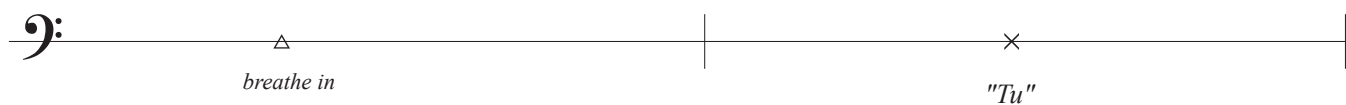
1. Inhale

The goal is 100% full breath. Take your time, breathe in until you physically can't fit in any more air, and then relax and the air flow out at its own pace (like a sigh).



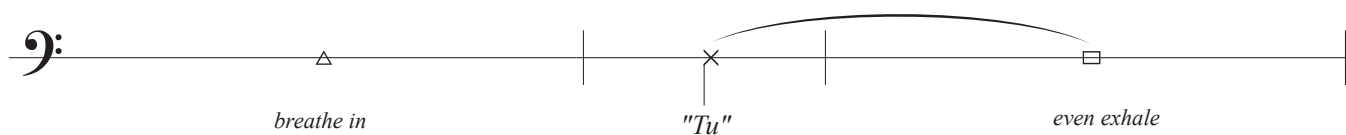
2. Transition

The goal is a clean articulation. Start by putting a flat palm in front of your face and breath in to 100%. Next, use the syllable "Tu" to blow into the center of your palm, feeling for an immediate pop of wind. For an extra challenge, replace the palm with a piece of paper, and aim to "pop the paper" (make a crinkle-like sound with the paper through your wind).



3. Exhale

The goal is dark, consistent wind. This final exercise is going to require your instrument. Take a 100% deep breath in, "Tu" tongue the start of the wind, then blow air through the instrument. You are listening for Dark and Consistent. Consistent wind sounds the same from start to end (the speed of the air is unchanging). Dark wind sounds are quieter and more open. If you hear high pitch sounds (you can make these by closing your mouth, like the syllable "Sss"), open up the embouchure to resemble a "TU" or "TOE" shape.



Unpublished Exercise: "Breathing Efficiency" by Oystein Baadsvik / arr. Martorano

Notes from Dr Martorano:

"The following exercise was introduced to me (Guytano) by Øystein Baadsvik in a 2018 masterclass at TTU. The goal of this exercise is efficient inhalation during performance.

Start each line by taking in a relaxed breath, making sure to be at maximum lung capacity. I cannot stress this enough; tension is the enemy of efficiency! As you perform each line (repeating as much as desired), focus on the consistency of each note's length and the fullness of the quick breath. If the amount of air you take in during the quick breath is enough, you will be able to perpetually repeat the given line."

Tempo: ♩ = 72

breath in quick breath

breath in quick breath

breath in quick breath

The Breathing Book "No. 1- Be Balanced" by David Vining

Notes from the Author:

"Be Balanced: In order to breath well, it is important to achieve muscular freedom throughout your body. One of the keys to achieving muscular freedom is to allow your bony structure to hold up your body. Your skeleton is designed to deliver your weight to the chair or floor in cooperation with gravity, and when you relay upon your bones in this way, you are balanced. There is no need to use muscular work to hold yourself up when you are balanced."

Tempo: ♩ = 72

breath in Blow sim. **f** Play

sim. **f**

f

f

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NOTES:

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CH. 2 - LONG TONES

Daily Routines for Trombone: "Long Tones" by Emory Remington

Notes from the Author:

"The daily use of the Sustained Long Tones combined with the slow legato slurs has been one of the major contributive elements to the development of rich, warm sonorous tone quality associated with Remingtons' student's tone quality, and in particular, in the Trombone Choir timbre."

♩ = 60

(etc.)

Special Studies for the Tuba: "Exercise 2, Tuba Drills" by Arnold Jacobs

Notes from the Author:

"One of the most important factors in approaching the tone building studies, is to do so with a plentiful supply of air in the lungs. Great care must be used so that the tone doesn't sound forced or strained. A constant effort should be made by the student to think musically. He or she should develop the ability to hear the sound in his or her mind that he or she wants to hear on the tuba. This is a tremendously important concept and should be encouraged by renewing it daily."

♩ = 80

20 Minute Warm-Up Routine: "Sound" by Michael Davis & Gene Pokorny

Notes from the Author:

"I would like to emphasize how important the use and velocity of our air stream will be in playing these exercises. Although I have indicated where breaths should be taken, these are merely suggestions. Feel Free to breathe at any time during any one of these exercises. I would rather you throw away a couple of notes, an maintain a good full sound, than eek out notes with a less that desirable sound."

♩ = 66

The Brass Gym: "Shwarmaaaaa!" by Sam Pilafian & Patrick Sheridan

Notes from the Author:

"The following exercise has multiple benefits for our ears and airs. On Brass instruments, the majority of our 'favorite' notes are right next to the 'bad' notes. By moving through these exercises in half steps we learn to clone the sound of our favorite notes. This will homogenize the sound you produce on your instruments. The lips bend in the second bar allow younger players to gain more control in their embouchure. For more advanced players, the bend forces a scrabbling of the tone and pitch which must be declared in the third and fourth bar. These lip bends are the building blocks of micro intonation. The lip bends will also open up your tone."

♩ = 80

(9) (2 or 4 beat breath)

(lip bend only)

(9) (2 or 4 beat breath)

(lip bend only)

(9) (2 or 4 beat breath)

(lip bend only)

simile simile

(lip bend only)

(lip bend only)

(lip bend only)

(lip bend only)

(lip bend only)

(lip bend only)

(lip bend only)

Unpublished Exercise: "Pentatonic Pedal Study" by Dr. Guytano Martorano III

Notes from Dr. Martorano:

"Playing in the pedal register, especially early in the warm-up session, promotes an even and controlled use of air. I would often, during my time at TTU, almost ritualistically begin every practice session with variations of this exercise. Here are some tips:

- 1) *Do not be in a hurry. Listen and respond to the sounds you are making (not the sounds you are supposed to be making). Repeat phrases, perform with/without the metronome, and generally be in the moment.*
- 2) *Widen your ideas of what counts as practicing. Singing, buzzing, wind patterns, recording, listening, fingering, and imagining are all techniques that can be used to advance a player's performance ability. Bring an open mind and a wide tool belt to each practice session will ensure consistent success of this exercise.*
- 3) *Focus on the musicality. As you gain mastery of this exercise, shift your focus from technique/fundamentals, into musicality. Let go of control of the body (let muscle memory take over), and start to embody the character of the music. As yourself, how should the audience feel as they hear this?"*

The musical score is written in bass clef and consists of three systems. Each system contains three staves. The first two staves of each system show two measures of music, with a double bar line between them. The first measure of each system has a fermata over the final note. The second measure of each system has a fermata over the final note. The third staff of each system shows a single measure with a fermata over the final note. The key signature changes from one flat (B-flat) to two flats (B-flat and E-flat) between the second and third systems.

DiCesare Warm-Up: "Descending Chromatic Scales" by John DiCesare

Notes from Dr. Martorano:

"This exercise focuses on tone production and flow in the low register; making it an ideal warm-up exercise. Perform each measure with continuous forward air while maintaining a full sound throughout. Repeat measures as needed to achieve both of these goals."

♩ = 80

The musical score consists of six staves of music in bass clef, featuring descending chromatic scales. The first staff starts with a tempo marking of quarter note = 80. Each staff contains two measures of music, with repeat signs (//) at the end of each measure. The notes are connected by slurs, and each measure ends with a fermata over the final note. The key signature has one flat (Bb).

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CH. 3 - FLOW STUDIES

Trumpet Flow Studies: "Slur Exercises" by Vincent Cichowicz

Notes from the Author:

"These studies are an important medium in which to develop a free, flexible production of sound, upon with all aspects of technique demanded. They are most effective when practiced at moderate speeds, taking care to produce a clear flexible, sound and that the connotation of the notes be smooth and without distortion."

The image displays ten musical staves, each representing a slur exercise for trumpet. Each staff begins with a bass clef, a key signature of one flat (B-flat), and a 2/2 time signature. The exercises are as follows:

- Staff 1: A slur over four notes: B2, B-flat2, B2, B2.
- Staff 2: A slur over six notes: B2, B-flat2, B2, B2, B2, B2.
- Staff 3: A slur over eight notes: B2, B-flat2, B2, B2, B2, B2, B2, B2.
- Staff 4: A slur over ten notes: B2, B-flat2, B2, B2, B2, B2, B2, B2, B2, B2.
- Staff 5: A slur over twelve notes: B2, B-flat2, B2, B2, B2, B2, B2, B2, B2, B2, B2, B2.
- Staff 6: A slur over fourteen notes: B2, B-flat2, B2, B2, B2, B2, B2, B2, B2, B2, B2, B2, B2, B2.
- Staff 7: A slur over sixteen notes: B2, B-flat2, B2, B2, B2, B2, B2, B2, B2, B2, B2, B2, B2, B2, B2, B2.
- Staff 8: A slur over sixteen notes with a wide interval: B2, B-flat2, B2, B2, B2, B2, B2, B2, B2, B2, B2, B2, B2, B2, B2, B2.
- Staff 9: A slur over sixteen notes with a wide interval and a final flourish: B2, B-flat2, B2, B2, B2, B2, B2, B2, B2, B2, B2, B2, B2, B2, B2, B2.

Unpublished Exercise: "Tremors" by Dr. Guytano Martorano III

Notes from Dr. Martorano:

This flow study focuses on even and consistent tone production in a gradually lower register. Begin each line by isolating the first measure. The goal is a continuous sound, unimpeded by the valves or embouchure. As Sam puts it "Ultra legato thoughts will produce ultra legato sounds".

The next two measures chromatically descend/ascend between the stated interval. The goal again is continuous sound, but through quicker changes and with a light legato tongue at the start of each triplet figure. To supplement practice in this section, repeat these measures isolating the fingers, wind, or lips. All must be accurate separately in order to be accurate together.

The exercise is then settled in the final measure, where through a held note of unspecified duration, the fullest tone is declared. When possible the 2nd-4th measure of each line should be done in one breath. Do not sacrifice tone or connection to gain air efficiency, as this is not the main goal.

The musical score consists of five staves, each in bass clef with a key signature of one flat (B-flat). Each staff begins with a whole note on G₂, followed by a whole note on F₂, and a whole note on E₂. The second and third measures of each staff contain triplet eighth notes that chromatically descend or ascend between the notes of the first and second measures. The final measure of each staff is a whole note on E₂ with a fermata.

(continue downward in the same pattern)

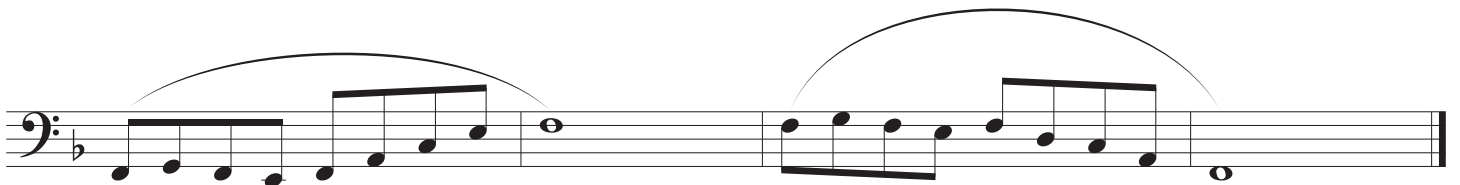
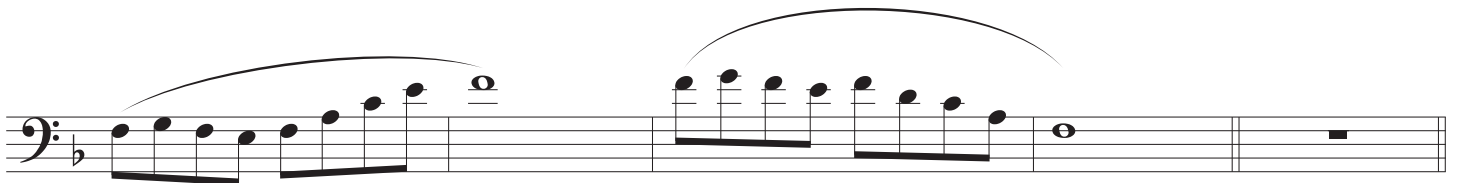
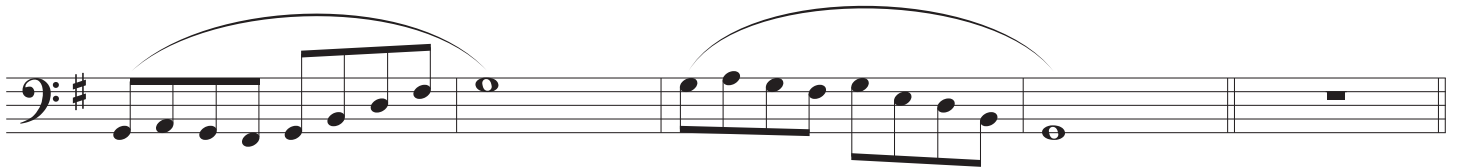
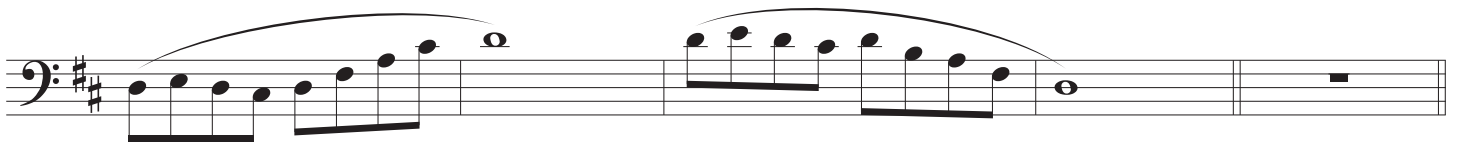
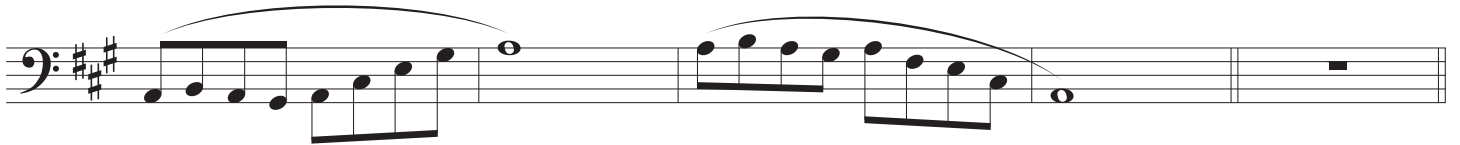
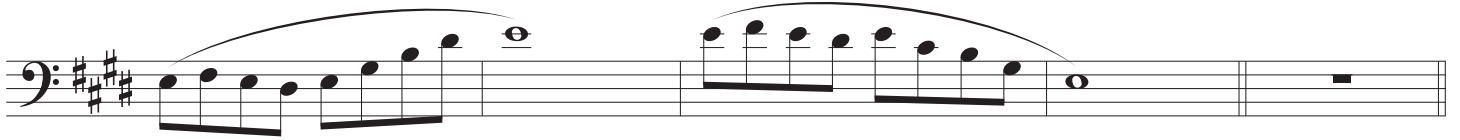
The Brass Gym: "Beautiful Sounds" by Sam Pilafian & Patrick Sheridan

Notes from the Author:

"Inspired by Arnold Jacobs, this exercise promotes the smoothest possible air movement while using your most beautiful tone. Use variable dynamics and tempos to access greater facility with a sustained and steady airflow at slower tempos and smooth movement through the phrase in all registers at faster tempos. This exercise is your model for achievement in sound."

$\text{♩} = 72 - 88$

The musical score consists of six staves of music, each in bass clef and 4/4 time. The tempo is marked as $\text{♩} = 72 - 88$. The key signature starts with one flat (B-flat major/D minor) and changes to two flats (E-flat major/G minor) on the second staff, three flats (A-flat major/C minor) on the third staff, and four flats (D-flat major/F minor) on the fourth staff. Each staff contains two phrases of music, each phrase consisting of a series of eighth notes followed by a half note, all under a slur. The first phrase of each staff starts on a whole note and the second phrase starts on a half note. The music is written in a single system with a repeat sign at the end of each staff.



Technical Studies for the Cornet: "Second Study" by Herbert L. Clarke

Notes from the Author:

"Practice each exercise ideally in one breath. Press the fingers down firmly; and keep the lips moving. All of these exercises are to be played very softly; by doing so your lips will always be fresh and under control. If played loud, the opposite effect may be the result. The principal is the same as a Physician prescribing 3 drops of medicine which will cure, whereas a spoonful will kill."

The image displays six staves of musical notation, each representing a different key signature for the exercise. Each staff begins with a bass clef and a 4/4 time signature. The notes are written in a single melodic line, with a slur spanning the entire phrase. The exercises are as follows:

- Staff 1: Key signature of one flat (B-flat major). The melody starts on G2 and ends on G2.
- Staff 2: Key signature of no sharps or flats (C major). The melody starts on C2 and ends on C2.
- Staff 3: Key signature of one flat (B-flat major). The melody starts on G2 and ends on G2.
- Staff 4: Key signature of two flats (B-flat major). The melody starts on G2 and ends on G2.
- Staff 5: Key signature of no sharps or flats (C major). The melody starts on C2 and ends on C2.
- Staff 6: Key signature of one flat (B-flat major). The melody starts on G2 and ends on G2.

Musical staff 1: Bass clef, key signature of three sharps (F#, C#, G#), starting with a whole note chord (F#, C#, G#) followed by a continuous eighth-note scale.

Musical staff 2: Bass clef, key signature of one sharp (F#), starting with a whole note chord (F#, C#) followed by a continuous eighth-note scale.

Musical staff 3: Bass clef, key signature of four flats (Bb, Eb, Ab, Db), starting with a whole note chord (Bb, Eb, Ab, Db) followed by a continuous eighth-note scale.

Musical staff 4: Bass clef, key signature of one sharp (F#), starting with a whole note chord (F#, C#) followed by a continuous eighth-note scale.

Musical staff 5: Bass clef, key signature of two flats (Bb, Eb), starting with a whole note chord (Bb, Eb) followed by a continuous eighth-note scale.

Musical staff 6: Bass clef, key signature of three sharps (F#, C#, G#), starting with a whole note chord (F#, C#, G#) followed by a continuous eighth-note scale.

Musical staff 7: Bass clef, key signature of one flat (Bb), starting with a whole note chord (Bb, F) followed by a continuous eighth-note scale.

The Brass Gym: "Brruummmm!" by Sam Pilafian & Patrick Sheridan

Notes from the Author:

"This extremely quick slurred exercise works to develop confident fingers and slurred technique at high velocity. Daily execution will teach you to think and move ever quicker and will give you confidence when you encounter difficult technical passages. Smooth, even airflow is the key to success on this exercise!"

The image displays six staves of musical notation for the exercise "Brruummmm!". Each staff is written in bass clef, 4/4 time, and one flat key signature (Bb). The exercise consists of six slurred lines of eighth notes, each with a corresponding bass line of chords. The first staff starts with a 4/4 time signature. The second staff has a 4/4 time signature. The third staff has a 4/4 time signature. The fourth staff has a 4/4 time signature. The fifth staff has a 4/4 time signature. The sixth staff has a 4/4 time signature. Each staff ends with a whole note rest.

Musical staff 1: Bass clef, key signature of three sharps (F#, C#, G#), and a common time signature. The staff contains a melodic line of eighth notes with a slur over the first four measures, and a bass line of eighth notes. The piece concludes with a whole note rest.

Musical staff 2: Bass clef, key signature of three sharps (F#, C#, G#), and a common time signature. The staff contains a melodic line of eighth notes with a slur over the first four measures, and a bass line of eighth notes. The piece concludes with a whole note rest.

Musical staff 3: Bass clef, key signature of three sharps (F#, C#, G#), and a common time signature. The staff contains a melodic line of eighth notes with a slur over the first four measures, and a bass line of eighth notes. The piece concludes with a whole note rest.

Musical staff 4: Bass clef, key signature of one sharp (F#), and a common time signature. The staff contains a melodic line of eighth notes with a slur over the first four measures, and a bass line of eighth notes. The piece concludes with a whole note rest.

Musical staff 5: Bass clef, key signature of one sharp (F#), and a common time signature. The staff contains a melodic line of eighth notes with a slur over the first four measures, and a bass line of eighth notes. The piece concludes with a whole note rest.

Musical staff 6: Bass clef, key signature of one flat (Bb), and a common time signature. The staff contains a melodic line of eighth notes with a slur over the first four measures, and a bass line of eighth notes. The piece concludes with a whole note rest.

CH. 4 - FLEXIBILITY

Lip Slurs for the Tuba: "Slow Slurs" by Deanna Swoboda

Notes from the Author:

"Developing a Great Lip Slur:

A great lip slur is a fine balance between smooth lip motion and consistent airflow. Developing a great lip slur takes time, daily consistency and awareness. Let the consistent airflow inspire lip motion. Avoid 'bumps' in the air, or 'shelving' the notes."

♩ = 66

The image displays seven staves of musical notation for tuba lip slurs. Each staff is in bass clef with a 4/4 time signature. The first staff has a key signature of one flat (B-flat). The tempo is marked as quarter note = 66. Each staff contains a sequence of notes with slurs, followed by a rest and the word "Breathe".

- Staff 1: B-flat, A, G, F, E, D, C, B-flat. Slurs connect B-flat-A, A-G, G-F, F-E, E-D, D-C, and C-B-flat.
- Staff 2: G, F, E, D, C, B-flat, A, G. Slurs connect G-F, F-E, E-D, D-C, C-B-flat, B-flat-A, and A-G.
- Staff 3: F, E, D, C, B-flat, A, G, F. Slurs connect F-E, E-D, D-C, C-B-flat, B-flat-A, A-G, and G-F.
- Staff 4: E, D, C, B-flat, A, G, F, E. Slurs connect E-D, D-C, C-B-flat, B-flat-A, A-G, G-F, and F-E.
- Staff 5: D, C, B-flat, A, G, F, E, D. Slurs connect D-C, C-B-flat, B-flat-A, A-G, G-F, F-E, and E-D.
- Staff 6: C, B-flat, A, G, F, E, D, C. Slurs connect C-B-flat, B-flat-A, A-G, G-F, F-E, E-D, and D-C.
- Staff 7: B-flat, A, G, F, E, D, C, B-flat. Slurs connect B-flat-A, A-G, G-F, F-E, E-D, D-C, and C-B-flat.

20 Minute Warm-Up Routine: "Air It Out" by Michael Davis & Gene PokornyNotes from the Author:

"I would like to emphasize how important the use and velocity of our air stream will be in playing these exercises. Although I have indicated where breaths should be taken, these are merely suggestions. Feel Free to breathe at any time during any one of these exercises."

The exercise consists of seven staves of music in bass clef, 4/4 time. A tempo marking of quarter note = 72 is shown at the beginning. Each staff contains a sequence of notes with a slur over the entire phrase. The notes are as follows:

- Staff 1: Bb, G, F, E, D, C, Bb, Ab, G, F, Eb, D.
- Staff 2: G, F, E, D, C, B, A, G, F, E, D, C.
- Staff 3: Bb, Ab, G, F, E, D, C, Bb, Ab, G, F, Eb, D.
- Staff 4: G, F, E, D, C, B, A, G, F, E, D, C.
- Staff 5: Bb, Ab, G, F, E, D, C, Bb, Ab, G, F, Eb, D.
- Staff 6: G, F, E, D, C, B, A, G, F, E, D, C.
- Staff 7: G, F, E, D, C, B, A, G, F, E, D, C.

Daily Warm-Ups: "Flexibility" by Emory Remington & arr. Brian Bowman

Notes from the Author:

"These exercises comes from a one-page warm-up sheet compiled by Euphonium legend Brian Bowman from exercises composed by Emory Remington. Use of a metronome is critical to the outcome of these lines. Start slow, find control, and slowly (almost unperceptively) increase the tempo."

The musical score consists of eight staves of music in bass clef, 4/4 time. Each staff begins with a bass clef and a 4/4 time signature. The exercises are characterized by long, sweeping slurs that encompass multiple measures of eighth and sixteenth notes. The first staff has a key signature of one flat (Bb). The second staff has a key signature of two sharps (D major). The third staff has a key signature of one flat (Bb). The fourth staff has a key signature of one flat (Bb). The fifth staff has a key signature of two sharps (D major). The sixth staff has a key signature of one flat (Bb). The seventh staff has a key signature of one flat (Bb). The eighth staff has a key signature of one flat (Bb). Each staff concludes with a double bar line and a fermata-like symbol. Vertical 'V' marks are placed above the staff at the end of each exercise line.

The Brass Gym: "Lip Flips" by Sam Pilafian & Patrick Sheridan

Notes from the Author:

"These exercises are the seeds of ease in flexibility. Achievement in this exercise will help to produce fluid, even lip slurs and will develop into a fine lip trill with practice. Remember the **LAW OF ACCOMMODATION!** As each tempo becomes easy — slowly increase the speed. Push yourself to new limits of velocity without tension."

The musical score consists of eight staves of music, all in bass clef and 4/4 time. The first staff begins with a key signature of one flat (Bb) and a 4/4 time signature. The music features a series of eighth-note patterns, often grouped with slurs. The second staff continues with similar eighth-note patterns, including some with slurs. The third staff introduces a key signature change to two flats (Bb, Eb) and continues with eighth-note patterns. The fourth staff maintains the two-flat key signature and features eighth-note patterns with slurs. The fifth staff introduces a key signature change to one flat (Bb) and features eighth-note patterns with slurs. The sixth staff continues with eighth-note patterns in one flat. The seventh staff features eighth-note patterns with slurs. The eighth staff concludes with eighth-note patterns and slurs. The score is designed to be played at a slow tempo and gradually increased in speed.

Lip Flexibility: "Study No. 27" by Bai Lin

Notes from the Author:

"During practice sessions your embouchure, throat and tongue should be naturally relaxed and flexible. The air should be fluent and steady (consistent). Always try to produce your most beautiful tone. If you feel your embouchure is tiring or is uncomfortable, you should choose an easier section to practice. Do not attempt to play in too high a register. This will avoid hurting your embouchure or learning to play incorrectly. The best way to practice these exercises is to concentrate only on the appropriate sections according to your level of development."

The musical score consists of six systems of exercises, each with two measures. The notes are as follows:

- System 1:** Measure 1: Bb, C, D, Eb, F, G, Ab, Bb. Measure 2: Bb, C, D, Eb, F, G, Ab, Bb.
- System 2:** Measure 1: Bb, C, D, Eb, F, G, Ab, Bb. Measure 2: Bb, C, D, Eb, F, G, Ab, Bb.
- System 3:** Measure 1: Bb, C, D, Eb, F, G, Ab, Bb. Measure 2: Bb, C, D, Eb, F, G, Ab, Bb.
- System 4:** Measure 1: Bb, C, D, Eb, F, G, Ab, Bb. Measure 2: Bb, C, D, Eb, F, G, Ab, Bb.
- System 5:** Measure 1: Bb, C, D, Eb, F, G, Ab, Bb. Measure 2: Bb, C, D, Eb, F, G, Ab, Bb.
- System 6:** Measure 1: Bb, C, D, Eb, F, G, Ab, Bb. Measure 2: Bb, C, D, Eb, F, G, Ab, Bb.

Drill of the Week: "No. 10 Jellyfish" by Chris Olka

Notes from the Author:

"This is a benchmark flexibility study for how flexible your lips are in the middle register today. Record yourself; the thing that is the most telling is how well you perform this slowly. Start at a tempo that feels comfortable and increase by increments of 10 beats per minute. Strive to do each of these lines in one breath."

The following lines are practice variations for Chris Olka's "Jellyfish" exercise:

CH. 5 - REGISTER BLENDING

DiCesare Warm-Up: "Arpeggio Study" by John DiCesare

Notes from Dr Martorano:

"This exercise focuses on tone production and flow in the low and high register, making it an ideal warm-up exercise. Perform each measure with continuous forward air while maintaining a full sound throughout. Repeat measures as needed to achieve both of these goals."

The musical score consists of nine staves of music, all in bass clef and 3/4 time. Each staff begins with a key signature of one flat (Bb). The notes are as follows:

- Staff 1: G2, F2, E2, D2 (half note), G2, F2, E2, D2 (quarter notes), G2, F2, E2, D2 (quarter notes), G2 (half note).
- Staff 2: G2, F2, E2, D2 (half note), G2, F2, E2, D2 (quarter notes), G2, F2, E2, D2 (quarter notes), G2 (half note).
- Staff 3: G2, F2, E2, D2 (half note), G2, F2, E2, D2 (quarter notes), G2, F2, E2, D2 (quarter notes), G2 (half note).
- Staff 4: G2, F2, E2, D2 (half note), G2, F2, E2, D2 (quarter notes), G2, F2, E2, D2 (quarter notes), G2 (half note).
- Staff 5: G2, F2, E2, D2 (half note), G2, F2, E2, D2 (quarter notes), G2, F2, E2, D2 (quarter notes), G2 (half note).
- Staff 6: G2, F2, E2, D2 (half note), G2, F2, E2, D2 (quarter notes), G2, F2, E2, D2 (quarter notes), G2 (half note).
- Staff 7: G2, F2, E2, D2 (half note), G2, F2, E2, D2 (quarter notes), G2, F2, E2, D2 (quarter notes), G2 (half note).
- Staff 8: G2, F2, E2, D2 (half note), G2, F2, E2, D2 (quarter notes), G2, F2, E2, D2 (quarter notes), G2 (half note).
- Staff 9: G2, F2, E2, D2 (half note), G2, F2, E2, D2 (quarter notes), G2, F2, E2, D2 (quarter notes), G2 (half note).

Each staff includes a slur over the first four notes, a repeat sign (//) at the end, and a fermata over the final note.

The image displays ten staves of musical notation, each representing a different exercise for register blending in the bass clef. Each staff begins with a whole note chord, followed by a series of eighth notes, and concludes with a whole note chord. The exercises are as follows:

- Staff 1: C2, D2, E2, F2, G2, A2, B2, C3. Chords: C2-E2-G2, C3-E3-G3.
- Staff 2: B1, C2, D2, E2, F2, G2, A2, B2. Chords: B1-D1-F1, B2-D2-F2.
- Staff 3: D2, E2, F2, G2, A2, B2, C3, D3. Chords: D2-F2-A2, D3-F3-A3.
- Staff 4: C2, D2, E2, F2, G2, A2, B2, C3. Chords: C2-E2-G2, C3-E3-G3.
- Staff 5: B1, C2, D2, E2, F2, G2, A2, B2. Chords: B1-D1-F1, B2-D2-F2.
- Staff 6: C2, D2, E2, F2, G2, A2, B2, C3. Chords: C2-E2-G2, C3-E3-G3.
- Staff 7: B1, C2, D2, E2, F2, G2, A2, B2. Chords: B1-D1-F1, B2-D2-F2.
- Staff 8: C2, D2, E2, F2, G2, A2, B2, C3. Chords: C2-E2-G2, C3-E3-G3.
- Staff 9: B1, C2, D2, E2, F2, G2, A2, B2. Chords: B1-D1-F1, B2-D2-F2.
- Staff 10: C2, D2, E2, F2, G2, A2, B2, C3. Chords: C2-E2-G2, C3-E3-G3.

Drill of the Week: "No. 2 Peanut Butter Long Tones" by Chris Olka

Notes from the Author:

"This should not be treated as a set warm-up, but rather a daily bug-hunt to find out what is wrong with your chops today. Imagine your most beautiful notes as a big blob of peanut butter. You want to spread it to all corners of the bread in a nice, even layer. This is how the study works. Start with a reference tone that you make a wonderful sound on and slowly spreading it in increasing intervals outwards to the extremes. Only move forward with success in tone and flow."

Moderato (♩ = c. 108)

1. Descending to the Pedal B flat

Musical notation for the first drill, "1. Descending to the Pedal B flat". It consists of four staves of music in bass clef, 4/4 time, with a key signature of two flats (B-flat and E-flat). The tempo is Moderato (♩ = c. 108). Each staff contains three measures of music, with a slur over the first two notes of each measure. The notes in each measure are: Measure 1: G2, F2, E2; Measure 2: D2, C2, B1; Measure 3: A1, G1, F1. The final note of the third measure in each staff is a whole note, indicating the end of the phrase.

Moderato (♩ = c. 108)

2. Blending the Mid-Register

Musical notation for the second drill, "2. Blending the Mid-Register". It consists of four staves of music in bass clef, 4/4 time, with a key signature of two flats (B-flat and E-flat). The tempo is Moderato (♩ = c. 108). Each staff contains three measures of music, with a slur over the first two notes of each measure. The notes in each measure are: Measure 1: G2, F2, E2; Measure 2: D2, C2, B1; Measure 3: A1, G1, F1. The final note of the third measure in each staff is a whole note, indicating the end of the phrase.

Moderato (♩ = c. 108)

3. Ascending to the Upper B Flat

4. Full Register Blending

Moderato (♩ = c. 108)

Drill of the Week: "No. 4, Giant Steps" by Chris Olka

Notes from the Author:

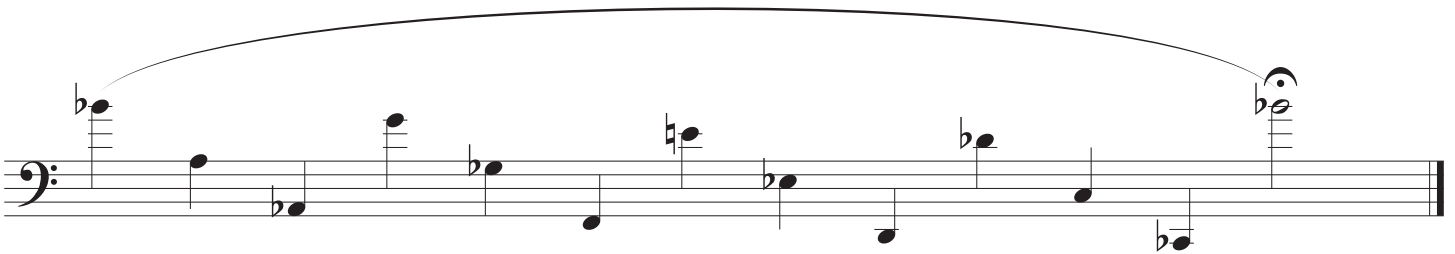
"This should not be treated as a set warm-up, but rather a daily bug-hunt to find out what is wrong with your chops today. Both "Giant Steps" and "Gianter Steps" are to be practiced the same way. Start by holding the first note in a fermata. Continually repeat the line, adding one additional note with each successful repetition. Make sure to only proceed with mastery of the previous notes. For example, if you move to playing the first four notes, when the third note is unreliable, you should move back to playing just the first three."



Drill of the Week: "No. 15, Gianter Steps" by Chris Olka

Notes from the Author:

"This should not be treated as a set warm-up, but rather a daily bug-hunt to find out what is wrong with your chops today. Both "Giant Steps" and "Gianter Steps" are to be practiced the same way. Start by holding the first note in a fermata. Continually repeat the line, adding one additional note with each successful repetition. Make sure to only proceed with mastery of the previous notes. For example, if you move to playing the first four notes, when the third note is unreliable, you should move back to playing just the first three."



Unpublished Exercise: "High-Range Finger-Buster" by Carl Kleinsteuber

Notes from the Author:

*"As you play, and replay, through this exercise, vary the articulations and vary the dynamics.
When ascending to the edge of your upper range, stop when you get that "Charley horse" feeling.*

The exercise consists of eight staves of music, each containing two measures. The first measure of each staff is an ascending eighth-note scale, and the second measure is a descending eighth-note scale. The scales are written in various keys: Staff 1 (B-flat), Staff 2 (C major), Staff 3 (D major), Staff 4 (E-flat major), Staff 5 (F major), Staff 6 (G major), Staff 7 (A major), and Staff 8 (B-flat major). The exercise is designed to be played in a high register, as indicated by the 'High-Range' in the title and the 'Charley horse' feeling mentioned in the author's notes.

8^{va} to end

The image displays eight musical staves, each in bass clef, containing a sequence of eighth notes. Each staff is divided into two measures by a comma. The first measure of each staff contains a sequence of eighth notes, and the second measure contains a sequence of eighth notes with various accidentals. A fermata is placed over the final note of each staff. The staves are arranged vertically, and the key signatures and accidentals vary across them, illustrating different register blending exercises.

Unpublished Exercise: "Low-Range Finger-Buster" by Carl Kleinsteuber

The image displays ten musical staves, each representing a different key signature for the exercise "Low-Range Finger-Buster". Each staff begins with a bass clef and a unique key signature. The first phrase of each exercise is an ascending eighth-note scale. The second phrase is a descending eighth-note scale with various accidentals (sharps, flats, and naturals) interspersed throughout. A fermata is placed over the first measure of the second phrase on each staff. The exercises are arranged in a descending order of pitch range from top to bottom.

CH. 6 - ARTICULATION

Unpublished Exercise: "Stacking the Scale" by Dr. Guytano Martorano III

Notes from Dr. Martorano:

"This exercise focuses on immediate, resonant tone while progressively increasing the articulation speed. Our top priority is to find a beautiful centered sound (sympathetic vibration) and build in its consistency (muscle memory). Think of each note as striking a bell; As soon as the air moves past the lips, there is vibration. As soon as there is vibration, there is resonance."

Tip(s): Make sure that you are using effective wind (see: pg. 7 "Breathing Breakdown") at all times. Keep a consistent articulation in mind throughout the exercise (such as "Tu" or "Ta"). Use a drone to help internalize the pitch. This will help you work the "horn in the mind"!

"Short, but Resonant"

"Op·por·tu·ni·ty Knocks!"

"Lu·do·mu·si·col·o·gy Rocks!"

Ludomusicology- the study of video game music

*Cycle through these exercises at progressively faster tempos until fail.

The Brass Gym: "Tongue Coordination" by Sam Pilafian & Patrick Sheridan

Notes from the Author:

"The pursuit for technique at high velocity requires tongue coordination. This starts with single tonguing. Increasing single tongue coordination is a progressive activity that requires a lot of patience! It is a skill that improves slowly in small increments and only gets better with consistent practice. Increased coordination has the obvious benefit of improving quick articulated passages. The added benefit of this coordination journey is highly improved clarity on articulations at much slower speeds!"

♩ = 80-172



Complete Method for Tuba: "The Double Tongue" by Joseph Jean-Baptiste Laurent Arban

The musical score is written for Tuba in bass clef, 6/8 time, with a key signature of one flat (B-flat). It consists of eight staves of music. The first staff begins with a treble clef and a 6/8 time signature. The music is characterized by intricate rhythmic patterns, primarily using sixteenth and thirty-second notes, often beamed together. There are several measures with rests, indicated by a '7' below the staff. The piece concludes with a double bar line at the end of the eighth staff.

Drill of the Week: "No. 12, Minor Doo Doo" by Chris Olka

Notes from the Author:

"This is a soft dynamic and ultra-legato tonguing study, using the "D" tongue, rather than a "T" or "K" tongue. This is a style of articulation often used by trombonist. Play these as connected and as soft as humanly possible. Focus on a steady supported air stream, hearing/creating the pitch, and staying relaxed."

The image displays ten musical staves, each representing a different key signature for a 4-measure rhythmic drill. The first staff is in B-flat major (two flats) and 4/4 time, marked *pppp*. The subsequent staves are in various keys: D major (two sharps), B-flat major (two flats), D major (two sharps), B-flat major (two flats), B-flat major (two flats), B-flat major (two flats), D major (two sharps), D major (two sharps), and B-flat major (two flats). Each staff contains a sequence of eighth notes with stems pointing up and down, and beams connecting them in pairs, creating a continuous melodic line.

Unpublished Exercise: "Mr. Blue Sky" arr. Dr. Guytano Martorano III

Notes from Dr. Martorano:

STORY TIME: In a lesson, Baadsvik suggested using his exercise of repeated notes to push tone production efficiency. After using this exercise for some time, I adapted it to this song, "Mr. Blue Skies" by the Electric Light Orchestra. How long can you go on one breath?

3

sim.

Breath!

7

sim.

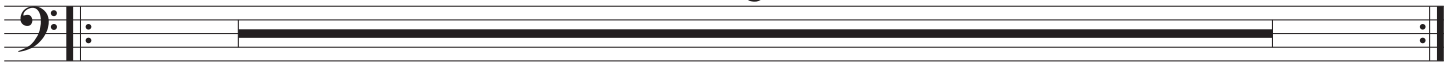
Breath!

7 (x3)

1.



8



Play or Sing



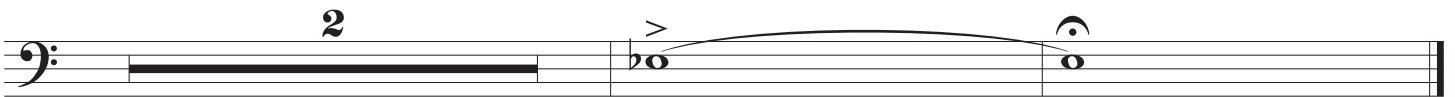
(x3)



simile



7



2



CH. 7 - DYNAMICS

Daily Warm-Ups: "Volume Control Exercise" by Emory Remington & arr. Brian Bowman

Notes from Dr. Martorano:

"This is the final line of Bowman's Daily Warm-up for Euphonium. How soft and loud can you play WITH GREAT SOUNDS AND CONTROL. This exercise is not a place to gamble on extremes, but rather find consistency and control."

The musical score consists of four systems of bass clef staves in 4/4 time, each containing three measures of music. The notes are half notes with accents.

- System 1:** Notes are G2, F2, and E2. Dynamic markings: *pp*, *ff*, *pp*, and the word *simile*.
- System 2:** Notes are D2, C2, and B1. Dynamic markings: *pp*, *ff*, *pp*.
- System 3:** Notes are A1, G1, and F1. Dynamic markings: *pp*, *ff*, *pp*.
- System 4:** Notes are E1, D1, and C1. Dynamic markings: *pp*, *ff*, *pp*.

The word *cont.* appears at the end of the second and fourth systems.

The Brass Gym: "Soft Touch" by Sam Pilafian & Patrick Sheridan

Notes from the Author:

"This exercise should be performed as softly as a clean articulation can be achieved to promote a clear articulation right from the beginner of each day. Remember: TENSION KILLS TONE! Playing softly is not holding back air. Rather, it is blowing air slowly. Relax in all registers to stay resonant on every note."

The musical notation for "Soft Touch" consists of two staves in bass clef, 3/4 time, with a key signature of one flat. The first staff begins with a dynamic marking of *pppp*. The music features a sequence of notes and rests, with some notes beamed together in groups of three or four. The second staff continues the sequence, ending with a double bar line.

Unpublished Exercise: "Hard Touch" by Dr. Guytano Martorano III

Notes from Dr. Martorano:

"This exercise is a dynamic variation of the previous "Soft Touch" exercise. Use this exercise to break into the loudest dynamic register and create consistency of loud articulation. As you play this exercise, focus on the response and tone color of each note. Can you make them consistent?"

The musical notation for "Hard Touch" consists of two staves in bass clef, 3/4 time, with a key signature of one flat. The first staff begins with a dynamic marking of *fff*. The music features a sequence of notes and rests, with some notes beamed together in groups of three or four. The second staff continues the sequence, ending with a double bar line.

Drill of the Week: "No. 9, Whack-a-Mole" by Chris Olka

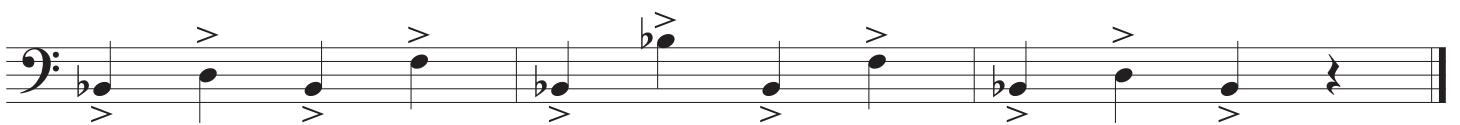
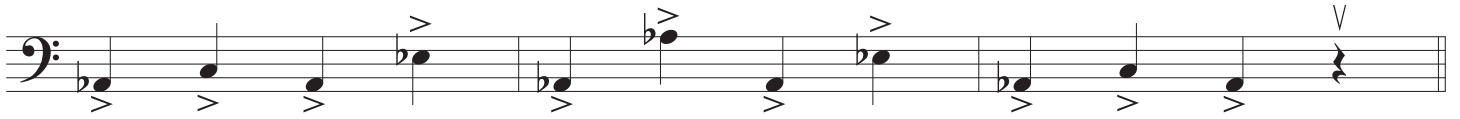
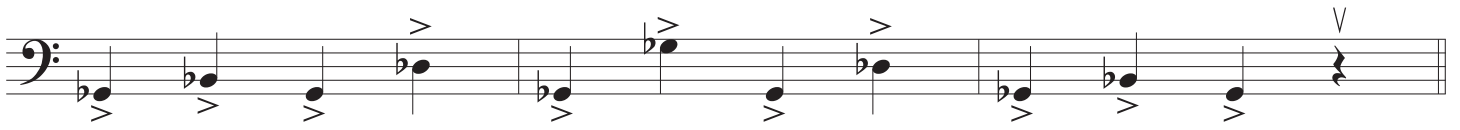
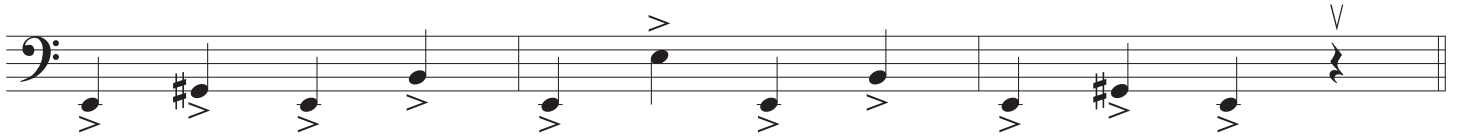
Notes from the Author:

"No great mysteries here. Use these exercises to build tone and facility in the low register and with extreme loud dynamic. This is not a study of beautiful sounds, rather of an abundance of sound. Play this exercise much louder than you would play in an ensemble, so in performance you are more relaxed and in control."

"An Abundance of Sound"

The exercise consists of six staves of music in bass clef, 4/4 time. Each staff contains a sequence of notes with accents and slurs. The first staff includes a *ffff* dynamic marking and a fermata at the end. The notes are as follows:

- Staff 1: G2, F2, E2, D2, C2, B1, A1, G1, F1, E1, D1, C1, B0, A0, G0. (Note: The first staff in the image shows a different sequence of notes, likely a typo in the transcription above. The notes are: G2, F2, E2, D2, C2, B1, A1, G1, F1, E1, D1, C1, B0, A0, G0.)
- Staff 2: G2, F#2, E2, D2, C2, B1, A1, G1, F1, E1, D1, C1, B0, A0, G0.
- Staff 3: G2, F2, E2, D2, C2, B1, A1, G1, F1, E1, D1, C1, B0, A0, G0.
- Staff 4: G2, F2, E2, D2, C2, B1, A1, G1, F1, E1, D1, C1, B0, A0, G0.
- Staff 5: G2, F#2, E2, D2, C2, B1, A1, G1, F1, E1, D1, C1, B0, A0, G0.
- Staff 6: G2, F2, E2, D2, C2, B1, A1, G1, F1, E1, D1, C1, B0, A0, G0.



How to Practice Effectively

a guide of self-instruction for the young musician

Overview:

Daily practice is key to a successful performance. It provides an ease of sound control, and lets the performer shift their focus to musicality. This guide will help you get the most out of each practice session, and let you play with more ease, speed, and confidence.

Step 1: Goal Setting

“The first step in practicing music effectively is envisioning your Goals”

Begin with the end in mind. Ask yourself, “What does my ideal performance sound like?” Listen to recordings. Give yourself clear, actionable objectives, such as tempo and range. From here, start making intermediate goals (half-way & weekly) and write these down on your practice sheet.

With this clear path in mind, you can begin your daily practice with a purpose.

Step 2: Routine Building

“The second step in practicing music effectively is building a Routine”

Put First Things First. As a musician, regular exercises in sound control, as well as working on literature, is the key to success. This balance of fundamental, scales, and literature creates an effective Routine.

Try this:

A. *Adapt your Routine to your Needs*

“I’ll say this about my warm-up routine: I do one every day, Its always very thorough, and it’s never the same thing twice.” - Chris Olka, Principal Tubist of the Cincinnati Symphony

Find/create a set of exercises, both as a warm-up and as a way to address weaknesses in your fundamentals. Once mastered, find fun ways to modify/expand these exercises to grow as you do.

B. *Prioritize Material that is Challenging to You*

When practicing, divide the music into small section (4/8 measures), ranking them 1, 2, or 3:

1 = Mastered 2 = Learned/Playable 3 = Unlearned/Unplayable

During each practice session, work on all 3 sections, most of the 2 sections, and some 1 sections as needed. The goal is to move every section to the next level.

C. *Practice with Great Focus*

Focused practice is effective practice. Dividing your practice session into chunks will help you stay focused and avoid mental fatigue. Rule of thumb, if your brain feels tired, take a break!

Step 3: Creative Problem Solving

“The third step in practicing music effectively is using creative problem solving”

Be Proactive. Step one (goals) gives us a map to our destination. Step two (routine) gives us the vehicle to travel that path. Step three (problem-solving) puts gas in the tank. Learning to problem solve, that is overcoming challenges we face in our daily practice, is the essence of proactivity.

Here is a guide to help you turn mistakes into skills:

1) *Identify the Errors*

Error can be defined as “*The difference between what you hear and what you **want** to hear*”. Notice this comes in two parts: **Perception** (what you hear) and **Intention** (what you wanted). The clearer you can identify errors, the easier they will be to fix.

Here are some tips on how to better identify errors:

- A) Record yourself – **(Perception)** When performing, focus is split between playing and listening. Recording of yourself helps you focus solely on listening and error identification
- B) Listen to recordings – **(Intention)** Find recordings of your piece, performed by great musicians. Ask yourself: “*What do I like about this? What would I do differently?*”

2) *List Possible Causes*

This step is more subtle and takes time to master. The more you practice, the better you will be at diagnosing the causes. Take the error identified in step 1 and ask yourself, “what’s causing this?”:

“*I played the wrong note (step 1), → because I was using the wrong fingering (step 2)*”
 “*I don’t like my tone (step 1), → because my embouchure is too tight (step 2)*”
 “*My notes sound muddy (step 1), → because my notes need work (step 2)*”

Start with what you know and think creatively. What are some possible causes to this problem? Which one do you think is most likely? Are there multiple causes? Start broad and narrow it down.

3) *Create Creative Solutions*

Count a tricky rhythm. Play slow to fast with a metronome. Buzz a note with a drone. Sing the melody, freer and more expressive. Wind pattern and finger along. Play along with a recording. Soft to loud.

These are all examples of creating creative solutions. The key here is using practice techniques that target the cause of the identified errors. Think “Because of (step 2), which caused (step 1), I need to work on (step 3)”. The more you follow Problem → Cause → Solution, the easier creative problem solving will be.

Remember: The core of any good practice technique is starting simple and slowly going complex.

Simple → Complex

Slow to fast. One measure to multiple measures. Comfortable dynamics to extremes in loud and soft. Comfortable range to up/down an octave. Alone in a practice room to performing for friends and family.

If your creative solution does not succeed with slow, focused practice, go back to step 2 and rethink the cause. Here are a couple of techniques for you to try (next page):

Abbreviated list of Practice Techniques

Backing Track –	The use of pre-recorded track (possibly drum tracks or piano tracks) in order to work on tempo, style, and performance.
Buzzing –	Performing a note or small section on the mouthpiece (MP) alone in order test the pitch and train the embouchure. Best used with a drone.
Counting–	The rhythmic chanting of the note names or rhythms on the page. Can be combine with other techniques like Fingering, Wind Patterns, or Singing.
Drone –	The use of a sustained pitch (using the “Sound Back” feature on your tuner) while you play in order to work on tuning and buzzing accuracy.
Fingering –	Preforming the music only at the fingers. Can be combine with other techniques like Fingering, Wind Patterns, or Singing.
Half Valve –	The act of pressing the valves halfway down to allow the production of any note desired (like buzzing, but high resistance). This works best on piston horns, but is possible on rotary horns (might be more quarter valving on rotary horns).
Play-Sing-Play –	Going between performing a note on the instrument and then singing a note at the voice, and back to the horn. Could also hum/whistle the pitch.
Reverse stacking –	See stacking. The practice technique of using progressively longer passages, starting the with LAST note of a phrase and backing up more with mastery.
Sing –	Using the voice to mimic the pitch, rhythm, and style of a passage.
Slide removal –	The removal of a slide in order to hear the pitch that is being buzzed through the instrument. Best done in lower ranges, as to not create an overtone on the shorter tubing. This is an alternative to buzzing and singing.
Stacking –	The practice technique of using progressively longer passages, starting with the FIRST note and adding more with mastery.
Whole-Part-Whole –	The act isolating small sections within the larger context to work on performance. Play a large section, isolate a small challenging section, then go back to whole.
Wind Pattern –	The use of only wind to perform the music. Can be combined with Fingering or Clapping to greater effect.
Wood shedding –	The act of rehearsing a section at a slower tempo, then progressively faster (best accomplished with a metronome).

Resources:

Books:

Covey, Stephen R. *The 7 Habits of Highly Effective People*. San Francisco, CA: Franklin Covey Co., 2016.

Levitin, Daniel J. *The Organized Mind: Thinking Straight in the Age of Information Overload*. New York: Dutton an imprint of Penguin Random House, 2017.

Videos:

How to practice effectively...for just about anything - Annie Bosler and Don Greene:

<https://www.youtube.com/watch?v=f2O6mQkFiiw&t=124s>

Cello Drone for Tuning and Improvisation (Musician's Practice Partner – Topic):

<https://www.youtube.com/playlist?list=PL-DyGoFkAJ1GRwBhUD4AOTewsr6l-x8qe>

Sheet Music:

20 Minute Warm Up- Michael Davis

Complete Method for Tuba- Joseph Arban

Daily Routines for Trombone- Emory Remington

Drill of the Week- Chris Olka

Lip Flexibilities- Bai Lin

Lip Slurs for the Tuba- Deanna Swoboda

Special Studies for the Tuba- Arnold Jacob

Technical Studies for the Cornet- Herbert Clarke

Technical Study for the Cornet- Herbert Clarke

The Brass Gym (and Breathing Gym)- Sam Pilafian and Patrick Sheridan

The Breathing Book- David Vining

Trumpet Flow Studies- Vincent Cichowicz

& Unpublished exercises by Carl Kleinsteuber, John DiCesare, and Oystein Baadsvik.

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