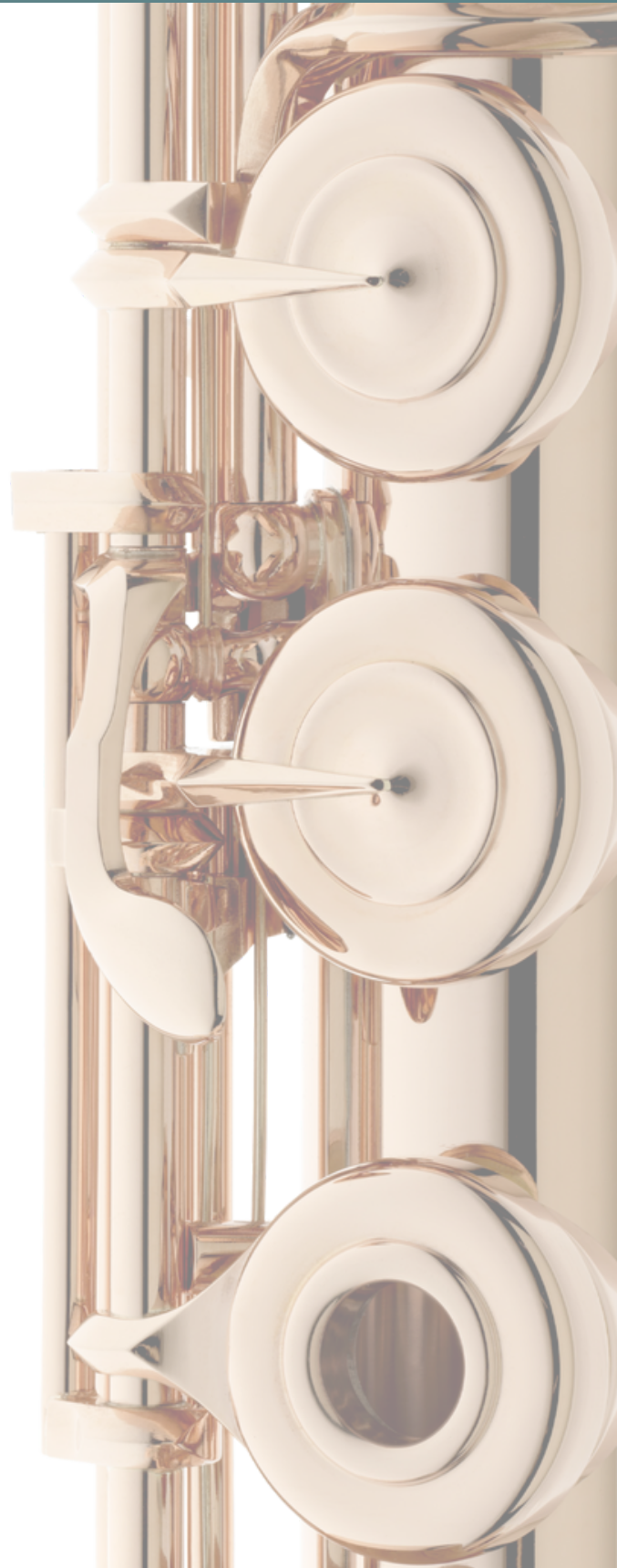




Tools and Strategies for

FLUTE TONE & INTONATION



03

Questions to Ask

04

Basic Components of Flute Tone

07

Tuning Tendencies: Observe

10

Tuning Variations: Explore

11

Tuning Prescription: Observe

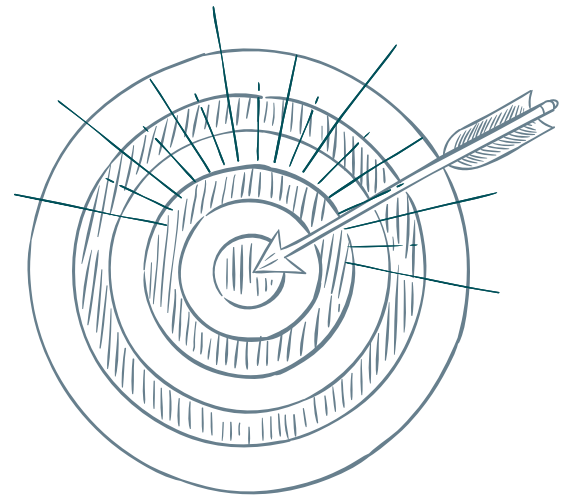
13

Tuning Prescription: Reflect & Create



TABLE OF CONTENTS

All adjustments begin with questions.



01. WHAT ARE YOU LOOKING TO ADJUST?

Are you looking to refine tone? If so, can you specify what you're currently unhappy with? A general, "I need to fix my tone" is not helpful. Is it in a particular octave where you need the adjustment? Is it at a certain dynamic level? For blending purposes? For timbral changes? The more you specify, the easier you can pinpoint what is helpful and make a plan.

Has your intonation always been a source of stress? Are you uncertain where your tendencies lie? The pages in this book will help you discover what you can do to not only predict your intonation tendencies, but to resolve any issues with the tools that are the most helpful for you.

02. WHAT TOOLS DO YOU HAVE?

The following pages will introduce you to some of the components of flute tone/timbre and intonation flexibility. We often use terms that reference our tools broadly, such as "embouchure" and "support," and the pages in this booklet are intended to help you isolate and specify components of each. By understanding each of them on their own, you can begin to craft a "prescription" - a combination of elements that is adjusted specifically for your own playing - to empower you when playing solo or with others. In these pages, you will be asked to isolate and observe the following components of your flute playing:

Air speed: not a volume of air, but the intensity with which it moves

Air temperature: Does it swirl fastest at the front of your mouth (cold) or nearer the back of your mouth (warm)?

Lip prominence: Is your upper lip working to aim the air down the same as the lower lip is working to compress the air up? Is one working more than another?

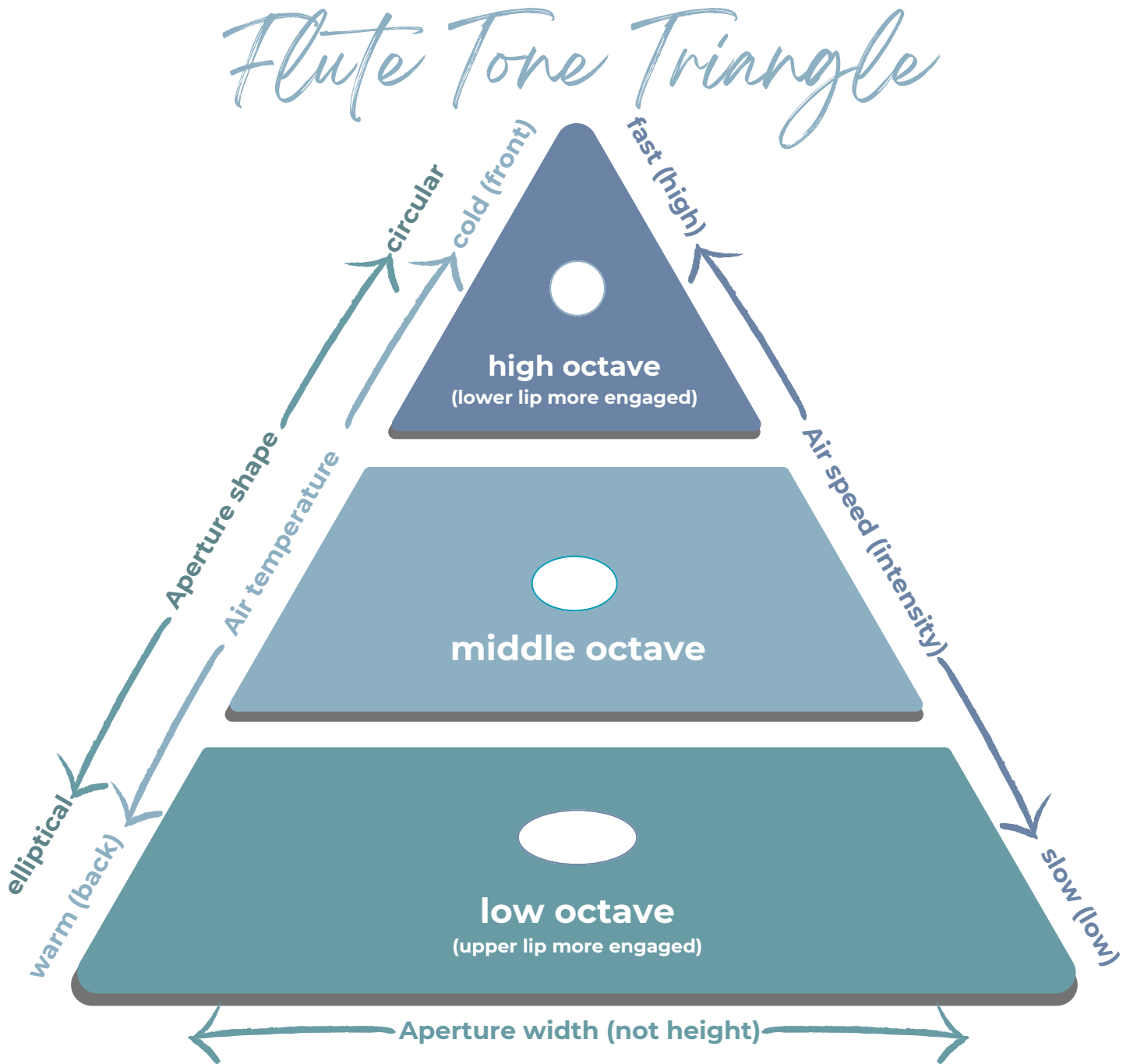
Embouchure compression: How much are your lips working to compress the air?

Oral cavity shape: How does changing the shape of your oral cavity affect tone and intonation? Different vowels and tongue placements produce different effects.

BASIC COMPONENTS OF FLUTE TONE

Using air intensity/speed, embouchure compression, and oral cavity shape in combination, we can learn to manipulate the clarity of our tone to achieve the timbre we desire. That flexibility has a profound impact on our intonation. Isolate individual components and note your observations. What changes when you adjust using the tools on their own and in combination? Practice so you can isolate, adjust, and refine one component at a time.

Note the aperture shapes in each section of the triangle. Their height doesn't change between octaves - meaning, don't close your lips. (Small changes in height are likely to happen on their own, but we don't want to exaggerate those changes.) More often than not, that limits the amount of sound we can make. No matter what we do, if we're not letting air out of our mouths, we will not get a full sound.

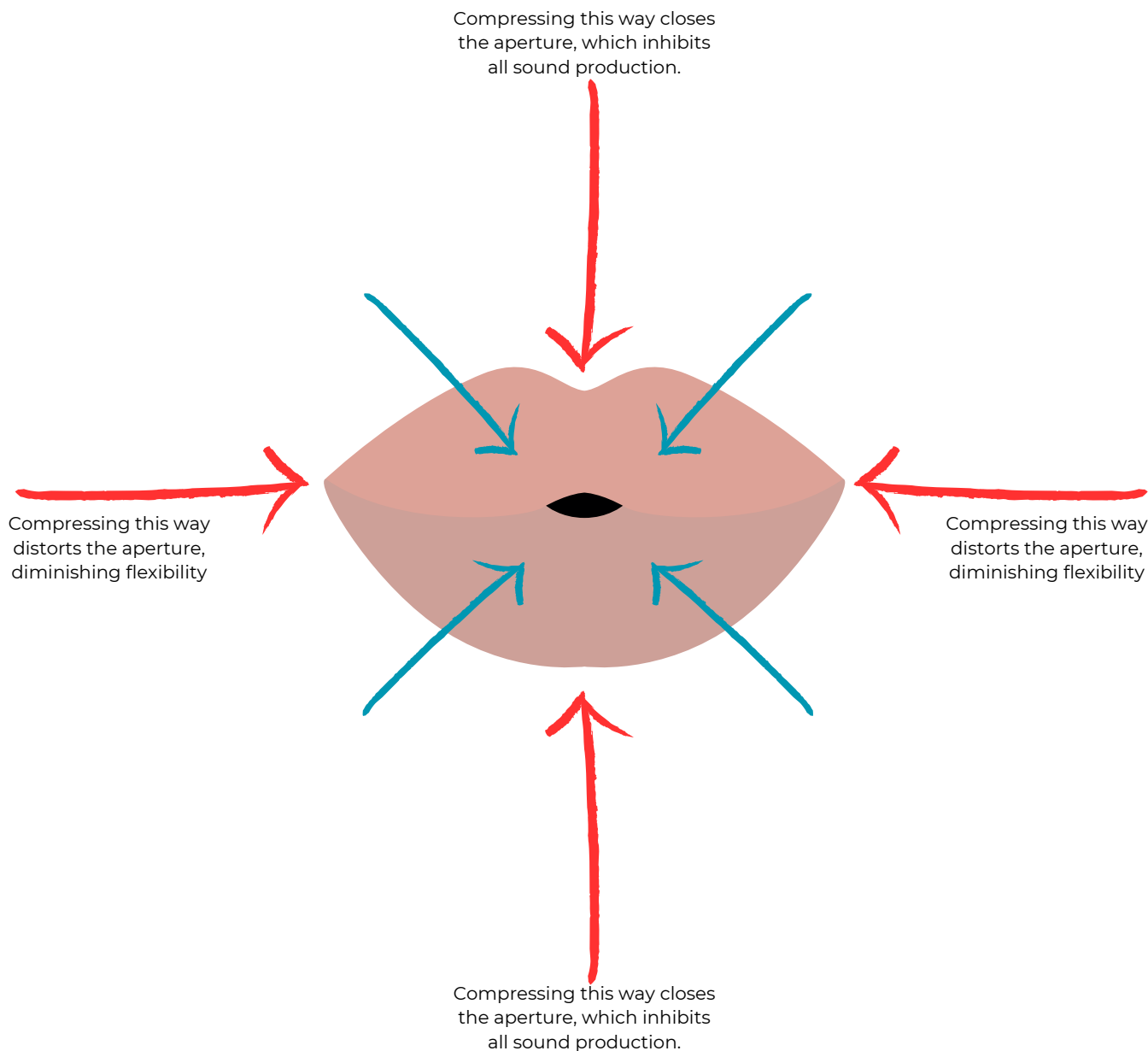


Questions to consider when you're evaluating:

1. Which of the components are easiest for you to manipulate?
2. Which components work best for you in the low octave? In the middle and high octaves?
3. Can you work to manipulate each component to the extreme, past the ideal for your tone? Go farther than you need in each direction, then back off to a comfortable balance.

BASIC COMPONENTS OF FLUTE TONE: EMBOUCHURE COMPRESSION

The muscles we use to change our embouchure have a profound impact on our tone. Too much compression? The resulting tone is limited and lacks resonance. Too little compression? Tone is diffused and airy, and we lose air faster than is helpful. Small changes in aperture height are likely to happen on their own, but we don't want to exaggerate those changes. Focus on the area surrounding the aperture. Since we each have unique musculature and lip shape, these suggestions have been made to be accommodated by anyone - regardless of whether or not your aperture is in the center or is offset, whether you have a teardrop or not, where you place your headjoint, etc.



Activate the tiny muscles around your embouchure in the direction of the blue arrows (think of them as legs of the letter "X"). Compressing the embouchure this way gives you control over your aperture shape while also allowing the lips to be drawn forward for more accurate aiming. The corners should remain as neutral as possible (unlike the embouchure for a clarinet) to maintain flexibility between octaves.

BASIC COMPONENTS OF FLUTE TONE: LIP PROMINENCE AND CLARITY

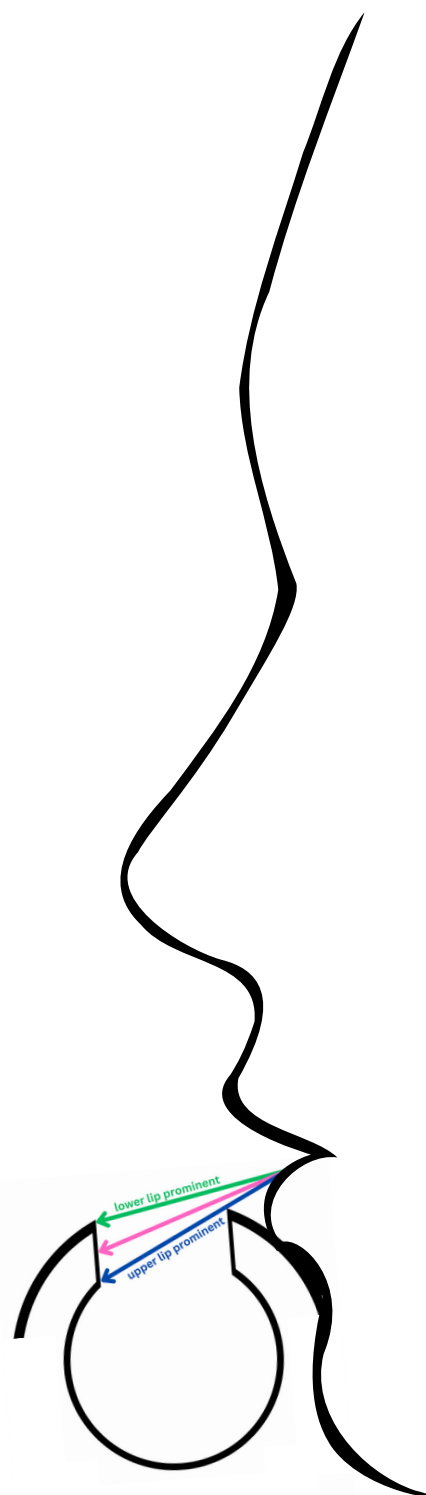
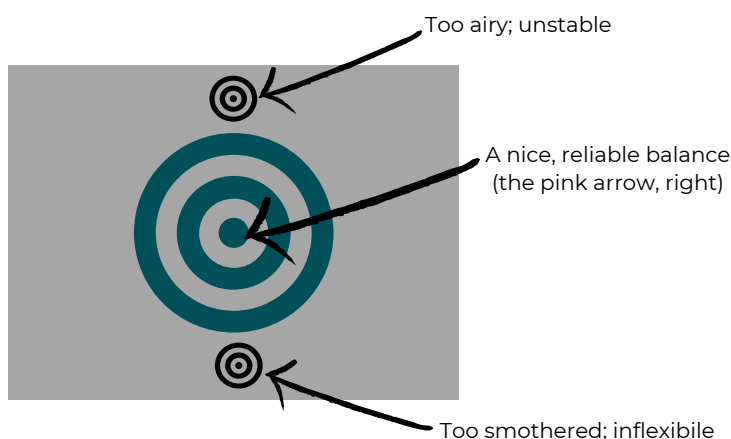
Continuing our exploration of tone, we have to consider the upper lip as an independent of the lower lip (and vice versa). In the profile below, the pink arrow represents both lips working equally to direct the air. When the upper lip is more engaged/prominent, the air enters the flute at a steeper angle (the blue arrow). When the lower lip is more engaged/prominent, the air enters the flute at a shallower angle (the green arrow).

Consider some common tone issues, such as airy (and likely sharp!) high notes, or even airy tone in general. If you are hearing more excess air in a sound than you are hearing actual tone, there is too much air skimming across the surface of the tone hole. To adjust this, engage the upper lip to encourage the air to hit lower on the riser (like the pink arrow).

Is the tone smothered or inflexible, specifically with regard to slurs between registers? (These notes are likely to be flat, as well.) It's time to engage that lower lip. Its job is not to bring the air up and out of the flute, but to compress the air. This compression results in a more condensed stream of air.

Overall, hitting the riser where the pink arrow points is ideal for fullness of tone. As a result, you are setting up your aperture to be more flexible and able to take control of dynamic contrasts.

This rectangle, below, represents the wall of the riser where the air hits (where the arrows are pointing, in the image on the right).



TUNING TENDENCIES: OBSERVE

First, take a tuning note and adjust if needed. Then, for each note within your range, play comfortably (no forcing, no extreme dynamics, and no vibrato). Observe what your tuner registers for each note, and place a mark in the appropriate column. While there are often outliers (hello, C#...), you should be able to observe your overall tendencies.

PITCH	> -20	-20	-15	-10	-5	0	+5	+10	+15	+20	> +20
Low C											
C#/Db											
D											
D#/Eb											
E											
F											
F#/Gb											
G											
G#/Ab											
A											
A#/Bb											
B											
C											
C#/Db											
D											
D#/Eb											

TUNING TENDENCIES: OBSERVE

First, take a tuning note and adjust if needed. Then, for each note within your range, play comfortably (no forcing, no extreme dynamics, and no vibrato). Observe what your tuner registers for each note, and place a mark in the appropriate column. While there are often outliers (hello, C#...), you should be able to observe your overall tendencies.

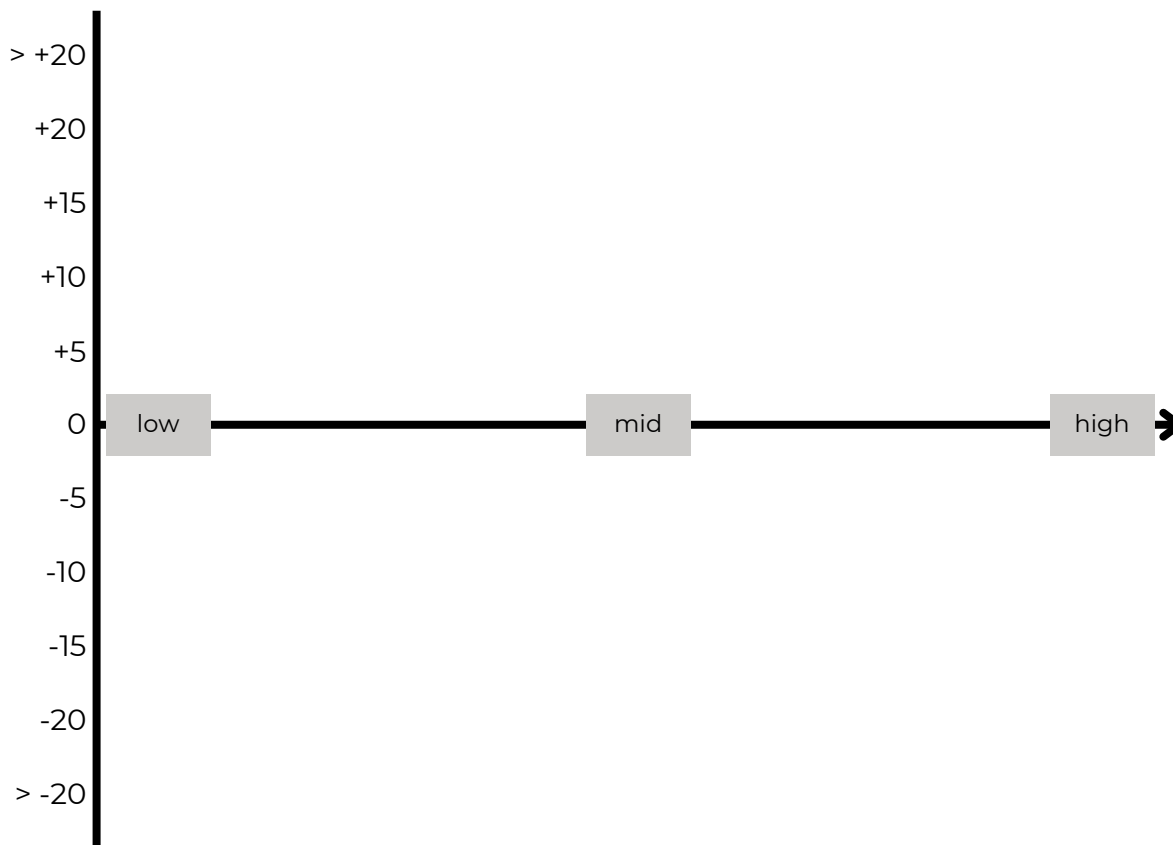
PITCH	> -20	-20	-15	-10	-5	0	+5	+10	+15	+20	> +20
E											
F											
F#/Gb											
G											
G#/Ab											
A											
A#/Bb											
B											
C											
C#/Db											
D											
D#/Eb											
E											
F											
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G											

TUNING TENDENCIES: OBSERVE

First, take a tuning note and adjust if needed. Then, for each note within your range, play comfortably (no forcing, no extreme dynamics, and no vibrato). Observe what your tuner registers for each note, and place a mark in the appropriate column. While there are often outliers (hello, C#...), you should be able to observe your overall tendencies.

PITCH	> -20	-20	-15	-10	-5	0	+5	+10	+15	+20	> +20
G#/Ab											
A											
A#/Bb											
B											
High C											
High C#/Db											
High D											

Plot your general trends on this line graph to generate a visual representation of what you've observed.



TUNING VARIATIONS: EXPLORE

Pick three notes and use the following components of tone and intonation adjustment to make the pitch go as sharp and as flat as you can. Remember, the key here is to use only one tool at a time. Record your results below. Try other notes as you get more comfortable manipulating the pitch within each octave.

Some tools might be more effective down low, others up high.

Tool	Note 1: _____ Observations: low	Note 2: _____ Observations: mid	Note 3: _____ Observations: upper
Air speed/intensity			
Embouchure compression			
Oral cavity shape			

TUNING PRESCRIPTION: OBSERVE

Using air intensity/speed, embouchure compression, and oral cavity shape in combination, experiment with notes in various octaves to learn which adjustments work best for you. Note your observations. What changes when you adjust using the tools on their own versus in combination with one another?

CHOSEN NOTES	Air intensity/speed	Embouchure compression	Oral cavity shape	Air + embouchure	Embouchure + oral cavity shape	Air + oral cavity shape
Low 1: _____						
Low 2: _____						
Low 3: _____						
In staff 1: _____						
In staff 2: _____						
In staff 3: _____						

TUNING PRESCRIPTION: OBSERVE

Using air intensity/speed, embouchure compression, and oral cavity shape in combination, experiment with notes in various octaves to learn which adjustments work best for you. Note your observations. What changes when you adjust using the tools on their own versus in combination with one another?

CHOSEN NOTES	Air intensity/speed	Embouchure compression	Oral cavity shape	Air + embouchure	Embouchure + oral cavity shape	Air + oral cavity shape
Above staff 1: _____						
Above staff 2: _____						
Above staff 3: _____						
High 1: _____						
High 2: _____						
High 3: _____						

TUNING PRESCRIPTION: REFLECT & CREATE

Using the questions below, reflect on all the adjustments you experimented with over the past few pages.

Observation 1: Were you able to manipulate pitch using air intensity/speed on its own? How did this go for you?

Observation 2: Were you able to manipulate pitch using embouchure compression on its own? How did this go for you?

Observation 3: Were you able to manipulate pitch using oral cavity shape on its own? How did this go for you?

Observation 4: When you combined techniques together, which combinations influenced your pitch the most? Were different combinations more helpful in different octaves?

Observation 5: When you combined techniques together, which combinations were the least successful overall?

Final Step: Identify your go-to combinations of one, two, or all the tools to adjust your intonation for each octave by circling them in the table below. This is your “prescription” for playing! It’ll need to be reassessed as your playing grows and changes.

Low	In Staff	Above Staff	High
Air speed/intensity	Air speed/intensity	Air speed/intensity	Air speed/intensity
Embouchure compression	Embouchure compression	Embouchure compression	Embouchure compression
Oral cavity shape	Oral cavity shape	Oral cavity shape	Oral cavity shape



Miyazawa Performing Artist Megan Lanz (DMA/CMI) performs regularly as a solo artist and chamber musician. As a pedagogue, she finds great joy and fulfillment in helping students make the connection between the musical and physical components of playing an instrument. Her holistic performance and pedagogical approaches encompass all physical, mental, and emotional components of being a human musician.

Megan has had the pleasure of sharing the stage with great artists such as Andrea Bocelli, The Who, Stephen Hough, David Foster, Natalie Merchant, Time For Three, Charles Yang, Jackie Evancho, Celtic Woman, Hillary Hahn, and Edgar Meyer. She has performed with a variety of ensembles and productions, including the Colorado Symphony Orchestra (under Andrew Litton and Peter Oundjian), Colorado Music Festival Orchestra, Crested Butte Music Festival Orchestra, Opera Steamboat, Las Vegas Philharmonic, the first national tour of Wicked, Phantom: The Las Vegas Spectacular, and Disney's The Lion King.

