# Establishing Balance
Walk around the room and ask:

“Can I tell if I’m leaning?”
“Is my weight over my leading foot?”
“Where do I sense the bottom of my torso?”

Imagine dribbling a basketball out in front of you. Where do you feel your center?

Notice the pressure your feet exert on the ground, and that the ground exerts on your feet.

Notice if your head is free to move, your ribs move easily in all directions, your hips feel open and supple, your weight is equal across your feet.

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<tbody>
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# Stretching

Stretch arms up to the ceiling and notice rib expansion
Meet hands behind back, notice chest expansion
Hip circles
Bend to the floor roll up slowly
Neck semi circles

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# Breathing

Feel your throat open on inhale and exhale

Imagine releasing a bowling ball or frisbee while exhaling on a:

- shhhhhhhhhhhhh
- dddddjjjjjjjjjjjjjjj
- sssssssssssssssssssssssssssss
- zzzzzzzzzzzzzzzzzzzzzzzzzzzzzz

Inhale for 4 counts, suspend the breath for 4 counts, release the breath for 4 counts

Pulse the breath on a quick shhh, ssss, or ffff

Sigh out with open throat and slowly add sound

Release air on a long wwwooooahhhhh

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[www.voicescienceworks.org](http://www.voicescienceworks.org)
<table>
<thead>
<tr>
<th>Connecting Spoken Phrases</th>
<th>Length of Time</th>
<th>Starting Pitch</th>
<th>Pitch Pattern</th>
</tr>
</thead>
<tbody>
<tr>
<td>Well, Well, Well</td>
<td>ex: 4 min, 6 repetitions</td>
<td>ex: speaking range, high/middle/low range</td>
<td>see examples page</td>
</tr>
<tr>
<td>Whoooo arreree youuuuu</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mmmy Mmamma Mmmakes Mmmuffins</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Name that tune</td>
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<tr>
<td>Late for class</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Once upon a time</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hiiiiiiiiiiiiiiii</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>But I don’t waaaaanna (toddler whine)</td>
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<tr>
<td>Other:</td>
<td></td>
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</tbody>
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<table>
<thead>
<tr>
<th>Massage</th>
<th>Length of Time</th>
<th>Starting Pitch</th>
<th>Pitch Pattern</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chewing muscles, Temples</td>
<td>ex: 4 min, 6 repetitions</td>
<td>ex: speaking range, high/middle/low range</td>
<td>see examples page</td>
</tr>
<tr>
<td>Tongue thrusts, Tongue curls</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under chin</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Imagine chewing gum</td>
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<td></td>
<td></td>
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<tr>
<td>Sides of hyoid bone and thyroid cartilage</td>
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<td></td>
<td></td>
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<tr>
<td>Scrunch nose and lips together, spread far apart in wide yawn and smile</td>
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<tr>
<td>Other:</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Semi-Occluded</th>
<th>Length of Time</th>
<th>Starting Pitch</th>
<th>Pitch Pattern</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sing through a straw or cup</td>
<td>ex: 4 min, 6 repetitions</td>
<td>ex: speaking range, high/middle/low range</td>
<td>see examples page</td>
</tr>
<tr>
<td>Alternate every other pattern with the straw or cup and then a vowel</td>
<td></td>
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<tr>
<td>Start the onset of the pattern on a straw or cup, then open up to a vowel</td>
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</tr>
<tr>
<td>Lip trill, Tongue trill, Raspberries</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>MMMMMMMM, NNNNNNNN, LLLLLLLLLL</td>
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<td></td>
</tr>
<tr>
<td>NNNNGGGG, ZZZZZZZ, WVVVVVV, Djjjjj</td>
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<tr>
<td>Other:</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Focus the Sound (easy adduction)</th>
<th>Length of Time</th>
<th>Starting Pitch</th>
<th>Pitch Pattern</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tiny whimpers</td>
<td>ex: 4 min, 6 repetitions</td>
<td>ex: speaking range, high/middle/low range</td>
<td>see examples page</td>
</tr>
<tr>
<td>Puppy whines</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MmmiamMiamMiamMiamMiam</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MiuMiuMiuMiu (kitten-like)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>MoneyMoneyMoney</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GaNGGaNGGaNGG</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NweedoNweedoNweeedo</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Toddle whines ‘I don’t wanna’ ‘Aww Maan’</td>
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<tr>
<td>Vocal fry while breathing out &amp; breathing in messa di voce in one direction</td>
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<td></td>
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<tr>
<td>ingressive singing or speaking</td>
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<tr>
<td>Other:</td>
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Other:

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### Onsets

While lip trilling, alternate air only and pitch
Alternate SSSS to ZZZZ, SHHHH to D\|\|\|\|, and FFFFFF to VVVVV
Alternate WhyWhyWhy and AiAiAiAi and HaiHaiHaiHai
Start AiAiAiAi with a puppy whine
Start AiAiAiAi with vocal fry
Lightly say “Uh-Oh” and “oops”
Staccato Ng and B combined with a vowel
(e.g. Ng-Ah, Ng-Ih, Ng-Oo, B-Ah, B-Ih, etc.)
Staccato lh Uh and [ə] (schwa)
Other:

### Tongue Independence

Tongue thrusts with and without sound
Slides with tongue completely out of mouth
Raspberries
NNNGGGG ---> AAAAAA
ZZZZZZ ------ EEEEEEEE
EEEEEEEE----- AAAAAAAA
YaYaYaYaYa and KaKaKaKaKa (with jaw still)
GangGangGangGang and MingMingMingMing
The Blowfish (puff cheeks, tiny opening at lips)
Other:

### Whoop Resonant Strategy

Cop Car whoop WHOOP
Siren WeeeUUUUUeeUUUU
Like on a swing WEEEEEEE
Imitate a ghost hoooOOOO
Slide on Whoop, Wheep and Whaaap
Octave glide on ooo-oh-ah, changing vowel slowly across glide to match the “whoop” boost
Pigeon “Coo, Coo, Coo”
Other:

### Hey Resonant Strategy

Call out ‘Hey’ to get someone’s attention
Call out ‘Hey’ as if annoyed
Hey STAY AWAY
Slide on Hey
Octave glide on eee-eh-ae, changing vowel slowly across glide to match with the “hey” boost
Duck “Quack, Quack, Quack”
Other:

### Length of Time

ex: 4 min, 6 repetitions

### Starting Pitch

ex: speaking range, high/middle/low range

### Pitch Pattern

ex: see examples page

- 54321
- 5-1
- 1-8-1
- 123454321
- 1356531
- 534231271
- 1 5 8 5 3 1
- other:
**Acoustic Mix Resonant Strategy**

Use [N] (=ng)  
Sing the vowel chains [i] [ɪ] [e] [ɛ] [a] [æ] and [u] [ʊ] [o] [ɔ] [a] [æ]  
Sing the vowel shape bridging exercise  
Goose “Qwaa Qwaa Qwaa”

**Stability Across Vowels**

Neutral Vowels: [I] (bit), [ʊ] (book), and [ə] (schwa=but). Use “bit, book, but”  
Apply stability to other vowels by keeping the neutral vowel feeling with speech-level vowels:  
Aaa([ə])-ehhh(Ih)-eee(Ih)-00hh(Uh)-uuuuu(Uh)  
Sing the vowel shape bridging exercise  
Slide low to high eeeeee - ihhhhh

**Vowel/Consonant Combos**

Let the consonants lead and the vowels energize the consonants  
Louie Louie Louie Louie Bwe Bwe Bwe Bwe  
Boi Boi Boi Boi Bee Bo Bee Bo Bee  
AngAngAngAngAng Gi ko Gi ko Gi  
Zingy Zingy Zingy Zing Lee Io Lee Io Lee  
Ai yai yai yai yai Vee Veh Vee Veh  
New New New New New  
Speak words from a song or monologue  
“The quick brown fox jumped over the lazy dog”

**Bringing Attention Outside**

Walk around the room  
Notice 5 things you see, 4 you touch, 3 you hear, 2 you smell, 1 you taste  
Imagine tossing a ball  
Bring your hands out by your ears, notice their presence with your peripheral  
Create choreography for each warm-up  
Create a horizon with your hand under your eyes  
Sing each warm up with an emotion in mind, and notice how you feel and sound differently.  
Focus on 4 core emotions: Anger, Sadness, Joy, Fear

---

**Length of Time**  
ex: 4 min, 6 repetitions

**Starting Pitch**  
ex: speaking range, high/middle/low range

**Pitch Pattern**  
ex: see examples page

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- 1-8-1
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- 1 5 8 5 3 1
- other:
Explanations and Examples

The primary goal of any warm up is to stretch and unpress the vocal folds. There are many other goals after that, however, that center primarily on coordination at local and global levels. Knowing the reasoning behind individual warm ups, and in what order you perform them, can be a key factor in their success. The key to utilizing the direct benefits of each one rests in tracking the sensations that you feel when performing them, and attempting to recreate those sensations when singing. Remember these helpful hints:

- **Warm Ups have specific purposes**
- **Only YOU can warm your voice up**
- Many warm ups serve the same goal, pick what works for you
- You have as much information as anyone about your voice

Centering, Stretching, and Breathing
Aligning your body eliminates tensions that can cause vocal strain. The key to body alignment rests in noticing. We habituate posture in daily life in ways that puts undue stress on muscles throughout the body that we are often unaware of. Focusing your attention on certain muscles and muscle combinations, and noticing if they feel strained or not, provides the first important insight into your voice. Always inhale and exhale while performing these warm ups, to connect your breath to your body alignment through feelings of freedom.

Spoken Phrases
Speaking allows the singer to align the vocal tract and breath without the added challenge of sung pitch. Focus on a relaxed inhale, and sustaining long (or extra-long) vowels while increasing vowel energy into consonants such that the consonant is energized by the vowel. This process sets the voice up nicely for singing by helping the vocal folds coordinate the breath pressure and vocal fold onsets with vocal tract consonants. Add the concept of twang for resonant strategy success.

Massage
We tend to engage some muscles in perpetual tension when our bodies are out of alignment. Finding the ones that are significantly contracted and rubbing them while breathing and asking them to release can become an important aspect of body freedom. This will be particularly important with smaller muscles in the neck and face.

Semi-Occluded
The principal benefit from semi-occluded exercises is the positive back pressure provided by the smaller aperture that helps the vocal folds vibrate and “gear shift” easily. After that, each SOVT has slightly different functions. The straw elongates the vocal tract, giving even more back pressure (try it with an [b] vs. a [m] and notice how the soft palate responds). The cup creates a similar back pressure, but allows the lips to move. Lip trills, tongue trills, and raspberries each require coordination with the lips/tongue and vocal folds, but be careful of jaw tension. When relaxation is achieved, they provide a positive coordination between the vocal tract and vocal folds that is unique each unto itself. Each of the sustained consonants ask for a different vocal tract position, and as such, can be used to create specific desired habits. The [z], for example, each requires the tongue to be in a forward position, and create a specific sensation that people can remember when singing. The [n], [ng], and [r] each help to create a more refined aperture opening between the throat and mouth.

Focus on the Sound
Laryngeal registration (i.e. which laryngeal muscles are used in what configuration at any given moment) is critical to how we sound, yet, very difficult to perceive given the fact that we can’t feel those muscles. This is further complicated by the fact that we can feel the muscles surrounding the larynx, which confuses our sense of perception. Laryngeal registration targets, therefore, need to focus on a relaxed/open, or “nothing”, sensation around the larynx, and specific vibratory sensations in the vocal tract that reflect the nature of vocal fold adduction. Each of these exercises encourages clean adduction and active/easy “gear shifting” of the laryngeal muscles. Focus on the vibration sensations in your face and mouth while doing them.

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Onsets
For maximum usefulness, the vocal folds need to come together with even, easy onsets. Hard onsets, by contrast, can cause disruption to vocal tract stability, and auditory perception of sound. Listen for smoothness in the sound, rather than the tell-tale “pop” of the hard onset, and try to feel as if your airflow is even and “pouring” through the sound. Easy onsets can take some time to coordinate with some singers.

Tongue Independence
The tongue is a massive player in the vocal tract, and difficult to coordinate. One of the primary sensations that we try to habituate is a forward, rounded tongue position. Each of these exercises help in this habituation process, and each creates noticeable sensations that can be recreated when singing.

Acoustic/Resonant Strategies: Hey, Whoop, and Acoustic Mix
These three large-scale resonant strategies helps to define tone color, and create stability. In particular, they can each be used to access certain stylistic traits that can be otherwise difficult to achieve. The Whoop strategy, which boosts the first harmonic, can be very useful for training a Western classical style of singing, particularly in the upper ranges (~D4 and higher), and can be helpful in training men to sing in a lighter, choral sound in their middle range (~A3-A4). The Hey strategy, which boosts the second-tenth harmonic, can be useful for training CCM styles of singing including pop, country, folk, music theater, and gospel. It is particularly useful in the lower to middle parts of the range. Above B4, the Hey strategy encounters challenges that make it less useful. You can feel both of the Whoop and Hey strategies in specific places in your face/head. People tend to feel the Whoop strategy more upward and back (near the ears and top of the head), and the Hey strategy more forward (near the upper teeth and nose). The Acoustic Mix strategy, which boosts in between two harmonics (e.g. H1/H2, H2/H3, etc.), is more difficult to feel and habituate. In the middle range (G3-G4) it can be very helpful in western classical singing, as well as CCM styles like gospel and the music theater legit sound, and even rock and pop especially higher into the range. It is also essential for finding stability in the middle belt range (G4-D5). The most challenging part of the Acoustic Mix resonant strategy is maintaining independence between the mouth and the throat shapes even as interdependence is developed.

Stability Across Vowels
We have a range of vocal tract adjustment choices available to us when shaping every vowel. The less the vocal tract has to move, the more easily stability is achieved, making the vocal folds more efficient, thereby helping with breath regulation and sound output. Learning to hear vowels as a complex of tone color rather than a singularity is a key to targeting stability. Using “neutral” vowels as a replacement for “speech-level” vowels helps singers avoid radical adjustments (e.g. use [I] for [i] and [ae], [U] for [u] and [o], and [ə] for [a] and [ɔ]). Using vowel glides helps to habituate sensations associated with subtle shape changes, as well as using the vowel chains and vowel shape bridging found on the bottom of the next page.

Vowel Consonant Combos
These are pretty self-explanatory. You might want to start them by stretching the tongue, jaw, and lips while avoiding tension in the larynx area. The “bite an apple” inner smile sensation can play a role in freeing the tongue and jaw as well. As you sing the warm ups, pay attention to what the tongue, jaw, and lips are doing to create the consonants and vowels. Also notice if the general volume of your sound changes, as this would suggest that your adduction is changing, which may point to the fact that the change in vowel/consonant combination is destabilizing the vocal folds.

Attention to the Outside
With all of the noticing and target creation that goes on in singing practice, the singer’s brain can get wrapped around itself, causing new roadblocks to form. These exercises can be used throughout the warm up process to help the singer focus their attention more generally on their bodies. The key is to commit to the task. A half-baked attempt will collapse on itself.

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Musical Exercises
There are endless variations you can use for note patterns, each with their own benefits and challenges. We have offered five basic ones.

1 2 3 4 5 4 3 2 1

This exercise is great for middle range singing. The step-wise motion and limited range help singers feel smaller adjustments over time. Try starting on the top note to focus on other resonant strategy approaches and vowel needs.

5 3 4 2 1

Equally good for middle range singing, the relatively small leaps are good for developing vocal fold "gear shift" coordination. Try using them on alternating vowels in order to develop vowel stability. Use vowels that share the first formant energy boost at first like [e] [o], and then move to more different vowels like [a] [u]. Consonants can be added for further coordination challenges, and vocal tract benefits. The "bit, bull, but" neutral vowels are very effective on this exercise. You can also extend it by adding 3-1-2-7-1 (G-E-F-D-E-C-D-B-C).

5 4 3 2 1

The simplicity and brevity of this exercise makes it nice for approaching range extremes. Starting on the highest note helps singers develop their body setup, prephonatory tuning, and easy vocal fold onset.

1 - 8 - 1

This exercise is wonderful for laryngeal muscle "gear shift" coordination. Try it with semi-occluded exercises, vowel and vowel/consonant combinations, etc.

5 8 5 3 1

This provides singers with a nice approach to notes in their upper range, and helps create vocal tract and laryngeal stability, as well as establishing sensations associated with large-scale resonant strategy adjustments.

Vowel Shape Bridging Exercise Continue to rise in pitch, and adjust vowel shape using the vowel chains [i] [I] [e] [a] [æ] and [u] [o] [ɔ] [a] [æ] to help create a mix sensation across your range.

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