For all BASS CLEF INSTRUMENTS including bassoon, tenor trombone, bass trombone, euphonium, and tuba

Truly FUNdamentals

The most FUN musical warmups ever

For all woodwind and brass instruments

by

MARY ELLEN GRACE

Exercises designed to make longtones, scales and more, *FUN*!

Truly FUNdamentals, The Most FUN Musical Warmups Ever

Copyright © 2012 by Mary Ellen Grace
All rights reserved.

No part of this book may be reproduced in any form or by any electronic or mechanical means, including information storage and retrieval systems, without permission in writing from the publisher.

Published by Lyra Publishing, Portland, OR 97215.
Email: Publisher@LyraPublishing.com
At www.TrulyFUNdamentals.com you will find updates to the method, additional music exercises, and news.
ISBN: 978-0-9839229-4-0 paperback
978-0-9839229-9-5 ebook

Library of Congress Control Number: 2011914592

Printed in The United States of America
Cover design and interior layout by Rupert Kinnard for The Rupe Group Graphics
Photos of Mary Ellen Grace by Anita Lacy
Editing by Kathryn Williams

First printing, 2012

Dedication

to my father,
who showed me the way in teaching and in life
Dr. James L. Grace, Jr.
(1929-2010)

to my mother,
whose encouragement and loving support brought me to today
Loretta M. Grace,
patron of the arts

Acknowledgements

When I began the process of writing this method, little did I know about all the pieces that were to go into the production and how much help I needed from so many people. There is a bit more involved than simply writing out the exercises!

I would like to thank Kathryn Williams for her tireless support, keen editing, and great ideas throughout the whole production process; Rupert Kinnard for the fantabulous design work and friendship; extraordinary teachers Kim Heron and Helen Minkle; dedicated students Larry Williams, Peter Kurtz and Davis Einolf for their assistance in evaluating this method; Dan Arrayan for his encouragement; Susanna Maida for tenacious creative and energizing support of my artistic process; and Anita Lacy for always being there with loving inspiration.

Table of Contents

Coordinated CD Tracks, Exercises and Sheet Music ..... *i*
Introduction 1

Method

Warmup Your Body 5
Longtones *7*
Scales 17
Triads and Chords 25
Articulation 33
Improvisation 39
Summary *43*

Sheet Music

Music for Bass Clef Instruments *47*

Appendices

Appendix A: Key Signatures and Circle of Fifths *67*
Appendix B: Bringing Order to Flats and Sharps in Key Signatures *75*
Appendix C: Traveling Through The Keys *78*
Appendix D: Interval Recognition *79*
Glossary 81
About the author 82

Coordinated CD Tracks, Exercises and Sheet Music

CD Track	*Workbook Pages*	
	Exercise	**Sheet Music**
1. Strauss Melody	11	47
2. Oh When The Saints @ 60 bpm	12	48
3. Oh When The Saints @ 110 bpm	12	48
4. Latin Groove	14	49
5. Tone What	15	50
6. Scale Joy	18	52
7. Snake Charmer	20	54
8. Greek Melody @ 88 bpm	22	56
9. Greek Melody @ 100 bpm	22	56
10. Row, Michael, Row @ 60 bpm	26	58
11. Row, Michael, Row @ 80 bpm	26	58
12. The Star-Spangled Banner	26	59
13. Merrily, Merrily, Merrily @ 80 bpm	27	60
14. Merrily, Merrily, Merrily @ 100 bpm	27	60
15. Dona Nobis Pacem @ 60 bpm (w/shadow melody)	30	62
16. Dona Nobis Pacem @ 84 bpm	30	62

Introduction

Archaeologists have discovered what they believe is the oldest wind instrument, a 35,000 year-old flute found in a German cave. How different was life for the musicians in those days? Did they have to practice and do their longtones?

I can imagine the cave-moms and cave-dads gently reminding their offspring to practice each day when they got home from school. It's not too much of a stretch to further imagine that the teachers were instructing their students to practice longtones.

And you can believe that music students, whether they lived 35,000 years ago or today, have found longtones and other warmup exercises to be boring.

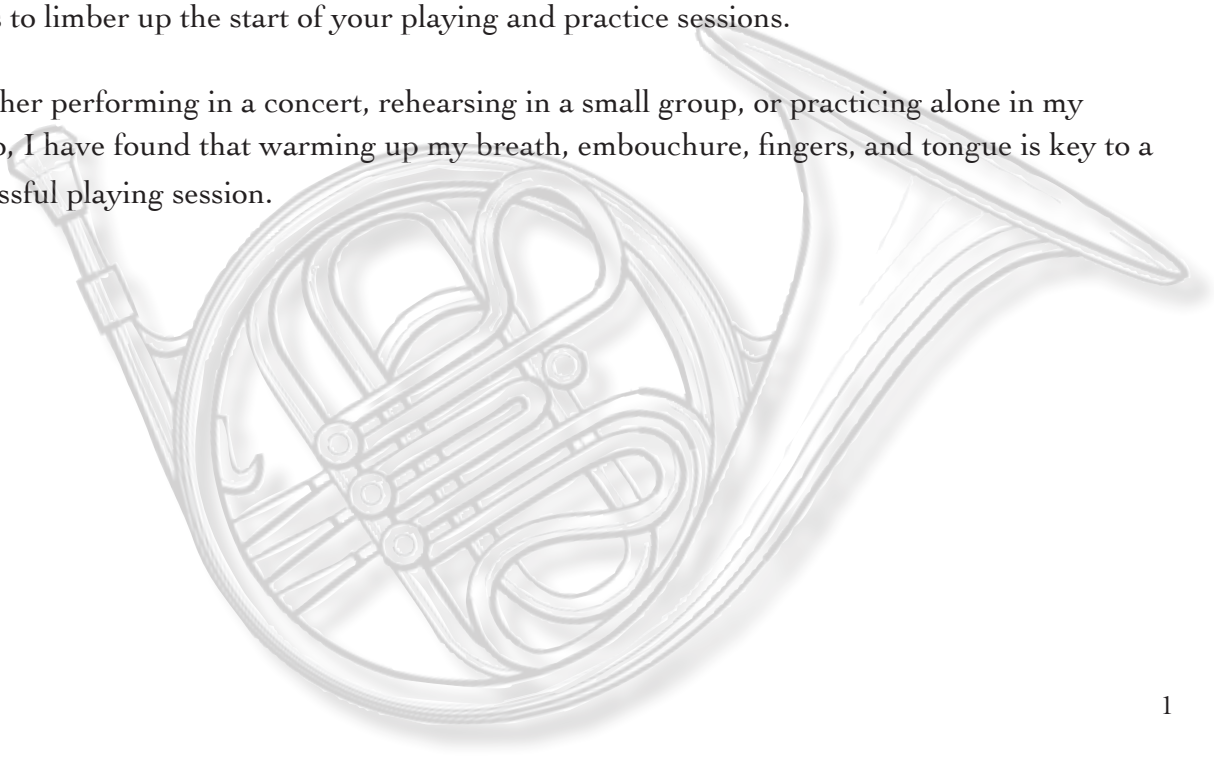
"Practice your longtones!" That's what I heard from every music teacher I ever had. But I struggled to make myself do them. I loathed them. They were boring to me. I just wanted to play! Longtones were, well... long, slow, single tones. Not very interesting.

As a music teacher, I find myself reminding my students to practice their longtones, too. I have learned that these crucial warmup and embouchure-strengthening exercises don't have to be a chore. They can be fun when you get a little creative with them.

Truly *FUNdamentals* to the Rescue

In comes Truly FUNdamentals: FUN ways for you beginning and advanced wind instrumentalists to limber up the start of your playing and practice sessions.

Whether performing in a concert, rehearsing in a small group, or practicing alone in my studio, I have found that warming up my breath, embouchure, fingers, and tongue is key to a successful playing session.



I'm here to show you ways to have fun practicing your longtones. Yes! In my method, I've prepared exercises that engage the player while practicing. I draw upon familiar melodies to use during each aspect of your warmup. I cover longtones, scales, triads, articulation, and improvisation. There are also four valuable appendices at the back of the book with information that supports the exercises in each chapter.

How to use the Truly FUNdamentals Method

This method is useful for a wide range of skill levels; wind players in middle school and high school, as well as adults. Beginning players can feel free to read from the sheet music in the latter half of the book. Advanced players are encouraged to play the exercises without the sheet music, doing the transposing in their heads.

Accompaniments for five of the exercises are recorded at slow and medium tempos, further allowing each student to practice at his or her own skill level. Both beginners and advanced musicians may find it helpful to first play some of the exercises without the CD accompaniment. This will allow you to practice at your own tempo. Personalize your practice sessions by taking these steps.

Organization: The exercises are presented in a recommended order. Stretch before you play. Start your playing with longtones and gradually work up to quick articulations. In the interest of variety, I provide a number of different exercises for each area of warmup. Once you become familiar with the material here, select one exercise from each area to create your own personal warmup.

Conventions used in the Truly FUNdamentals Method

When you see this image, it means there is an accompaniment for that particular exercise on the included CD.

Music: The notated musical exercises for bass clef instruments are provided at the end of the method, in front of the Appendices. This symbol reminds you the exercise is written out in full at the end of the book for bass clef instruments. This method is also available for C instruments, Bb instruments, Eb instruments, and F instruments.

This eye graphic alerts you to something important to take note of.

GLOSSARY TERM Refer to the glossary, p. 81, for definitions of bold, all-capped words in the text.

METHOD

Warmup Your Body

✺

Longtones

✺

Scales

✺

Triads and Chords

✺

Articulation

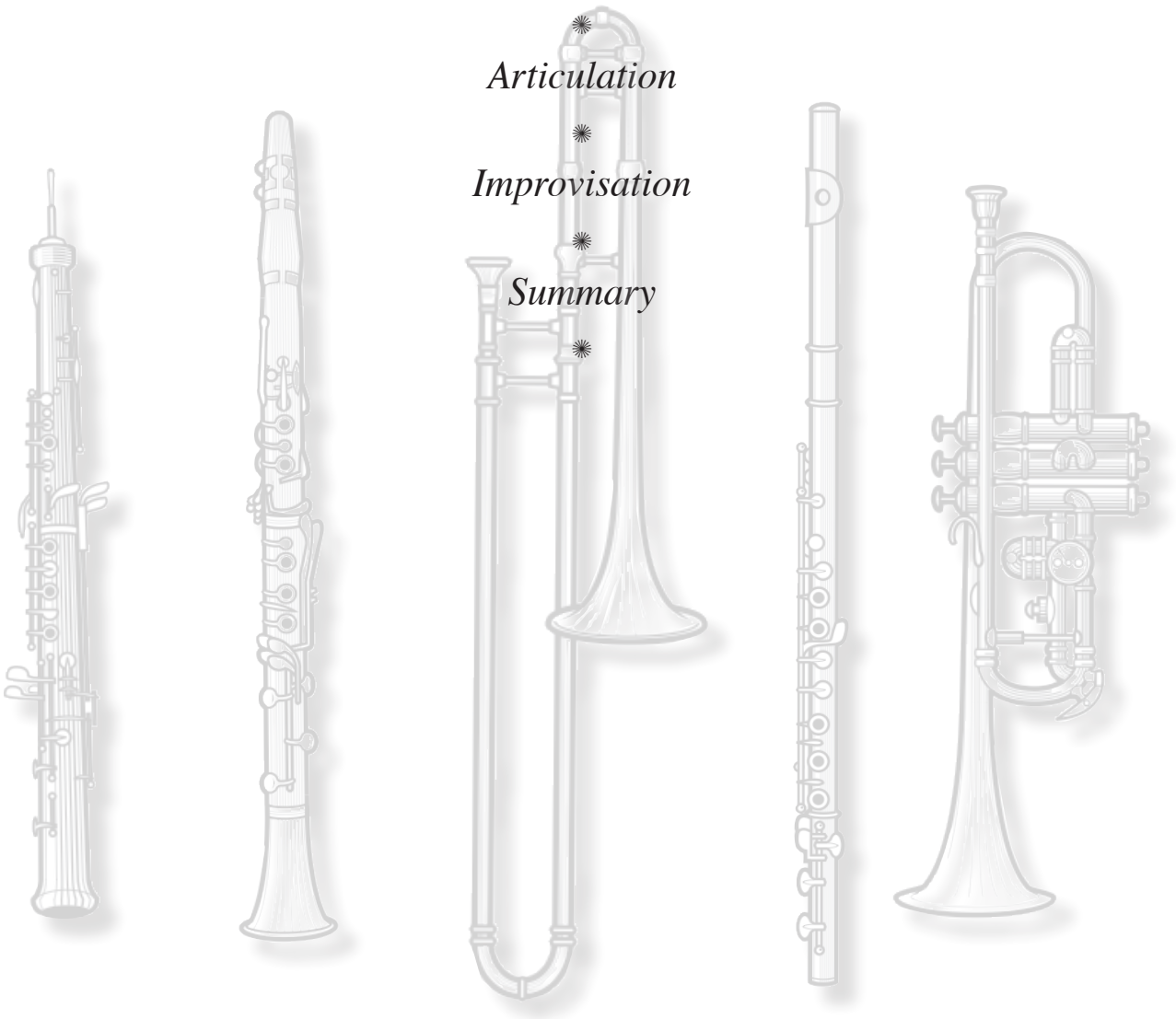
✺

Improvisation

✺

Summary

✺



Warmup Your Body - 6 minutes

The first thing to warm up is your body. When we play our instrument, we sometimes hold our bodies in unusual positions, making it necessary to get those muscle groups stretched and warmed. Here are six simple stretches you can do before any playing session.

Let's start at the top and work our way down. That way we won't miss anything. However, you can do them in any order you like next time.

IMPORTANT: With each exercise move slowly and gently. Be sure to stop at once if you feel pain.

Face

Funny Faces. 1 minute. This is great fun to do with another person or in front of a mirror.

Here are some suggestions to get you started making funny faces. Push your lips outward toward the mirror. Pull them back away from the mirror. Open your mouth wide and stick your tongue out. Touch your chin with your tongue. Touch your nose with it!

Crinkle your eyes shut tight. Open them wide and blink. Look left and right without moving your head. Look up and down without moving your head. Wriggle your nose. Scrunch your nose and mouth to the left, to the right. Or opposite directions from each other!

Rub your hands over your face, gently or vigorously, whichever feels good.

Head and Neck

Gentle Neck. 2 minutes. From a standing or sitting position, start with your head level, facing forward. Slowly and gently tilt your head forward, chin toward your chest. You don't have to touch your chin to chest. Just move comfortably in that direction. You should feel a soft stretch in the back of your neck. Raise your head back to level. Now tilt your head back and look toward the sky.

Remember, the name of this exercise is gentle neck. Bring your head back to a level position, gazing forward.

Turn your head left and right—gently—then come back to center.
Make small circles with your nose taking the lead, clockwise and counterclockwise.

Center Body

Shoulder Shrug. 30 seconds. With your arms at your sides, bring your shoulders up in a shrug toward your ears. Then let go, allowing your shoulders to fall back down to a relaxed position. Do this two or three times, if it feels good.

Side Stretch. 30 seconds. "Bend and stretch. Reach for the stars. Here comes Jupiter. There goes Mars." That was a song I learned as a pre-schooler. Let's do a similar stretch.

From a standing position with your feet about two feet apart, raise your right arm over your head, pointing your hand to the sky. Slide your left arm down your leg. Feel the gentle stretch in your right side. Switch arms; left arm pointing to the sky and right arm sliding down your leg. This will stretch your left side.

Arms and Hands

Worm Fingers. 30 seconds. Shake your arms and hands out while they are hanging at your sides. Alternate this activity with wriggling your fingers—like worms! Remember to wriggle your thumb too.

Full Body

Folderoo. 30 seconds. From a standing position, feet about hips-width apart, take a deep breath in as you bring your arms up above your body. As you breath out, fold your body at the hips, dropping your arms down at the same time. You want to end up folded in half, or as close to that as your muscles will allow.

Let your arms hang to the floor. Let your head hang loosely, taking the weight off your neck for a bit. Put a little bend in your knees so you don't overstretch your hamstrings. The goal here is to stretch the whole body and give your neck a respite from the weight of your head!

Longtones

Now that your body is stretched and warm, let's move on to getting your air moving well.

Breathing - 5 minutes

From a comfortable seated position with hands resting on your lap or legs, take a relaxed breath in through your nose and exhale through your mouth. Notice the feeling of the cool air inside your nose. Be aware of the warmer air that leaves your mouth.

Continue taking breaths: in through your nose, out through your mouth. On the exhale, direct the air coming out of your mouth. Use the same lip support you would use when blowing up a balloon. You may find yourself gently pursing your lips together to get your exhale focused.

Now silently add counting to your breathing: 1 count on the breath in, 4 counts on the breath out. Remember, you are still breathing in through your nose and out through your mouth. If you are using a metronome, set it to 60 Bpm. About every third or fourth breath, increase the exhale by 4 beats. For example, 1 count breathing in, 8 counts breathing out. After a few breaths at that count, do 1 count breath in, 12 counts breathing out.

Can you breath out (with focused air as explained above) for 16 counts? How about 20?

Be aware of the first few beats of the exhalation. Is it explosive? Are you controlling the out breath, keeping it even throughout the exhalation count?

Is your body tensing up? Return to the previous out-breath count if the current one is causing you to tense up.

This is not an exercise to see who can do the longest exhalation. This is a warmup to get your body fully engaged with supported breathing.

Identifying Scale Tones

Up until now, you have not picked up your horn. If it is not put together, now is the time.

Below is a Bb major scale written out in both concert key and for transposing instruments. The numbers underneath represent the scale position of each note.

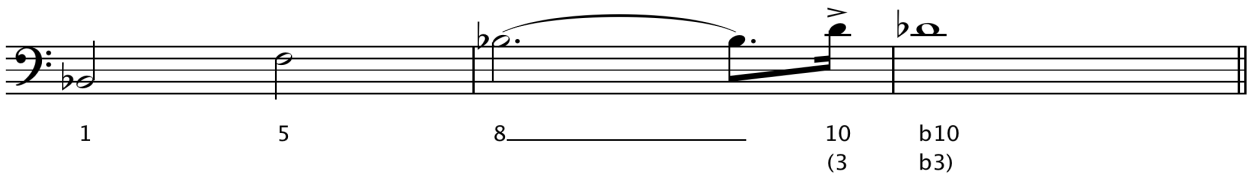
For example: When I give the instruction "play 1-5-8 scale tones," you will play the first scale tone, Bb, the fifth scale tone, F, and the 8th scale tone, high Bb. You will see more of these scale tone numbers throughout the book.

If you see a flat in front of a scale tone number (for example: b3) that indicates you should lower the pitch one half step in a major scale. If you see a sharp in front of a scale tone number (for example: #6) that indicates you should raise the pitch one half step in a major scale.

Another way to identify pitches is to use the **SOLFEGE** Syllable system. These syllables: do, re, mi, fa, sol, la, ti, do are another way of saying 1-2-3-4-5-6-7-8. I go into more detail about Solfege in Appendix D, p. 79. Throughout the exercises in this book, I will use both the numbered scale tones and the Solfege syllables. Use whichever one is more comfortable for you. Both have their value and emphasize different aspects of music pitches.

Familiar Strauss

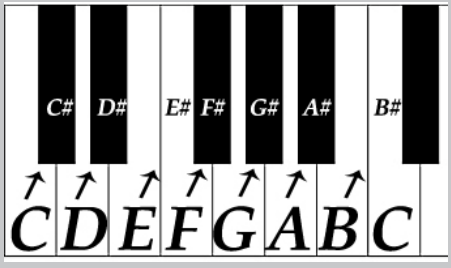
Our first longtone exercise comes from a melody by Richard Strauss, *Also Sprake Zarathustra*. You might have heard this melody as the theme for the Stanley Kubrick film, *2001: A Space Odyssey*.



Play this song snippet as a **LONGTONE** exercise. That is, play it at 48 bpm. This is slow on purpose. Playing very slowly like this gives you time to really listen to your sound, adjust your finger position, correct any **EMBOUCHURE** issues you may have, and strengthen your embouchure. Improving tone quality and strengthening your embouchure are the reasons for doing longtones.

Back to Strauss. After playing the first 5 notes of *Zarathustra* in the key of Bb, let's change key! Since we know the scale numbers, 1-5-8-10-b10, we can transpose this to any other key we know. By the way, the tenth pitch in a scale is the same note as the third, just an **OCTAVE** higher.

To Change Key Is To Travel



What does it mean to transpose? The short answer is that you are exchanging one set of notes for another. In the key of C major, the set of notes is C, D, E, F, G, A, and B. When we transpose from C major to C# major the new set of notes becomes C#, D#, E# F#, G#, A#, and B#. Each note in C major goes up in pitch the same distance. In this case the distance is one half step. Look at the graphic of the keyboard to the left. The distance between two sequential keys, black and white keys alike, is 1/2 step. I've marked the half steps between the notes of C major and C# major on the keyboard.

See Appendix C, p. 78, for some other methods of traveling through the keys.

For now, let's travel up by half steps (or ascend chromatically). Using the Strauss example above, start in the key of Bb major. The scale numbers 1-5-8-3-b3 in Bb major are Bb-F-Bb-D-Db.

Repeat the pattern in B major. The scale numbers 1-5-8-3-b3 in B major are B-F#-B-D#-D natural.

Here are a couple of ways to approach transposing in your head. Use whichever one works for you.

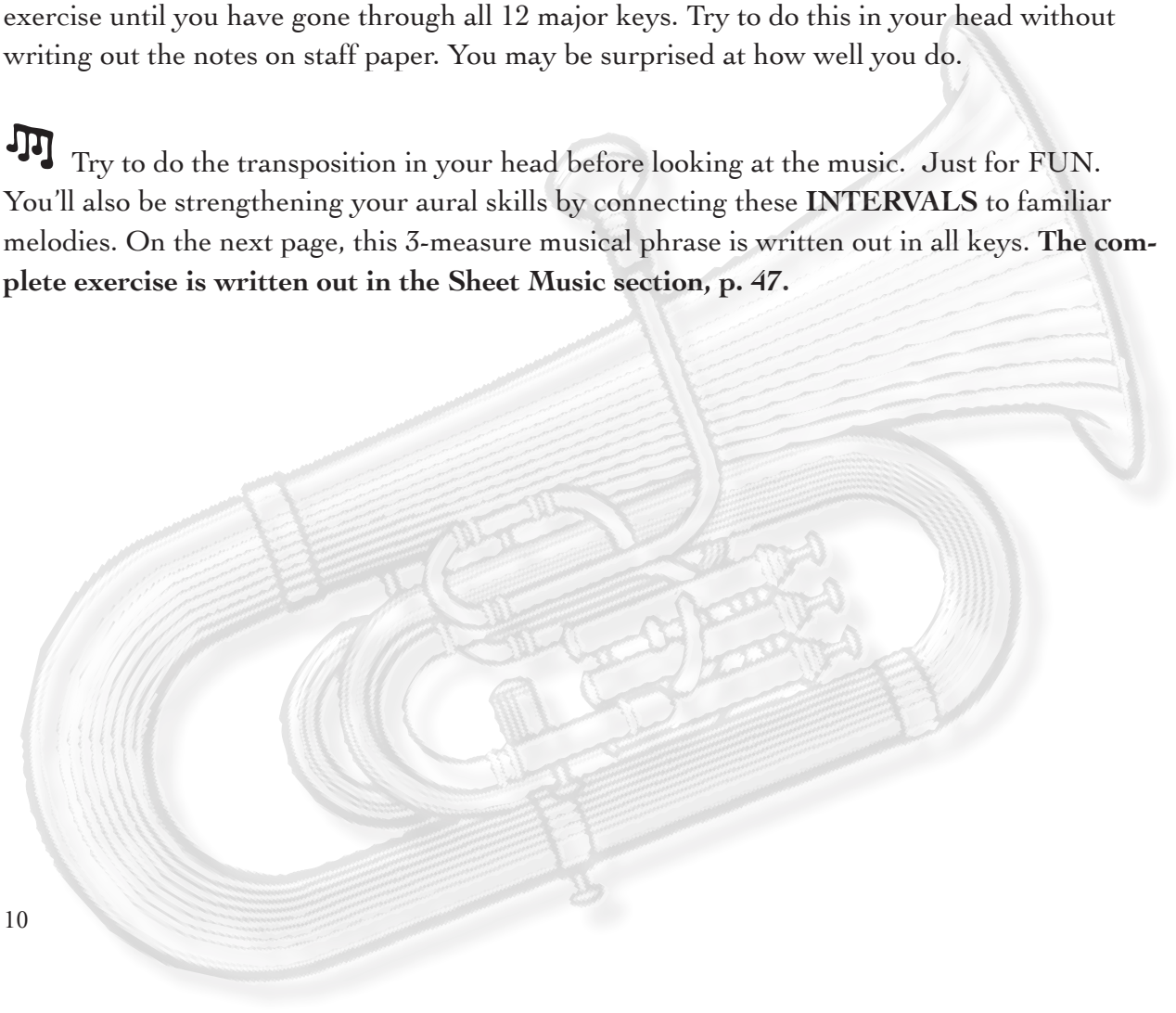
1) Think In Major Key: If the musical passage starts on the first scale tone, or Do, and you are starting on an F, then think in the key of F major. Do-mi-sol becomes F-A-C. Then, when you go up a half step to start on F#, think in the key of F# major. Then do-mi-sol is F#-A#-C#.

2) Think Relative: When you play a musical passage 1-3-4-5 starting on F, you have the notes F-A-Bb-C. Then when you go up one half step to F#, raise each note that distance. A to A#, Bb to B, and C to C#.

With both methods, the result is the same. These are two ways to think about it. Use whichever method is more comfortable for you.

In the Strauss exercise, continue up to C major. The notes are C-G-C-E-Eb. Continue this exercise until you have gone through all 12 major keys. Try to do this in your head without writing out the notes on staff paper. You may be surprised at how well you do.

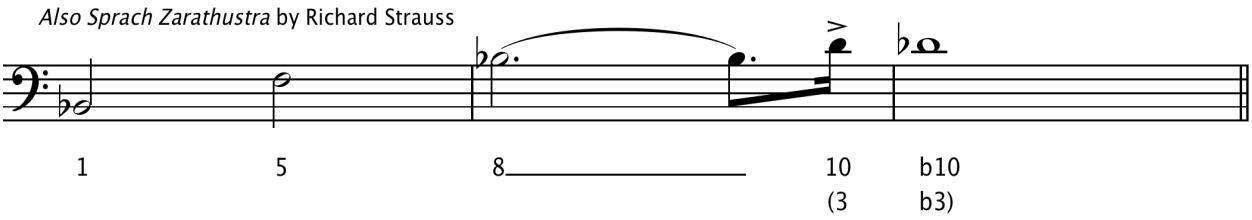
Try to do the transposition in your head before looking at the music. Just for FUN. You'll also be strengthening your aural skills by connecting these **INTERVALS** to familiar melodies. On the next page, this 3-measure musical phrase is written out in all keys. **The complete exercise is written out in the Sheet Music section, p. 47.**



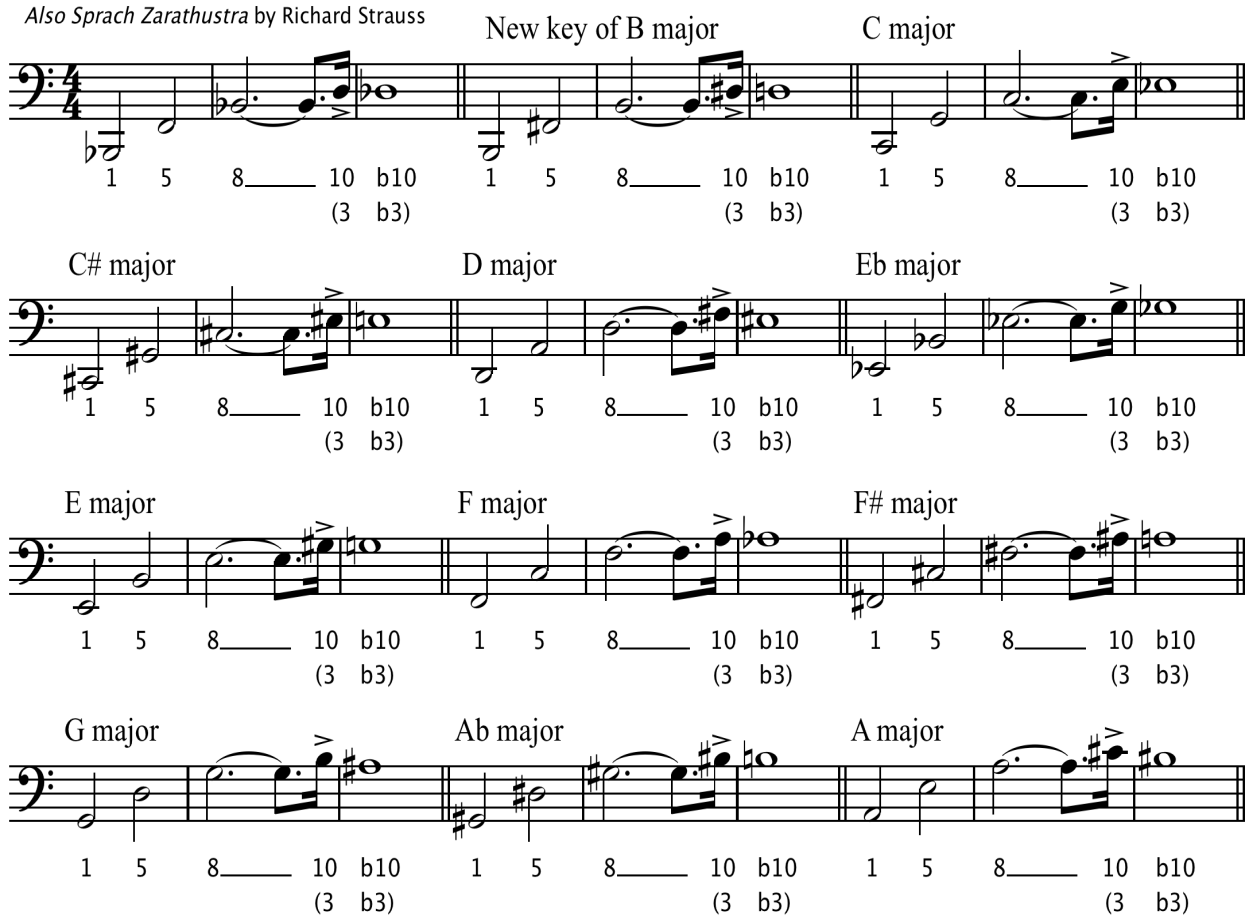
Longtone Play-Along

Using familiar melodies is only one way to add FUN to doing longtones. Playing them with accompaniment is another. I've recorded piano and acoustic bass for the Strauss longtones exercise.

Track 1 on the included CD has the rhythm section starting in Bb concert and ascending by half steps every 3 measures. The tempo is 48 beats per minute (bpm) with a 4-beat count-off. The slow tempo gives you plenty of time to think about what notes to play, while helping build embouchure strength.

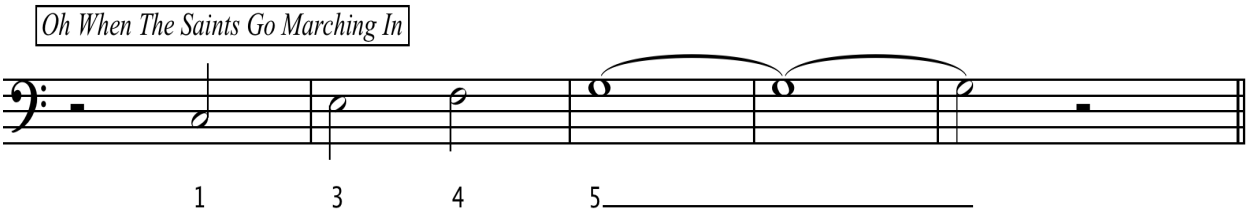


Play the above exercise in all the keys. You can read the music for your instrument in the Sheet Music section or try to do the transposition in your head.



Oh When The Saints

But why limit ourselves to one song for the longtone exercise? There are many song snippets you can use as a longtone warmup. For this next example, I've taken the first four notes of *Oh When The Saints Go Marching In*.

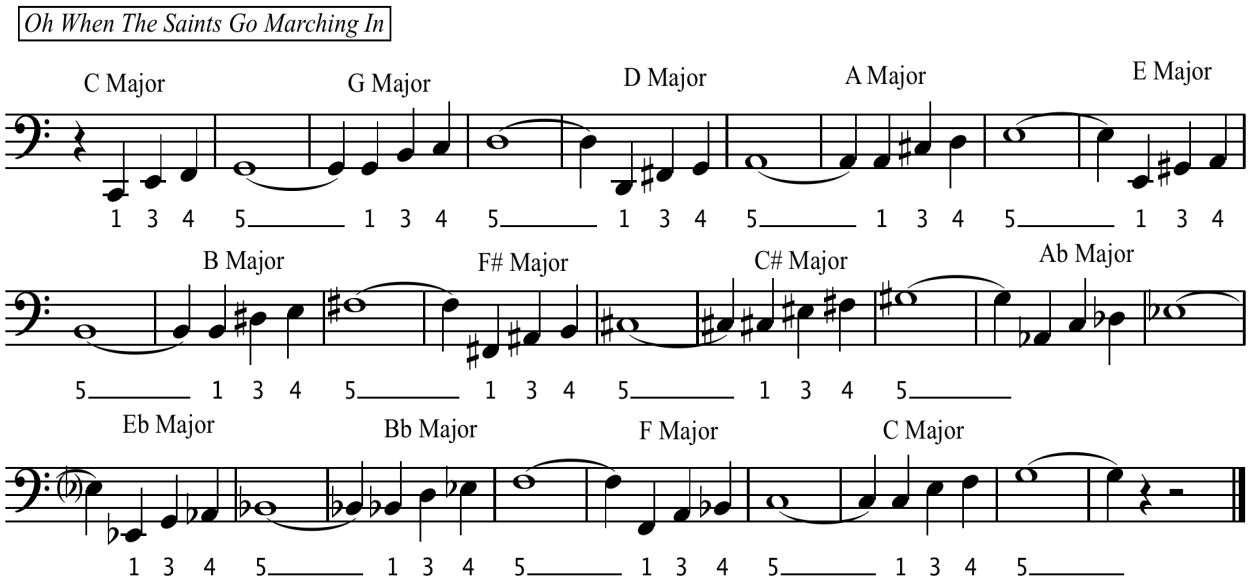


This song begins on Do or the first scale tone. The first scale tone is also called the root or tonic. Using the scale numbers, the first four notes are 1-3-4-5. In Solfege, it is do-mi-fa-sol.

Begin with the key of C major. The first four notes are C-E-F-G. Play this melody snippet as notated above at a largo tempo; between 40 and 60 Bpm. Play as slow as you need to.

When you are ready to play along with the accompaniment, you'll find it on **Track 2** played at 60 bpm and **Track 3** at 110 bpm. There is a two measure introduction by the percussion. Start playing on beat two of the third complete measure. End your last note of the phrase on beat one.

Start in the key of C playing C-E-F-G. The last note of the phrase is the starting note of the new key. Play G-B-C-D, then D-F#-G-A, continuing through all the keys until you arrive back at C again. Refer to the Circle of Fifths in Appendix A on p. 73, if you need help transposing. **The complete exercise is written out in the Sheet Music section, p. 48.**

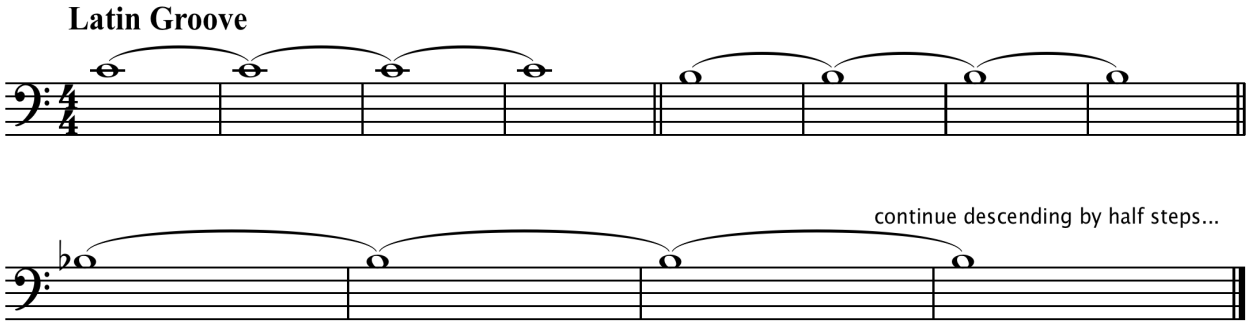


Other songs to try this with are the beginning notes of *Three Blind Mice*, or the chorus from *O Susannah!* Use just a few notes for a longtone exercise. For example, in *O Susanna!* play only 5-5-3-1-2 (measures three and four), or 4-4-6-6 (measures one and two), or 1-2-3-5-5 (end of measure four and beginning of measure five).

Get Into a Latin Groove

Playing along with a Latin rhythm section turns dry, single-note longtones into FUN, FUN, FUN. That's what we'll do next.

You'll find the accompaniment on **Track 4** of the CD. On this longtone exercise, you'll play one note for 16 beats, or 4 measures of 4/4. At 200 Bpm, you may find it easier to count "in two" or cut time.



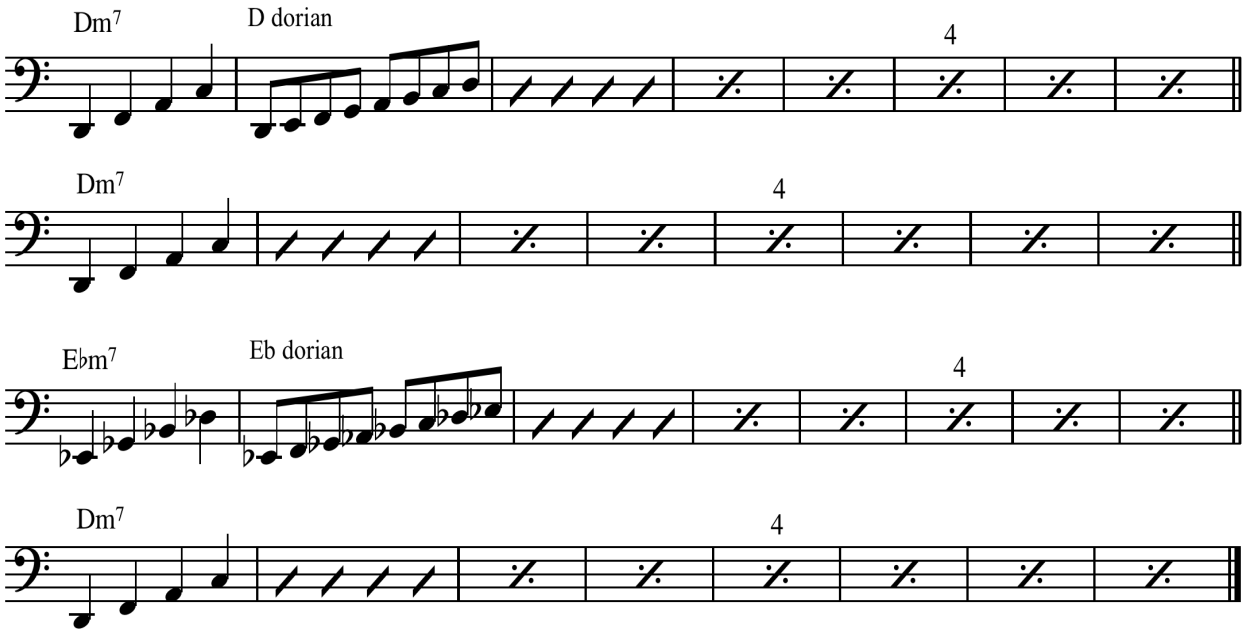
Continue the pattern of one pitch for every four measures by descending chromatically. Start on C concert. Bb instruments start on D. **The complete exercise is written out in the Sheet Music section, p. 49.**

Jazz Up Your Longtones

Playing along with a CD or music on the radio is a fantastic way to do longtones. I turned on the radio and happened to hear *So What* by Miles Davis. This is a great song to play along with on longtones, because the whole song only uses two **CHORDS**! You could play just one note for the first 16 measures. What a longtone! The song **FORM** of A-A-B-A where each letter represents 8 measures is played with two chords: D minor 7 played on all the A sections, and Eb minor 7 played during the B section.

Start out by playing a D for 16 measures, then an Eb for 8 measures, finish the form with 8 measures of D. Then start the form over. When you've got a cool rhythm section backing you up, longtones take on a whole new layer of FUN. The other notes of the chord can be played as longtones too: Dm7 is spelled D-F-A-C. Ebm7 is spelled Eb-Gb-Bb-Db. You could play these notes over the two chords as shown in the **CHORD CHANGES** below. The Dorian mode is a form of minor scale whose pitches can be used during the Dm7 and Ebm7 chords. These two modes are spelled out below.

Tone What Chord Changes with Dorian Scales



The changes above are the concert chords and modes. Bb Instruments play Em7 and Fm7. Eb instruments play Bm7 and Cm7. F instruments play Am7 and Bbm7. These chords and modes are spelled out on the next page.

How to Use

On **Track 5**, you'll hear the melody (Jazz musicians call this *the head*) that I've written based on these chord changes. It is 32 measures long. The song form is A-A-B-A and each A and B section is 8 measures long. 8 + 8 + 8 + 8 = 32.

When the complete song form has played through, we say that is *one chorus*.

Track 5 plays four choruses of *Tone What* all in the original key, with a two-measure tag ending. You won't be transposing in this exercise. *Listen to the melody in the bass for the first chorus, then play longtones for the other three choruses.*

What to Play

I recommend playing a concert D for 16 measures, concert Eb for 8 measures, then concert D for the last 8 measures of the chorus. Really sink into each pitch and hear how it blends with the accompaniment. **The complete exercise is written out in the Sheet Music section, p. 50.**

For the other choruses, you can continue playing the same notes, D and Eb concert or choose two new pitches from the chords to play. This exercise is intended as a FUN variation to your regular longtone exercises.

Explore playing the other pitches from the D dorian and Eb Dorian modes when playing along with **Track 5**. Choose a pitch and hold it out as a longtone over the chord.

Scales

Descending Scales With Joy

Opening phrase of *Joy To The World*, in C major

Joy To The World, a traditional Christmas melody, opens with a descending major scale: Do - ti- la - so, fa - mi- re - do or 8-7-6-5-4-3-2-1.

Practicing your scales while applying this pattern adds FUN to the exercise. Let's give it a try. Start on the lowest note of your instrument that you are comfortable playing and play that major scale in ascending quarter notes at a comfortable tempo. When you hit the octave, make that pitch the first note of the opening phrase of *Joy To The World*. In other words, do not repeat the top note. I've written the example out for the C major scale below.

C major scale ascending, *Joy To The World* descending C major scale

After descending the scale in the *Joy* rhythm and returning to Do, go up a half step and play that major scale ascending in quarter notes and descending in the *Joy* rhythm. If, for example, you started with C, then play the C# major scale, followed by D major, continuing up until you have played all 12 major scales. For even more FUN, keep going into the next octave, and the next if your instrument has that range. **The complete exercise is written out in the Sheet Music section, p. 52.**

Transposing Is FUN

This is a fairly simple melody. Try playing the whole song in all 12 major keys. The song has a range of one octave and has mostly scalar intervals. There are two large interval jumps to be aware of: a minor sixth at the end of measure 5 and a Perfect octave in measure 9. Here is the complete melody in C major.

Joy To The World, in C major

Can you transpose the complete melody in your head? If you can, great! If you want a little help with the transposition, I've written this exercise in a few keys to get you started at the end of this chapter, p.23. There are also some blank staves, p.24, for you to finish writing out this exercise.

Do you want to play this exercise with accompaniment? Of course you do, 'cuz it's FUN! **Track 6** on the CD is the accompaniment for *Scale Joy*. Play the first ascending scale and descending musical phrase in C. Continue through all the keys in an ascending chromatic direction.

Some other mostly scalar melodies are: *Ode to Joy*, *Frère Jacques* and *Yankee Doodle*. The first two are written out below. You can find *Yankee Doodle* in the chapter on articulation, p. 34.

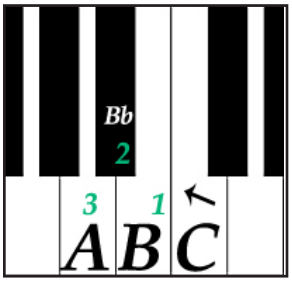
Ode To Joy Ludwig van Beethoven

Frère Jacques Traditional French song

Thus far, we have addressed Major scales only. Wouldn't it be FUN to play some minor scale-based songs? In Western music, there are three forms of minor scales; natural minor, harmonic minor, and melodic minor.

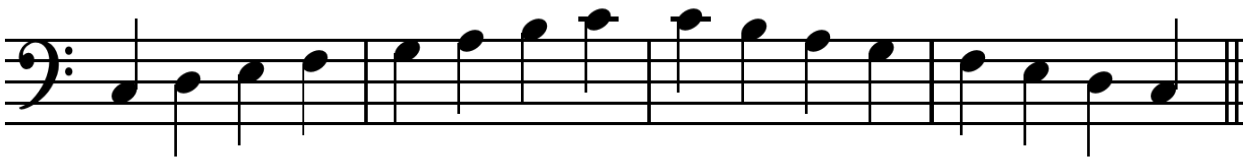
I have found that relating the minor scales to a major scale makes it easier to learn them. In fact, the minor scale is often referred to as the relative minor. The relative minor starts on a note that is a minor third lower than the starting note of the major scale. Alternatively, you can also go upward to the 6th scale tone to find the starting note of the relative minor.

For more information about major and minor keys, read Appendix A, p. 67, which is all about **KEY SIGNATURES**. You'll find all the major scales on p. 69; minor scales, p. 74.



Starting from Do of the major key, travel a minor third downward. In the example below, Do is C. Use the keyboard graphic to travel downward from C the distance of three half steps. C to B (one half step) B to Bb (another half step) and Bb to A (third and final half step). The relative minor of C is A. Another way to find the relative minor is to count up to the 6th scale tone—C being one, D two, E three, F four, G five, arriving at A six.

C major scale, ascending and descending

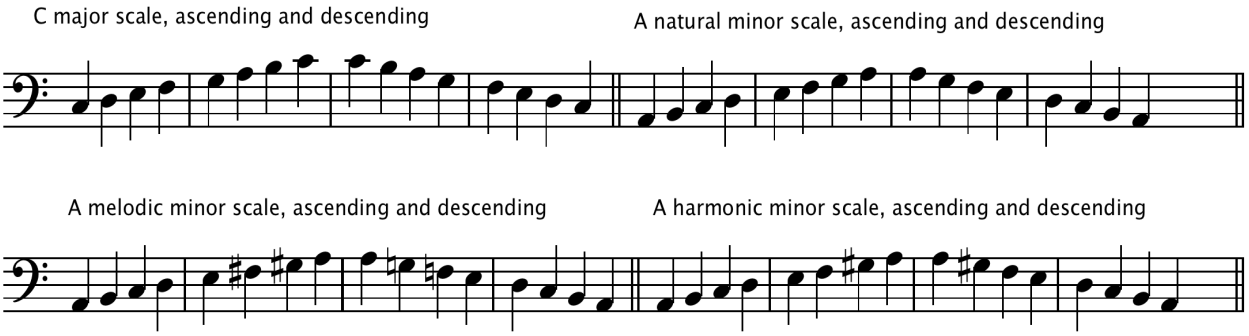


You're a Natural!

Using the same notes that are in the C major scale, start on A and play: A, B, C, D, E, F, G, A. This is the natural minor form, so-called because none of the pitches are changed from the relative major scale. This minor is in its natural state!

The other two forms of minor scales that we play in Western music are melodic minor and harmonic minor. To find the melodic minor, play the natural minor and raise the 6th and 7th tones of the scale, each by a half step, ascending only. On the way down the scale, return the 6th and 7th tones to their natural minor state.

To find the harmonic minor, play the notes of the natural minor and raise the 7th tone by a half step. This is my favorite of the three forms. It sounds good to my ear and kind of Middle Eastern.



Play each form of the A minor scale a few times. Let their individual and unique sounds soak into your ears.

Now that you've got the formulas to create the three forms of minor scales, let's play some minor melodies. We'll be transposing them to all keys as a way to review and practice all the minor scales.

Minor Snake Charmer

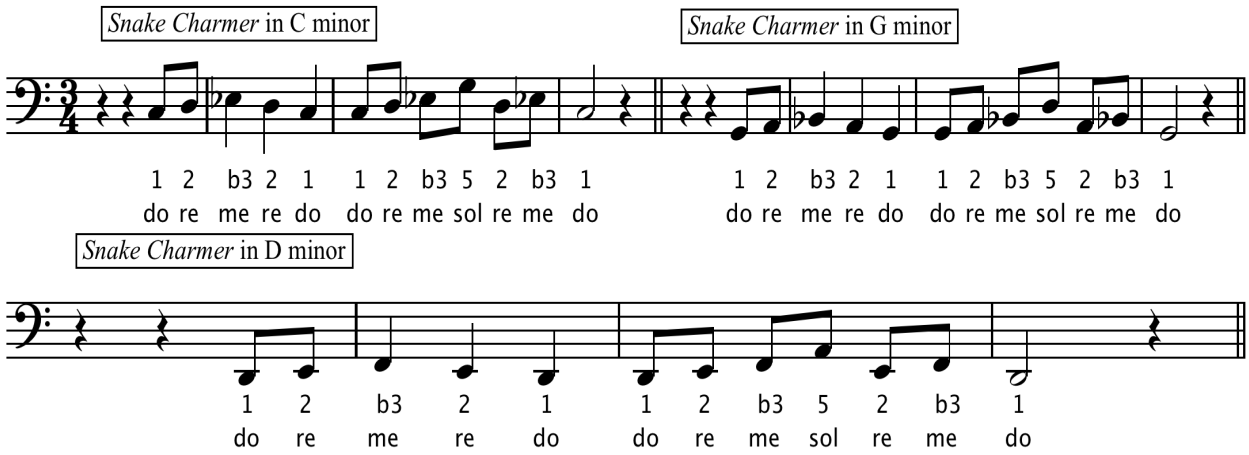
This familiar musical phrase doesn't have a name that I am aware of. But as soon as you play it, your mind's eye will conjure the image of a man in a turban playing a double-reed instrument seated cross-legged in front of a basket. Ah ha! A cobra is rising out of the basket.

This short melody starts and ends on the tonic. The pitches are 1-2-3-2-1. 1-2-3-5-2-3-1. Or, if you prefer the Solfege syllables, do-re-me-re-do. Do-re-me-sol-re-me-do.

As a reminder, the major scale Solfege syllables are: do re (ray) mi (mee) fa sol la ti (tee) do. The minor Solfege syllables are: do re me (may) fa sol le (lay) te (tay) do. Make sure you play the minor third in this little ditty. **The complete exercise is written out in the Sheet Music section, p. 54.**

Start by playing this melody in C minor. Change key by moving "do" up a Perfect fifth. Continue doing this until you have played completely around the circle of fifths and all natural minor keys. Piano accompaniment is found on **Track 7** of the CD. There are five beats of drum count. Start playing on beat six.

Here are the first three keys written out to get you started:



Refer to the circle of fifths in Appendix A on p. 73, if you get stuck.

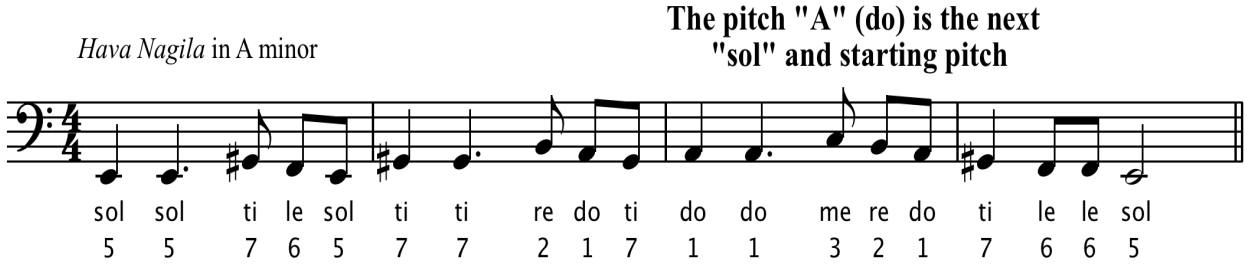
A Greek Melody

Here is another minor melody: a folk song I always hear at Greek dances; *Hava Nagila*. It uses the harmonic minor scale.

The melody starts on "sol" or the 5th tone of the scale. In numbers, the melody is 5-5-#7-6-5. #7-#7-2-1-#7. 1-1-b3-2-1. #7-6-6-5. In Solfege, the tones are sol-sol-ti-le-sol. ti-ti-re-do-ti. do-do-me-re-do. ti-le-le-sol. This melody excerpt uses every tone of the harmonic minor scale except the 4th, or Fa.

Start by playing this in A minor. Change key by moving up a Perfect 4th to D minor. Continue to G minor and so on around the circle of fourths.

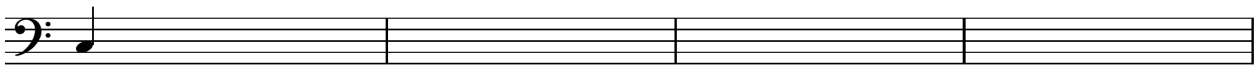
Notice that the melody starts and ends on "sol" and that a Perfect 4th above "sol" is "do." It may ease your way around the circle of 4ths to note that "do" in the current key becomes your next starting pitch, or "sol" in the next key. If you need to review the circle of 5ths and 4ths, see p. 73 in Appendix A. **The complete exercise is written out in the Sheet Music section, p. 56.**



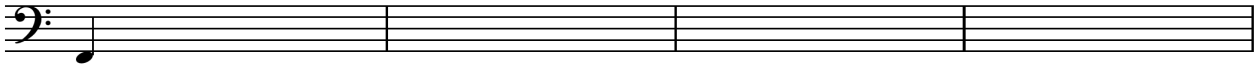
I've written these four measures in the first three keys to get you started. **Track 8** on the CD is the accompaniment for this exercise, played at 88 bpm. **Track 9** is the same accompaniment at 100 bpm.

Finish writing out the melody in F minor, Bb minor, and Eb minor. I have written the starting note for each.

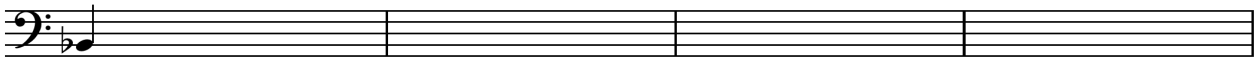
F minor



Bb minor



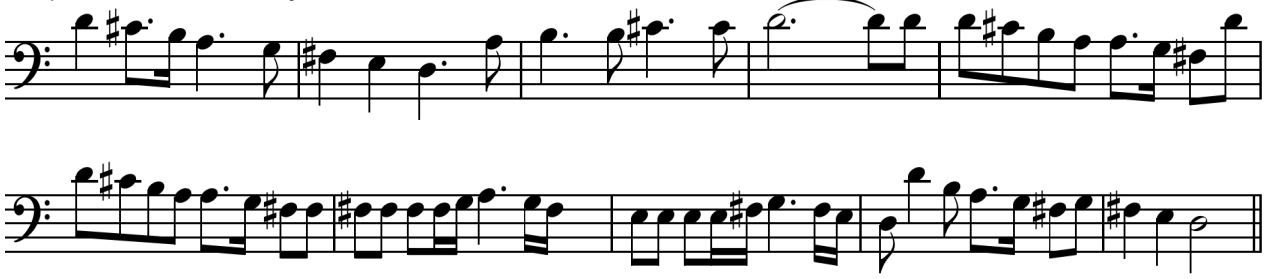
Eb minor



Now that you have played with your scales, let's move on to **TRIADS**. That's what the next chapter is all about.

As I promised earlier in this chapter, here is *Joy To The World* in three different keys. Some blank staff paper is on the next page for you to use.

Joy To The World, in D major



Joy To The World, in A major

Joy To The World, in G major

Triads and Chords

The Basic Triad

Longtones, Scales, and now **ARPEGGIOS**. We'll focus mainly on the major triad, composed of the tonic, third and fifth of the scale, 1-3-5 or do, mi, sol. There are many songs that outline triads in their melodies. I'll show you a few and then list some more for you to transpose through all the keys.

Remember, these are warmup exercises designed to be FUN. You don't need to do all of them at once. Take turns playing a different melody each day. When you find other songs that use the triad, jot them down in this book. I've provided some blank staff paper at the end of this chapter.

African-American Spiritual

Michael, Row the Boat Ashore neatly outlines the triad in its opening phrase. This spiritual includes all pitches of the major scale except the seventh. The pitch numbers are: 1-3-5-3-5-6-5, 3-5-6-5, 3-5-5-3-4-3-2, 1-2-3-2-1. Solfege: do-mi-sol-mi-sol-la-sol, mi-sol-la-sol, mi-sol-sol-mi-fa-mi-re, do-re-mi-re-do. Here is the music for the whole song in the key of C major. Give it a play.

You know what's coming next, don't you? Transposing time!

Traveling by Fourths

Let's go through The Circle (on p. 73 in Appendix A) counterclockwise—by fourths. Starting in C, next is F, then Bb, and so on till you end up back at C. Appendix C, p. 78, lists the many ways you can travel through all the keys. **The complete exercise is written out in the Sheet Music section, p. 58.**

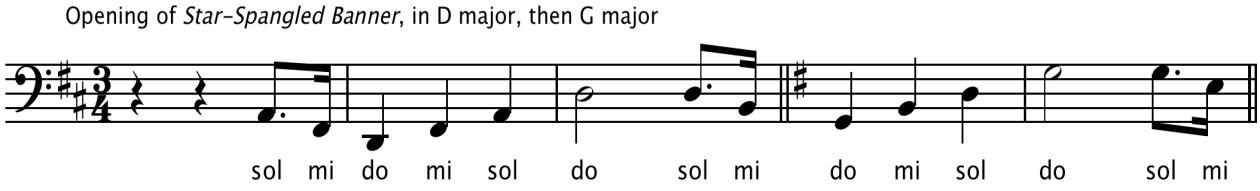
Play the first measure through all the keys now. Use the Circle of Fourths as your transposition map. Notice that the last note of the phrase leads to the first note of the new key. Just go down one whole step. Accompaniment for the first measure of *Michael, Row the Boat Ashore*, is on **Track 10** @ 60 bpm. **Track 11** contains the same music a little faster, 80 bpm.

Triads Descending

Here are two songs which outline a descending triad; 8-5-3-1 or do-sol-mi-do: *The Star-Bangled Banner* and *Row, Row, Row Your Boat*.

The Star-Spangled Banner's opening notes are 5-3-1-3-5-8 or sol-mi-do-mi-sol-do. Here is the music for you to play and transpose. By going counterclockwise on The Circle, you'll be changing key by fourths. And that is lucky in this musical example, because the end note of the phrase is the next key's starting note. **The complete exercise is written out in the Sheet Music section, p. 59.**

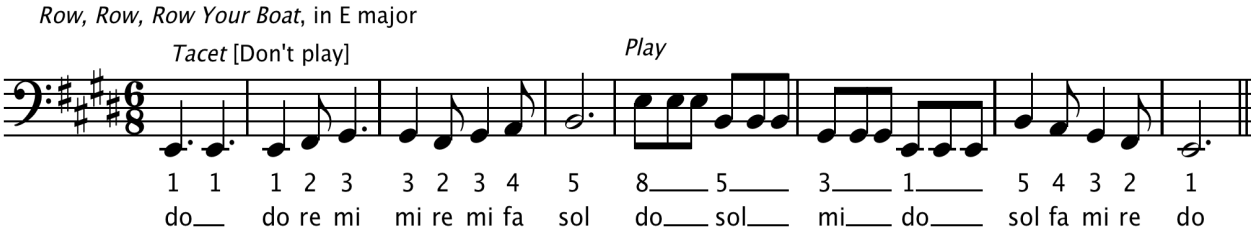
Start in the key of D concert, followed by G, then C, around the circle until you come back to D. Accompaniment for *The Star-Spangled Banner* is on **Track 12**.



Rowing in Circles

The children's round, *Row, Row, Row Your Boat*, is 8 measures long. The second phrase outlines a major descending triad. At the words, "Merrily, merrily, merrily, merrily..." play 888-555-333-111 or do-do-do, sol-sol-sol, mi-mi-mi, do-do-do. Choose any of the ways I've shown you to travel through all the major keys. **The complete exercise is written out in the Sheet Music section, p. 60.**

The accompaniment on **Track 13** moves at 80 bpm through the keys descending chromatically and includes only the last 4 measures. **Track 14** plays the same music at 100 bpm. Here is the music for you to play and transpose:



Roger's Arpeggios

I was taught this next exercise by one of my private music teachers when I was 14 years old. It's not a song, just another FUN way to play all the major triads, ascending and descending.

Start at or near the bottom pitch of your instrument and play 1-3-5-8 (do-mi-sol-do). Go up a half step to a new 8 and play down 8-5-3-1 in the new key. Go up a half step to a new 1 and play up 1-3-5-8, and so on. Here's a few measures written out to get you started.

You will find this exercise written out in treble clef and bass clef at the end of this chapter, p. 32. I have written it out for a 2-octave range. Please expand the range as you are comfortable and as fits your instrument. If you are a beginning musician, go ahead and use the music. If you are more experienced, give yourself the challenge of playing this exercise without the music.

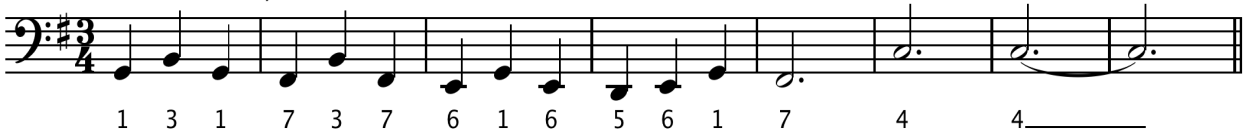
More Triadic Melodies

Here are some more songs—thirteen to be exact—that outline a triad for you to play with. Thirteen has always been a lucky number for me. I know you'll have FUN with these melodies. Perhaps thirteen will be lucky for you, too!

Here We Go Round The Mulberry Bush

Clementine

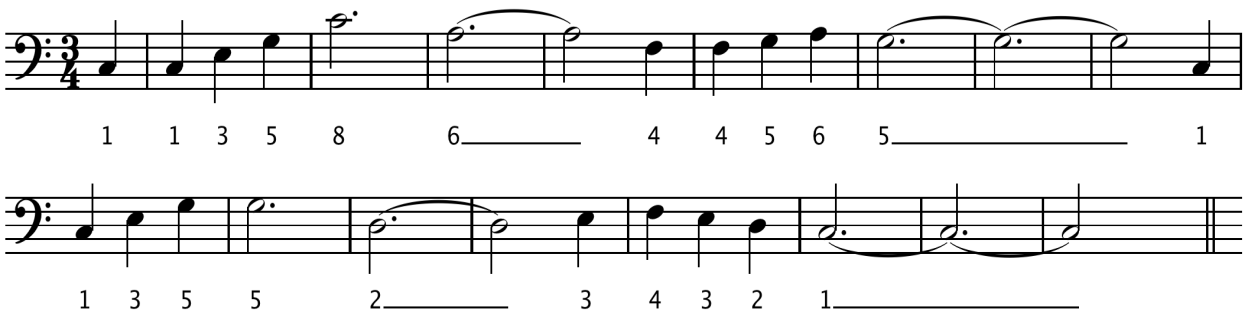
And The Band Played On



Abiyoyo

Blow The Man Down

On Top Of Old Smokey

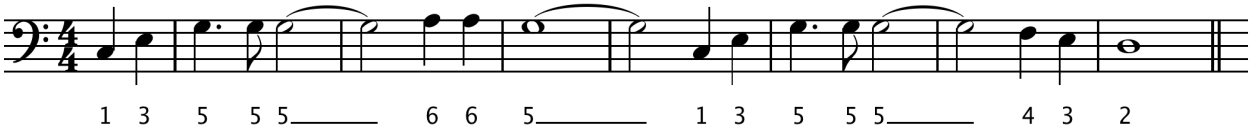


Bicycle Built For Two (Daisy, Daisy)

Turkey In The Straw (chorus)

The Caisson Song (Army song)

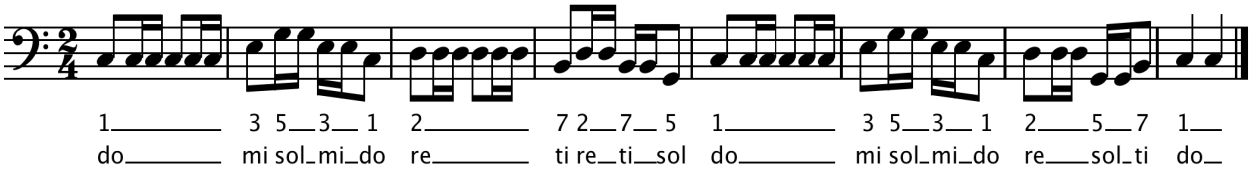
Kumbaya



Good Night Ladies

The Marine's Hymn

Ten Little Indians



Extra Fun: *Dona Nobis Pacem*

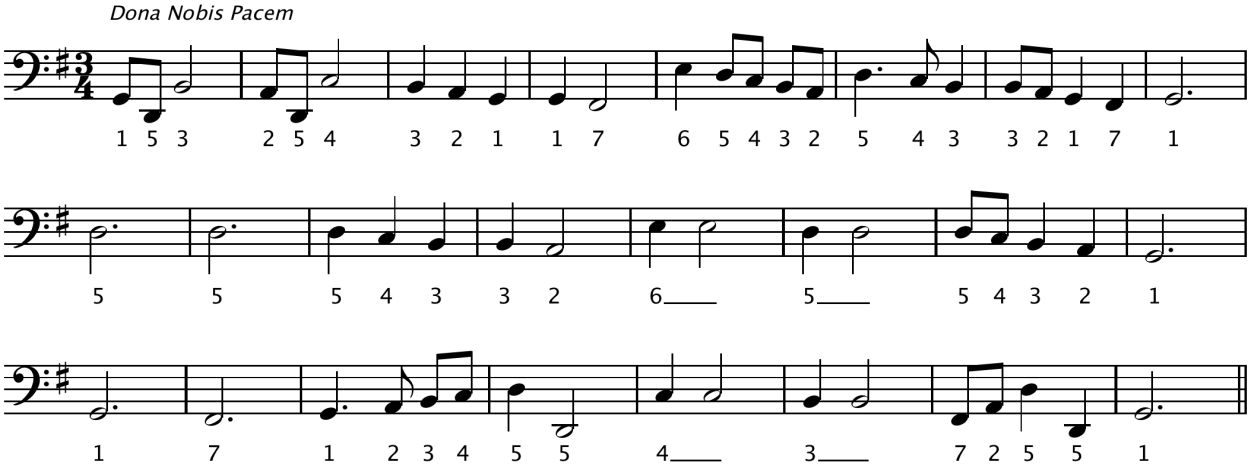
This song outlines the major triad *and also* plays a descending scale. Now that you've had some exposure to mostly scalar melodies and major triad tunes, you are ready for a melody that combines both.

This is a round in which each of the three 8-measure phrases can be played together by different players.

You may want to transpose just the first phrase. But if you feel so inspired, I've included all three phrases below. The first phrase pitches are: 1-5-3, 2-5-4, 3-2-1-1-7, 6-5-4-3-2, 5-4-3, 3-2-1-7-1; or do-sol-mi, re-sol-fa, mi-re-do-do-ti, la-sol-fa-mi, sol-fa-mi, mi-re-do-ti-do.

The accompaniment on **Track 15** goes through one 8-measure phrase and then changes key, traveling by 5ths, clockwise through The Circle. Since the chords are the same for each phrase, you can play any one of the three phrases along with the accompaniment. **Track 15** is played at 60 bpm and includes a shadow melody. **Track 16** plays only the accompaniment at 84 bpm.

The first phrase transposed to all keys is written out for your instrument in the Sheet Music section, p. 62.



Treble Clef Arpeggios

Bass Clef Arpeggios

Articulation

We've warmed up our bodies with stretching and breathing; we've worked on tone quality with longtones, and we've practiced major and minor scales. Now it's time to exercise the tongue!

The tongue is a muscle and as such can benefit from some "push-ups and sit-ups." The best way to quicker, lighter tonguing is regular exercising.

Tonguing Tips

To ensure you are tonguing lightly, try these tips. Check the sound of your tonguing by speaking a "ta" syllable. Are you saying a heavy "da" or a light "ta?" I find it helps me to whisper the "ta" syllable. When I whisper, my throat relaxes, which in turn helps me relax my tongue.

Check this out. Gently lay your hand on your throat and read this passage aloud. Continue holding your hand over your throat and whisper. Do you feel the difference? When you are speaking out loud, you can feel vibrations in your throat. You don't feel that when you whisper.

Now notice where in your mouth your tongue touches when you say, "ta." When you touch the tip of your tongue to the roof of your mouth near the back of your front teeth, do so quickly, even at slow tempi. Don't let your tongue hang out for any length of time when contacting the inside of your mouth. It's that moment when your tongue moves off the inside of your mouth that the articulation is produced.

Place your hand on your jaw and say "ta." Do you feel your jaw moving downward? Pretend you are a ventriloquist and speak without moving your mouth and jaw. It's okay to move your lips. The point of these tips is to get you to focus your attention on your tongue muscle.

Okay. Enough talk. Let's play.

Yankee Doodle Went to Town and Learned to Tongue Quite Quickly

The song, *Yankee Doodle* is mostly eighth notes and quarter notes, perfect for warming up the tongue. I've written it below in G major. You can transpose it to another key if you like or play it in different octaves if your instrument has the range. The song's range is a minor 9th. The main focus for this exercise is tonguing.

Start by playing this melody at a moderate tempo. That will vary person to person. You will want to start this exercise at a playable speed. For some people that will be 80 bpm, and others 160 bpm. As you condition your tongue with this exercise, your starting tempo will increase. Use a metronome to keep your tempo steady.

After playing through the piece at your starting tempo, increase the tempo on your metronome by 4 beats per minute.

1. Play through the song at the new tempo.
2. Increase the tempo by 4 bpm.
3. Play the song in tempo with clean articulation.
4. Repeat steps one through three until you reach a speed in which your articulation is not clean.

This is your current personal limit.

5. Back the tempo down by 4 beats.
6. Play a few more times at that tempo.
7. Rest.

The next time you do this exercise start at this tempo minus 8 beats and work your way through increased tempos. The more you do this, the more agile and light your tongue muscle becomes.

Here is an example. You've been playing and increasing your tempo until you reach 120 BPM in cut time or half note = 120. You just played at 126 BPM and tripped over some notes. You dial back to 120 BPM and play through the whole song two or three times. Tomorrow when you warm up, you will start this exercise at 112 BPM. As you continue to do this tongue conditioning at every warmup, your top speed will increase. Guaranteed.

Ooh! Here's a fun variation of *Yankee Doodle*. When you get to the point where you are playing at a quick tempo, smoothly and confidently, double up each note. That is, turn each quarter note into two eighth notes and each eighth note into two sixteenth notes, same pitch.
Like this:
You'll most likely need to reduce your starting tempo at first and gradually increase your speed as before. Have fun!

Yankee Doodle variation

Ready for another tempting tongue toner? *Ten Little Indians* was already included in the section on triads. It can be used here too. Follow the same instructions for increasing the tempo that you did for *Yankee Doodle*.

Ten Little Indians

Tripleting the Tongue!

Here are two songs I suggest using to exercise your tongue on triplets: *The Mulberry Bush* and *Over The River And Through The Woods*. Follow the instructions given on the previous page for increasing the tempo on both of these melodies. They are printed below in the key of F major and C major respectively.

The Mulberry Bush

Over The River And Through the Woods

Over The River And Through the Woods

Try doubling up the pitches on these tunes, too!

The Mulberry Bush variation

Over The River And Through the Woods variation

That's it for tongue conditioning. The final chapter addresses an important part of any musician's warmup and education, one that I believe has been overlooked by many non-jazz musicians — Improvisation.

Improvisation

Unleash your innate creativity

Exercise Your Creative Muscle

Playing an instrument is a creative endeavor. In the first five chapters, we've warmed up the breath and tone, played in all major and minor tonalities and strengthened our tonguing capability. Now it is time to exercise your creative muscle.

Make this part of your regular practice. Think of improvisation as an opportunity to play *your* music; the music that is inside you waiting to be expressed.

Why Improvisation?

Why not! Human beings are naturally inquisitive. We come out of the womb exploring our surroundings, using all of our senses to make sense of the world around us.

We create our first sounds with no apology; loud cries and soft whimpers, gurgling and gaga-ing. The adults around us, for the most part, mimic back to us the sounds we make, encouraging us to continue. They know, even if our newborn selves do not, that these peeps and cries will eventually become words.

If you are new to improvisation, give yourself the same compassion you would to a baby as they make their first sounds. Recognize the freedom with which babies express themselves and bring that freedom to the following exercises.

If you are not new to improvisation, I invite you to use these exercises to develop new ideas. If your improvising has begun to feel stale, try these activities to bring freshness back.

Exercises

#1 Free Play

This exercise is based on Julia Cameron's free-writing exercise: "Morning Pages." Cameron suggests that each morning you sit down and write out three pages by hand without stopping, writing anything and everything that comes to mind. In my Free Play exercise, I invite you to freely play on your instrument for up to fifteen minutes. **Start with one minute**.

Do not stop and think about what you are playing or what you want to play. Blow into your horn and move your fingers and tongue! Play slowly, play quickly, articulate and slur. Everything you do is just as it is meant to be. The only "rule" I ask you to follow is this: Play continuously.

The goal is not to compose a great melody or improvise on the changes to *Green Dolphin Street*. The goal is to get free of your thoughts. Unthink! In the same way that meditation helps us to quiet our mind, Free Play will lead you down a path of creativity that is essential in improvisation.

Set a timer for one minute and go! Add one minute each day until you get to 5 minutes. Do a five-minute Free Play for a week or two. Gradually increase to 10 minutes. As you feel comfortable, increase to 15 minutes.

Free Play teaches us to hear our muse and follow the promptings of our inner guide. Your improvisational voice will be fed by simply playing.

#2 Mirror Music

Stand or sit facing a mirror so that you can see your face. Even better, use a mirror that lets you see your whole body and instrument. This will give you more information from which to respond.

Do the Free Play exercise while facing your mirror. Modify your playing in response to whatever visual feedback you notice. Perhaps you notice your fingers are clutching the keys of your instrument. Respond to that information. You might relax your fingers and play a fluid legato line of sixteenth notes. Or you might not change your fingers at all and play a group of marcato quarter notes, all on the same pitch. There is no wrong response, only your response. You are creating. You are expressing.

You may notice something about your hair that you never noticed before, making you laugh. Out pours a jumble of eighth note triplets in a slur-two, tongue-one pattern.

You may look into your eyes and catch a glimpse of your beautiful soul. I can't begin to describe the exquisite music you are making in that moment. But you will recognize it as your own song.

There are so many observations you can make while playing in front of a mirror. Use this exercise as a variation on any of the solo exercises.

#3 Three-Note Jam

Choose three pitches on your instrument. Play those pitches using any rhythm. Remember to use rests, too. If you find your ideas feeling stilted, slow your ideas down. Take your time to investigate these sounds by playing them loudly, softly, breathily, honk-like, dirge-like, jig speed. Well, you get the idea. With each of these exercises, but this one especially, give yourself a lot of time to explore.

#4 On The Air!

Turn on your radio and sing along. Start with a radio station you like listening to. Listen to a song and hum or sing "la." Float around in the pitch until you hear your voice match the song's key or tonal center. Do this for a few songs. Then change the station.

Sing along with as many different styles and genres of music as you can. As someone who doesn't listen to Country Music very much, I enjoy breaking out of my comfort zone and singing with a twang on occasion.

Once you are comfortable singing with the radio and finding the tonal center of a song, then do the following exercise with your instrument.

1. Pick your channel.
2. Increase the volume so you can hear the radio over your voice or instrument.
3. Listen.
4. Match the predominant tones first. This will help you establish the key center. (You may find it helpful to first sing the pitch you want to play, and then match it on your instrument. This is great ear training.)
5. Play the melody if it is a song you know, or play a blending melodic line.

Most radio stations are specialized and play a specific genre of recorded music. You can choose from a jazz channel, pop channel, oldies, classical, college/alternative, folk, and more.

Choose music you are most familiar with to start. Some online alternatives to your AM/FM radio are Pandora <www.pandora.com> and Musicovery <www.musicovery.com>.

#5 Sing and Play

Sing one note. Play it on your instrument. Sing another note. Again, play that pitch on your horn. How quickly can you match pitch? Perhaps you match it right away. Perhaps you match after playing three or four notes.

As you gain confidence in matching played pitch to your singing pitch, sing multiple notes and match them. When you are matching the short phrase well, make the sung phrase longer. As always, have FUN with it.

#6 Call and Response

This exercise requires at least two people. The more the merrier! Begin by playing a chord or a complete scale on the piano. Doing so establishes a tonality in your ear and gives your voice a starting point. Now, sing one note and your partner sings it back to you, matching note length and style. Take turns being the caller.

As you become comfortable with one note, gradually add more notes to make short phrases. The responder ought to strive to match the caller's pitch and rhythm.

After you have each been the caller eight times, pick up your instruments. Just as you did with the singing, start "calling" single notes and build up to phrases, gradually increasing their length. Try not to look at each other's fingers for clues to pitch, even if you are playing different instruments.

Use your ears to listen and hear what is being played. I find it helpful to close my eyes. Then all my attention is in my ears and I am not distracted by things I see. Pretty FUN, huh?

Summary

I hope you've had FUN with this method. I've led you through a whole slew of warmup and technique exercises, each programmed with intent to create more FUN in your playing and practice of music.

It is my strong-held belief that music is accessible to everyone and anyone who picks up an instrument. We all have basic abilities that can be improved upon bringing us more joy in playing.

What have you learned?

- Stretch before playing. Take a few minutes and do some simple stretches of your limbs and torso. Don't forget your facial muscles!
- Breathe. As players of wind instruments, supported breathing leads to good, solid tone and promotes a satisfying playing experience.
- Longtones. Blowing long-held notes on your instrument builds strength in your embouchure, improves tone quality, and leads to good intonation. Always do your longtones.
- Scales and Triads. Ah! The building blocks of music; the keys to the kingdom as it were. A goal of any fine musician is knowing and being able to play scales and triads without having to think them out. They've got to be in your fingers. Now you've got some FUN ways to review them.
- Lightning-fast Tonguing. Light, relaxed articulations are a must-have skill for any level musician. Practice at moderate tempos and gradually increase tempo as your tongue muscle makes progress.
- Improv! Just as we improvise our words in communicating with another person, so we can improvise our notes and communicate with other musicians. I've given you six exercises to enhance your improvisational dexterity.

Notes

SHEET MUSIC

Music for Bass Clef Instruments

Track 1
Exercise: p. 11

Strauss Melody

arr. Mary Ellen Grace

Track 2 and 3
Exercise: p. 12

Oh, When The Saints

arr. Mary Ellen Grace

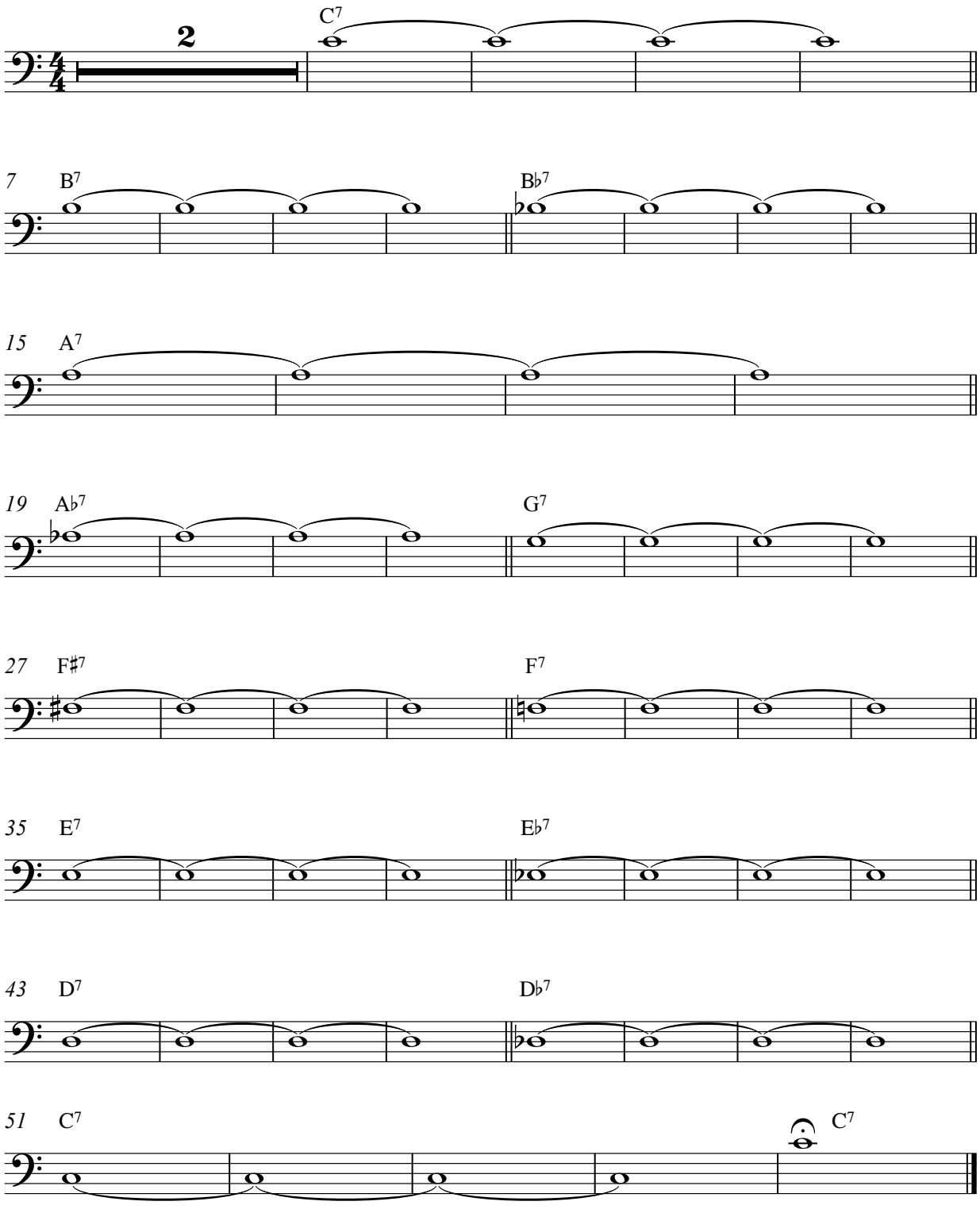
Largo

Track 4
Exercise: p. 14

Latin Groove

Mary Ellen Grace

Bossa ♩ = 200



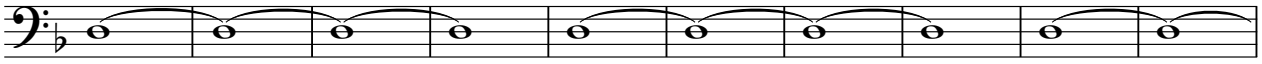
Track 5
Exercise: p. 15

Tone What

Play the melody (first six beats in each two-measure phrase) along with the bass or play one of the pitches from the chords on beats 7&8 in each two-measure phrase.

arr. Mary Ellen Grace

59 Chorus 2 - play one note from the scale on p 19, holding one pitch for four measures at a time



69

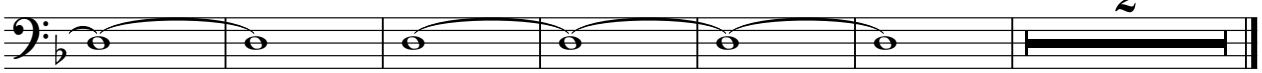
79

89 Chorus 3 play one note from the chord for each four-measure phrase

99

109

117



Track 6
Exercise: p. 18

Scale Joy

100 bpm

arr. Mary Ellen Grace

59 G

67 A♭

75 A

83 B♭

91 B

99 C

Do Re Mi Fa Sol La Ti Do Ti La Sol Fa Mi Re Do

Track *7*
Exercise: p. 20

Snake Charmer

arr. Mary Ellen Grace

♩ = 76

30 C♯m

34 A♭m

38 E♭m

42 B♭m

46 Fm

50 Cm

Track 8 and 9
Exercise: p. 22

Greek Melody

arr. Mary Ellen Grace

25 E♭m

29 A♭m

33 C♯m

37 F♯m

41 Bm

45 Em

Track 10 and 11
Exercise: p. 26

Row, Michael, Row

arr. Mary Ellen Grace

Track 12
Exercise: p. 26

The Star-Spangled Banner

arr. Mary Ellen Grace

Moderate ♩ = 92

Track 13 and 14
Exercise: p. 27

Merrily, Merrily, Merrily

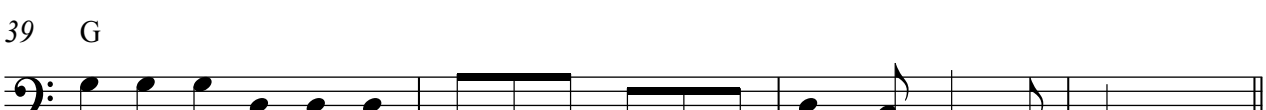
arr. Mary Ellen Grace

27 B♭

31 A

35 A♭

39 G



43 G♭

47 F

51 E

Track 15 and 16
Exercise: p. 30

Dona Nobis Pacem (Give Us Peace)

arr. Mary Ellen Grace

51
D♭
57
A♭
64
E♭
72
B♭
80
F
88
C
94

Notes

APPENDICES

Appendix A

Key Signatures and Circle of Fifths

✺

Appendix B

Bringing Order to Flats and Sharps in Key Signatures

✺

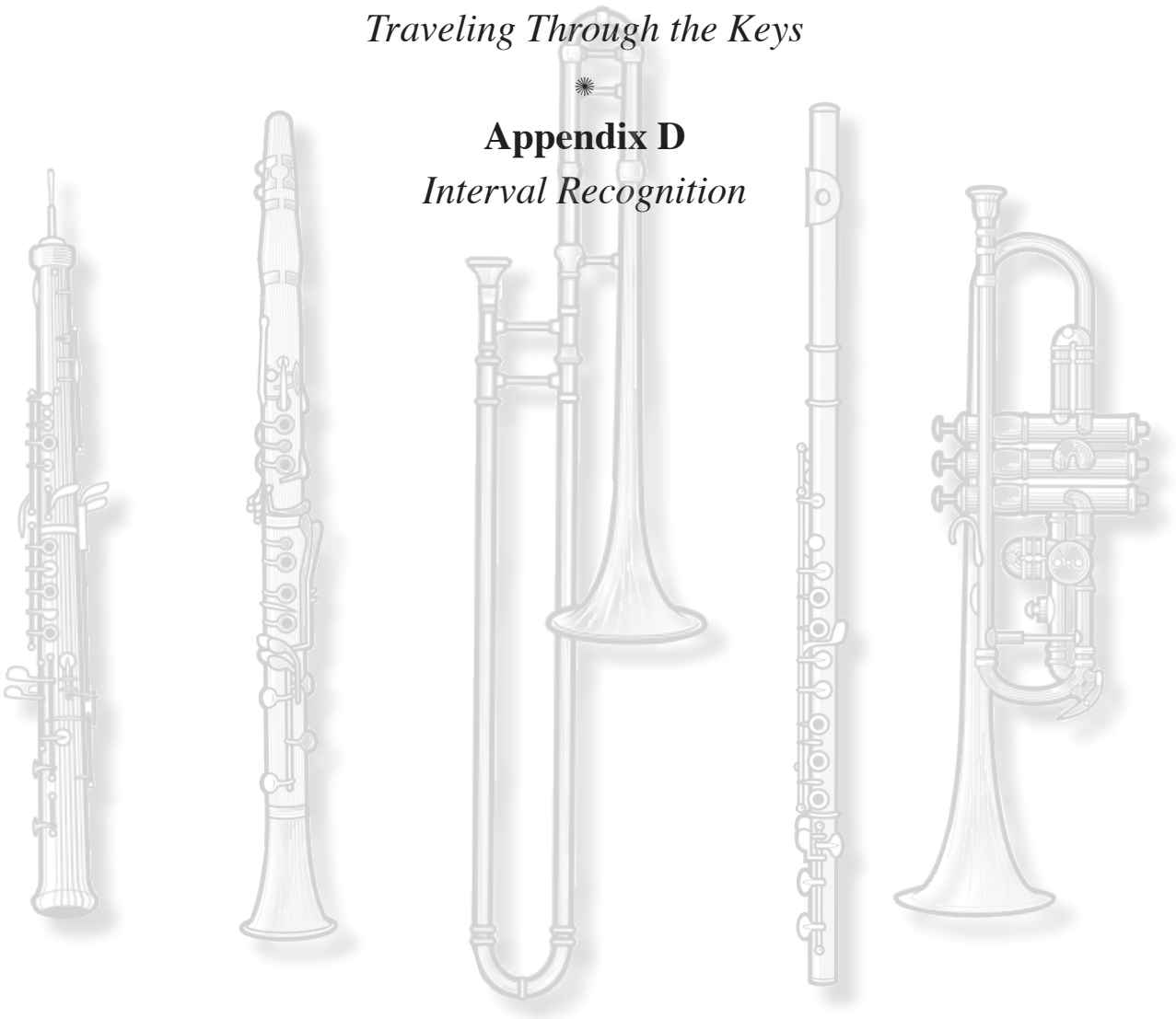
Appendix C

Traveling Through the Keys

✺

Appendix D

Interval Recognition



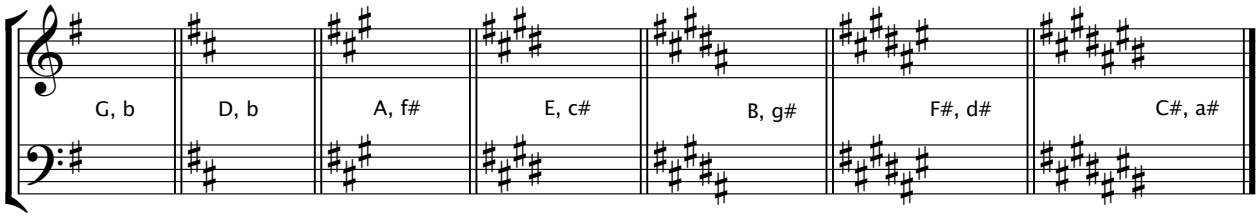
Notes

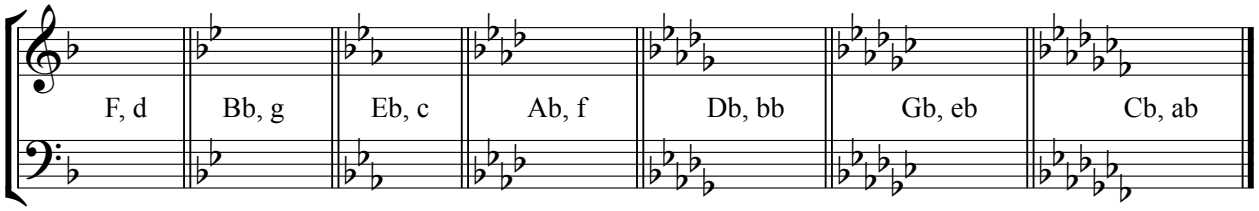
Appendix A:

Key Signatures and Circle of Fifths

Key Signatures

Key signatures are those collections of sharps or flats that you see at the beginning of a piece of music, right after the clef. Sometimes, the key signature is repeated at the beginning of each line of music. More often you will find the key signature at the top left of a sheet of music and then not again until it is changed to another one. We usually express a major key with an upper case letter (C) and a minor key with a lower case letter (a).





When there are no sharps or flats in the key signature, that signifies either C major or A minor. Every note is played as a natural unless an accidental is in front of it.

Are Key Signatures Necessary?

Key signatures make it a little easier to read the music. Having the sharps or flats in the key signature precludes the need to write those same sharps or flats in front of each affected note in the music. Whew! That's one less thing your eyes have to look at and process as you play through the music.

Exclusive Club

You can think of each key as a unique set of pitches. The key of F major contains these pitches: F, G, A, Bb, C, D, E. If we change the E to an Eb, that becomes a different set of pitches and thus, a different key, Bb major in this case.

Kinfolk

D minor shares the same pitches as F major, but has a different tonic, or starting note. Because of this close relationship, D minor is known as the relative minor of F major. Every major key has a relative minor. Think of them as the happy and sad siblings. The major key is happy-sounding, especially when compared to the sad-sounding minor key. I am using the words "happy" and "sad" to illustrate the different sounds of the major and minor keys. You may find "proud" and "pensive" better describe the feelings each key evokes, or other feelings entirely.

All Together Now

Let's take a look at all the key signatures together. If you look closely, you can see a pattern emerge. The flats are always added in this order: Bb, Eb, Ab, Db, Gb, Cb, Fb. The sharps are always added in this order: F#, C#, G#, D#, A#, E#, B#. In the graphic on the previous page, the names of the keys are placed between the staves; the uppercase letter is the major key name and the lower case letter is the minor key name.

Notice the placement of the sharps—F#, then C# below and to the right. Then up to G# and down again to D#. The distance between all of these sharps is the same, a perfect fifth. That is the pattern to notice. We'll see how we can use this pattern on the next page.

Now look at the placement of the flats—Bb, then up and to the right to Eb, then Ab and up to Db. The sharps have a downward motion pattern and the flats have an upward motion pattern. The distance between the flats is a perfect fourth.

Each key signature has its own name. For example, when you see two sharps in the key signature, the name of the key is either D major or B minor. The two sharps are always F# and C# and always in that order.

The Circle

On the following page is a list of all the major scales with their corresponding key signatures. Look at all those scales! It can seem a bit confusing and overwhelming until we add some order to them. Just look at all the sharps and flats! At least we can be thankful there are no sharps and flats together in any one scale.

I'll show you a way to get command of the keys and the key signatures. You'll need a blank piece of paper, a pencil, and a compass. If you don't have a compass, get an unopened can of soup from the kitchen.

MAJOR SCALES

1. In the center of your paper, draw a 3" circle with your compass or trace the bottom of your soup can.

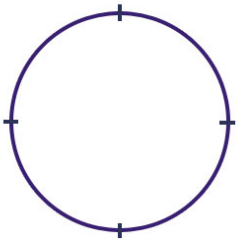


Figure A-1

2. Make a tick mark at these four places on the circle: at the very top (12 o'clock position), the very bottom (6 o'clock position), the right side (3 o'clock position), and the left side (9 o'clock position).

Your circle should look like figure A-1:

3. At 12 o'clock, write a capital C. This represents the key of C major, which has no sharps and no flats.

4. Count 5 letter names from C, starting with C as 1. Did you get to G? Good. If not, make sure you count like this: C (1) D (2) E (3) F (4) G (5).

5. Write G in the one o'clock position.

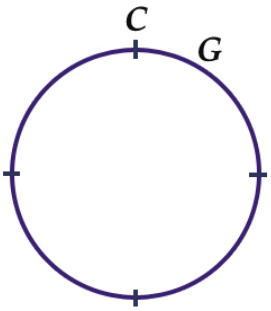


Figure A-2

Your circle now looks like figure A-2:

6. Count 5 letter names from G. Remember that in music we only use the letters ABCDEFG and then start over at A. In other words, after G comes A.

7. Write the 5th letter name after G in the 2 o'clock position. Did you write D there? Good work.

8. Continue this 3 more times, filling in the 3 o'clock, 4 o'clock, and 5 o'clock positions.

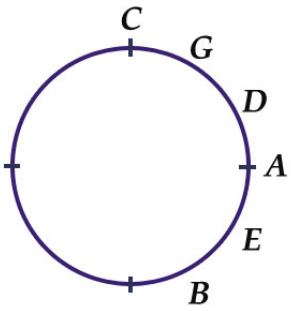


Figure A-3

Your circle should now look like figure A-3:

9. Look at the list of major scales and compare the key names to the letters you have so far on your circle. They match, don't they?

10. Count 5 letter names from B. Write your result in the 6 o'clock position. Add a sharp to the letter name. Is your answer F#? That is correct.

11. Count 5 letter names from F and add a sharp to the letter. Remember that F is 1. Write your answer at 7 o'clock.

Enharmonic Equivalents are two notes that sound the same pitch but are called by two different names.

Look at the white key labeled C on the keyboard below. When you raise C one half step, it is called C#. That's the name of the black key to the right of C. When you lower a note one half step, it is called a flat. Locate the white key labeled D on the keyboard. Lower D one half step, it becomes Db. The black key to the left of D is Db.

Wait a minute! That's C#. Yup. Same pitch. Different name. Enharmonic Equivalent.

Now let's go back to building our circle. So far it looks like figure A-4:

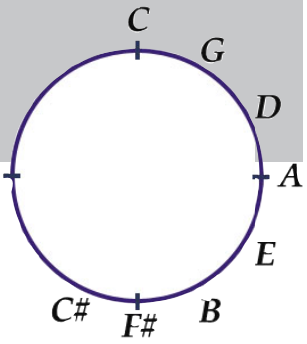
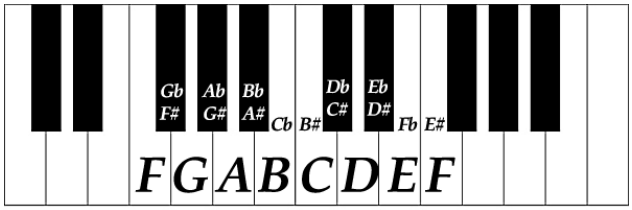


Figure A-4

12. Using the lettered keyboard below as your reference, determine the enhamonic equivalents for C#, F#, and B. Write those pitch names next to C#, F#, and B on the circle.



Did you write C#/Db, F#/Gb, B/Cb? If so, you've got a perfect score.

13. Starting at Db, count five letter names and write in your answer at 8 o'clock. If you haven't already done so, add a flat to its name.

14. Continue this 3 more times until you fill the circle with letter names. Check your circle against figure A-5. No flat on last letter.

Optional: Choose 3 crayons. Color all the letter names from G to C# (going clockwise) in one color. Color all the letter names from F to Cb (going counter-clockwise) in a different color. Then draw a polygon around the 3 sets of enharmonic equivalents with a third color.

Congratulations! You've just built your own Circle of 5ths. This represents the names of all the major scales. Go ahead – compare it to the list of scales on page 69.

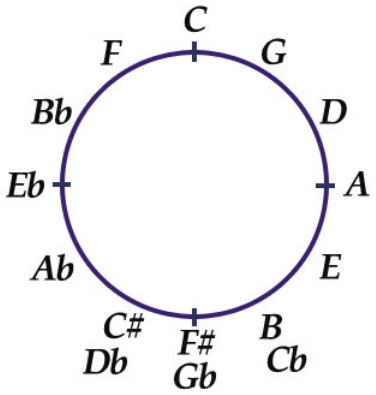


Figure A-5

On the next few pages, I explain what it all means and how you can use the circle in learning your scales, remembering your key signatures, and as a guide in transposing.

Using The Circle for Key Signatures

As we learned from building our own Circle of 5ths, each letter on the circle represents the name of a key or scale. Starting at C and going clockwise, one sharp at a time is added to each scale until we arrive at C#. Starting at C and going counter-clockwise, one flat at a time is added to each scale until we get to Cb.

Look at the circle you created. If "C" has no sharps and no flats AND going clockwise around the circle, we add 1 sharp at a time, THEN we can tell how many sharps are in each scale by counting letters on the circle.

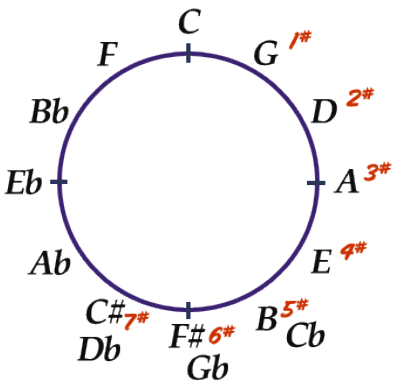


Figure A-6

Like this: C has no sharps. Move clockwise to G and add 1 sharp. The key of G has 1 sharp. Write "1#" next to G. Continue moving clockwise to D and add 1 sharp. Therefore, D has 2 sharps. Write "2#" next to D. Continue clockwise around the circle and label the number of sharps next to each letter name. Stop at C#. If your circle looks like figure A-6, you did it!

Go back to the top of the circle at C. Now move counter-clockwise to F and add 1 flat. The key of F has 1 flat. Write "1b" next to F. Continue moving counter-clockwise around the circle and label the number of flats next to each letter name. Stop at Cb. Check your work against the circle in figure A-7.

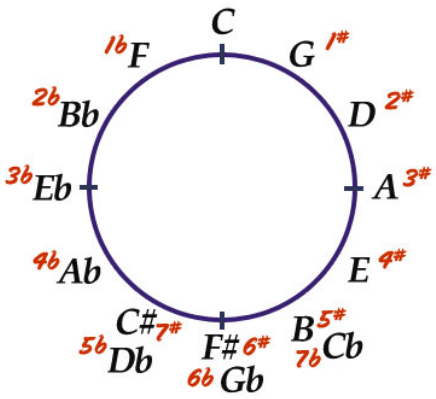


Figure A-7

Now we can use our circle to find the names of all the major scales and know how many flats or sharps are in each scale. Use these memory devices to memorize your scales and key signatures.

For the SHARP scales:

Get Down And Enjoy Bounti-Ful Chocolate

or if you prefer:

Get Down And Eat Batter Fried Chicken

For the FLAT scales:

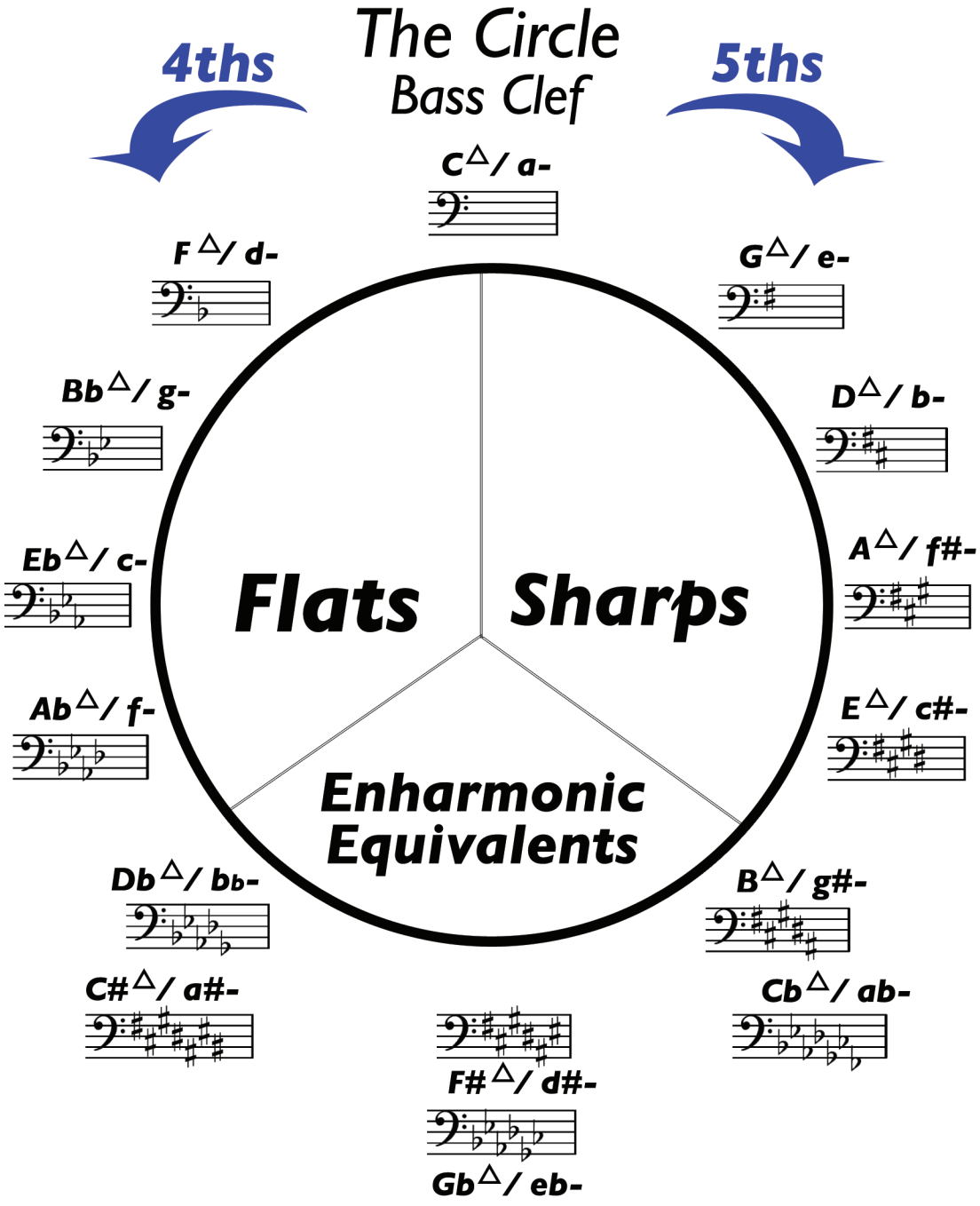
First BEAD Goes Clink.

Each uppercase letter on the circle represents the name of a scale, in the order of number of flats or sharps.

On the next page, you'll find a complete Circle of 5ths that not only indicates the names of the major scales, but also the names of the relative minor scales, along with a visual representation of each key signature.

Here is The Circle of 5ths or 4ths, depending upon your direction.

Remember I said that uppercase letters are used to represent major keys and lowercase letters for minor keys? There are other symbols we can use for shorthand. We can indicate a major key or scale using an uppercase letter followed by a triangle or an uppercase "M." For the minors, we can use a dash (or minus sign) or a lowercase "m." Like so: CM meaning C major and am meaning A minor. This is the same as if I had written C△ or a- like I did in the circle below. Any of these ways are fine.



MINOR SCALES

Appendix B:

Bringing Order to Flats and Sharps in Key Signatures

The key to remembering key signatures and the order of the sharps and flats is using this simple memory device:

Father Charles Goes Down And Ends Battle

To remember this sentence, I visualize an image like the one to the left. The minister is flashing the peace sign to stop a fight.

Recite the sentence backwards and it still makes sense, which helps in memorization. ***Battle Ends and Down Goes Charles' Father***

The first letter of each word in this handy little sentence is the name of a sharp or a flat, depending on where you start and which direction you go. For example, if you start with ***Father***, you will be reading the names of sharps in the order they are added to the key signature.

As you saw in Appendix A, key signatures are very orderly bits of notation on the musical staff. Sharps and flats are not just thrown up in any order. Sharps are added in this order: F#, C#, G#, D#, A#, E#, B# – which happens to be the first letter of each word in this sentence: ***Father Charles Goes Down And Ends Battle***.

Stay Sharp

The first sharp added to a key is F#. When there are two sharps in a key, they are F# and C#. Three sharps in a key are F#, C#, G#. Four sharps in a key are F#, C#, G#, D#. Five sharps in a key are F#, C#, G#, D#, A#. The six sharps are F#, C#, G#, D#, A#, and E#. When there are seven sharps in a key, everything is sharp! And they will always be listed in this specific order in the key signature: F#, C#, G#, D#, A#, E#, B#.
(See the key signatures on page 67.)

How can you use this in playing your scales? Look at the circle of 5ths you made in Appendix A or refer to figure B-1. Locate "E 4#." This tells you that the key of E major has four sharps. But which ones? Simply remember ***Father Charles*** and recite the sentence in your head. Stop at the first four words. ***Father Charles Goes Down*** That means the four sharps are F#, C#, G#, and D#.

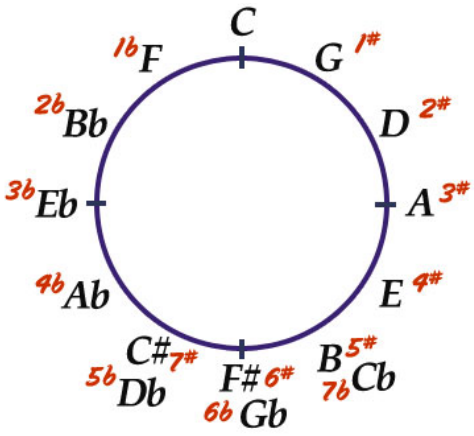


Figure B-1

Test this out on another sharp scale. On your circle find F# major. The note there is "F# 6#." Recite the ***Father Charles*** sentence up to the sixth word. ***Father Charles Goes Down And Ends***. The six sharps are F#, C#, G#, D#, A#, and E#. Using your Circle of 5ths and the ***Father Charles*** sentence, you can figure out the key signature for any scale that has sharps.

Flats in Reverse

So far we've only talked about the order of sharps and the sharp key signatures. Using the sentence in this direction, ***Father Charles Goes Down And Ends Battle***, only works for sharps. Turn it around to get the order of flats added to the key signatures. Now the sentence reads:

Battle Ends And Down Goes Charles' Father

The first flat added to a key signature is Bb. The first two flats are Bb and Eb. Three flats are Bb, Eb, and Ab. Four flats are Bb, Eb, Ab, Db. Look at the key signatures on page 67 to verify this. Five flats are Bb, Eb, Ab, Db, and Gb. The six flats will always be Bb, Eb, Ab, Db, Gb, and Cb. When there are seven flats in a key, everything is flatted! And they will always be listed in this order: Bb, Eb, Ab, Db, Gb, Cb, and Fb.

Using your Circle of 5ths, locate Bb. It says "Bb 2b." We know that there are two flats in the key of Bb major, but which two? Recite the ***Father Charles*** sentence backward and stop at the second word. ***Battle Ends***. The two flats are Bb and Eb.

Now locate Ab on your circle. The circle tells you the key of Ab major has four flats. Recite ***Battle Ends*** sentence and stop at the fourth word. ***Battle Ends And Down***. The four flats are Bb, Eb, Ab, and Db.

Sharps or Flats?

How do you know if a scale or key signature is one that contains flats or sharps? You already know that the key of C has no flats and no sharps. Look at all the flat key signatures. All of them except F have the word "flat" as part of their name. I could ask you to play a Bb scale, or Eb, Ab, Db, Gb, or Cb, and you would know from their name that they contain flats. We don't mix flats and sharps in key signatures. Whew! So, what about F?

What About F?

The names of the scales come from the notes contained in their scale That is, in the scale that contains C, D, E, F, G, A, B, we wouldn't name it Ab or C# since those notes are not part of the scale. You also know the first sharp is F#. (Remember the order of the sharps, Father Charles Goes...) Therefore, any of the scales with sharps in them would not be called F. Since you also know the scale with no sharps and no flats is C, then the F major scale must contain flats.

A Key With No Name

What if you are looking at sheet music with some sharps or flats in the key signature, and you want to figure out the name of the key?

As I mentioned earlier, the sharps and flats are always placed in the key signature in the same order. This is great news for determining the key. For the sharp signatures, note the last sharp and go upward to the next note name. This note is the name of the major key.

Using the circle on page 73, locate the key signature with 3 sharps. The three sharps are F#, C#, and G#. In the three sharp example, you will see F#, C#, and G#. The note above G# is A. This key signature represents A major.

To find the name of the minor key, look at the last sharp and move downward to the next note name. In our three sharp example, move down from G# to F#. The name of the minor key is F#. When you see three sharps in the key signature this means it could be either A major or F# minor.

Look back at all the key signatures on page 67 and see how this works for all the sharp keys.

For the flat key signatures, the second to the last flat is the name of the major key. In this example to the right, the second to the last flat is circled. When you see four flats in a key signature, it is either Ab major or F minor.

You can also go up five notes from the last flat added to get the name of the major key. This is necessary when there is only one flat in the key signature (Bb). Five notes up from Bb is Bb, C, D, E, F. F major (or d minor). From the last flat, move upward three note names to determine the name of the relative minor.

Keys to the Music

Now that you have read through Appendix B, you have acquired some great methods for determining key signatures as well as ways to determine the names of the keys represented by the signatures. Remember this palindromatic sentence:

Order of sharps:

Father Charles Goes Down And Ends Battle

Order of flats:

Battle Ends And Down Goes Charles' Father

Appendix C:

Traveling Through the Keys

When doing the various exercises and warmups in this book, you come across the instruction to "play this in all keys." Here are a few ways to travel through each key. Give them all a try and add some variety to your warmups. This will keep them fresh and interesting.

Chromatically

Play the pattern in C, then move chromatically ascending to C#, then D, until you have played the pattern in all keys covering one octave.

You can also go the other direction. Start in C, then B, then Bb. Play the pattern moving downward chromatically until you get to Db/C# and then C.

Occasionally play the pattern over two octaves worth of chromatic ascending or descending to ensure you cover the full range of your instrument.

Circle of 4ths

Start your pattern in C, then play it in F, followed by Bb, continuing around the Circle of 4ths through all 12 keys. Refer to Appendix A for a chart of the Circle of 4ths and 5ths.

You don't always have to start your pattern in the key of C. Start anywhere on the Circle! To travel by fourths, move in a counterclockwise direction.

Circle of 5ths

Start your pattern in any key on the Circle and move in a clockwise direction to play in all 12 keys.

Appendix D:

Interval Recognition

Your sight reading will become easy as pie when you learn to recognize intervals by sight and hear them in your head or ear. I've made a list of all the intervals within an octave, both ascending and descending and suggested familiar songs that use that particular interval at the start of the song. For example, when you sing the first two words of *Twinkle, Twinkle Little Star*, you are singing the interval of a Perfect 5th, written as P5.

Many of these songs will be familiar to you. But if they are not, you'll want to add your own song titles. A strong connection to a song will help you really get the sound of a particular interval. To lock in the sound of these intervals in your ear, I encourage you to find your own songs.

Ascending Intervals and Associated Melodies

Sing the melody aloud or in your head to help you hear and identify the interval.

Interval	Song(s)
m2	Shark Theme from *Jaws*
M2	*The Itsy Bitsy Spider, Frère Jacques, Silent Night, Happy Birthday*
m3	Brahm's *Lullaby*, Dvorak's *New World Theme, Work Song*
M3	*Kumbaya, Michael Row The Boat Ashore*
P4	*Here Comes The Brides, O Tannenbaum, Do You Know The Muffin Man, Amazing Grace, We Wish You A Merry Christmas*
Tritone	*Maria* from *West Side Story*, *The Simpsons* TV Theme
P5	*Twinkle Twinkle Little Star*, Theme from *2001 A Space Odyssey*, Guard's Theme from *The Wizard of Oz* (oh-ee-oh)
m6	*Black Orpheus*, Brahm's *Hungarian Dance #4*
M6	NBC, Leia's Theme from *Star Wars, Shortnin' Bread, Take the A Train*
m7	*Star Trek* (Original Show), *Somewhere* from *West Side Story* ("There's a place for us..."), *Give Peace a Chance* ("all we are saying, is give...")
M7	*Pure Imagination* from *Willy Wonka* (1st and 3rd notes), *Take on Me* (tune by A-Ha 1985)
P8 (octave)	*Over The Rainbow*, *Let it Snow* ("Oh the weather outside..."), *Chestnuts Roasting On An Open Fire*

Descending Intervals and Associated Melodies

Interval	**Song(s)**
m2	*Joy to the World, Für Elise, Shall We Dance*
M2	*Mary Had a Little Lamb, Yesterday, 3 Blind Mice*
m3	*Star Spangled Banner* ("Oh say can you..."), Grieg's *Morning*, *He's Got The Whole World in His Hands*
M3	*Swing Low Sweet Chariot, Summertime*
P4	*Dona Nobis Pacem, I've Been Working on the Railroad, Old MacDonald, Born Free, All of Me*
Tritone	
P5	*The Flintstones* Theme, *Bring a Torch, Jeannette Isabella, The Way You Look Tonight*
m6	Theme from *Love Story*
M6	*Down By The Riverside* ("Gonna lay down my sword..."), *Nobody Knows The Trouble I've Seen*
m7	*Watermelon Man*
M7	Cole Porter's *I Love You*
P8 (octave)	*There's No Business Like Show Business*, 2nd phrase *This Guy's in Love With You, Willow Weep For Me*

Solfege Syllables with Pronunciation

MAJOR SCALE SYLLABLES

do > re > mi > fa > sol > la > ti > do *(see pronunciation below)*

MINOR SYLLABLES

do > ra > me > fa > sol > le > te > do

tritone, a.k.a. augmented 4th or diminished 5th = fi

Solfege Syllables Chromatically

do – Perfect Unison (dough)
ra – Minor 2nd (rah)
re – Major 2nd (ray)
me – Minor 3rd (may)
mi – Major 3rd (mee)
fa – Perfect 4th (fah)
fi – Tritone (fee)
sol – Perfect 5th (sew)
le – Minor 6th (lay)
la – Major 6th (lah)
te – Minor 7th (tay)
ti - Major 7th (Leading Tone) (tea)
do – Perfect Octave (dough)

Glossary

Arpeggio
Playing chord tones one pitch at a time.

Chord
Four or more pitches played together to suggest harmony.

Chord changes
Sequence of chords, forming the harmony for a tune.

Embouchure
Wind players shape their mouths and lips to form an interface with the particular instrument. The teeth, tongue, and muscles around the mouth are all involved in shaping this interface known as the embouchure.

Form
Musical form. The structure of a musical piece. Upper case letters are used to denote sections of the song/movement/melody. For example, many popular songs follow an AABA form.

Interval
The distance between two tones. The smallest interval used in our Western music is a half step. The half step is a convenient unit of measure for all other intervals. For example, a minor third comprises three half steps.

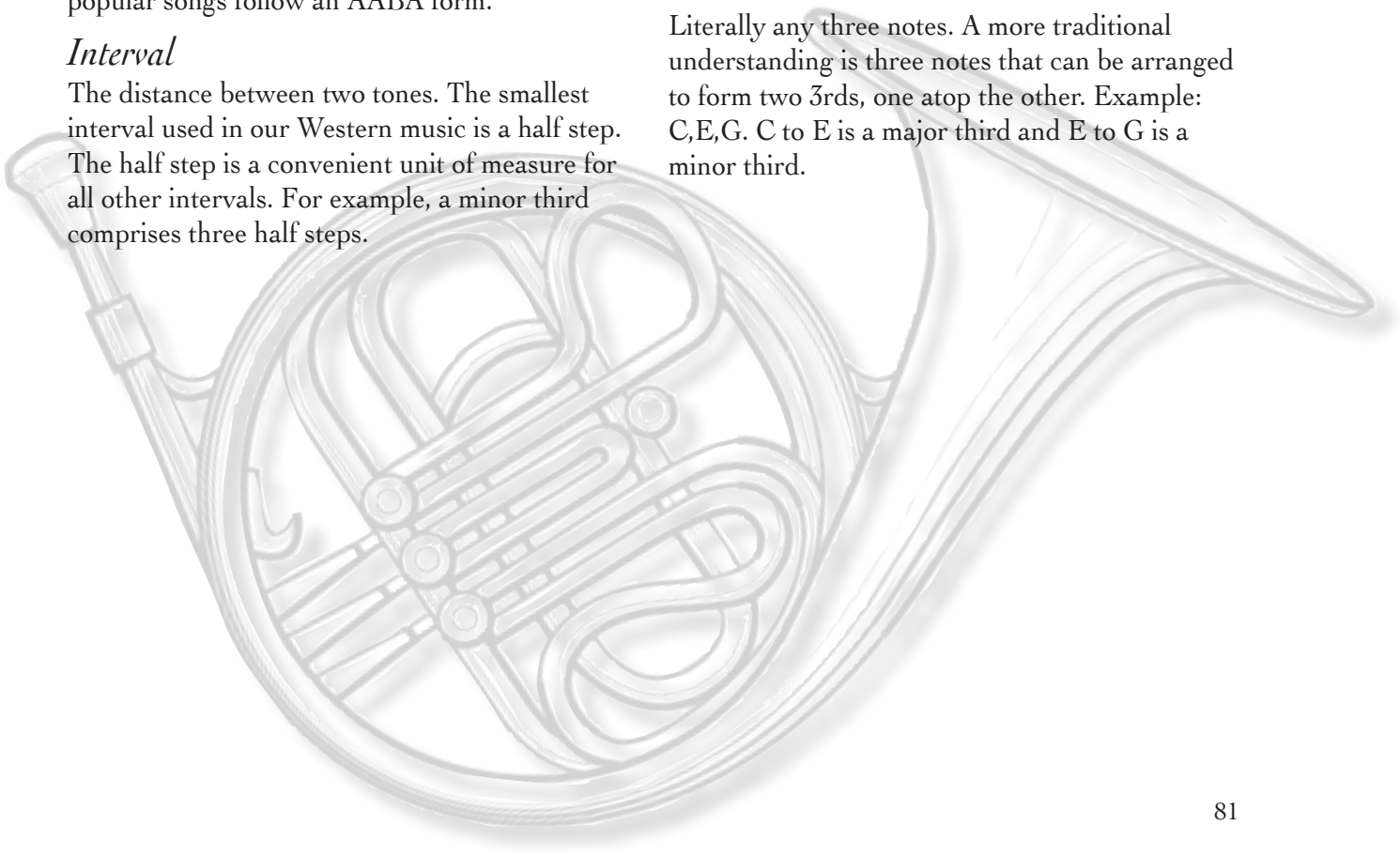
Key signature
The sharps or flats of the scale on which a piece of music is based are placed at the beginning of each staff and is referred to as the key signature.

Longtone
Warmup exercises practiced by wind instrument players to build embouchure strength and develop tone quality. Usually pitches played as if under a fermata, held in an unwavering tone.

Octave
Derived from an Italian word meaning eight. Two pitches with the same letter name but in different registers are said to be in different octaves.

Solfege
The system of syllables used to help musicians learn the major and minor scales. "Do, Re, Mi, Fa, Sol, La, Ti, Do" are the syllables used to sing a major scale.

Triad
Literally any three notes. A more traditional understanding is three notes that can be arranged to form two 3rds, one atop the other. Example: C,E,G. C to E is a major third and E to G is a minor third.



About the Author

Mary Ellen Grace began her lifelong relationship with music at the age of four at her grandmother's piano. Music lessons on piano began in earnest when she was seven years old and on saxophone at age 10. She picked up the clarinet in high school and learned a bit of strings (violin, guitar, cello), brass (trumpet), and percussion (snare drum, marimba) during her college years where she earned a bachelor of science degree in music education from Indiana State University. She has a particular affinity for any instrument you can blow into including harmonica, Native American flute, and flutes from her travels in Turkey and Central America.

Teaching music to motivated students of all ages is what gets her up in the morning. Since 1991, she has been guiding students on their musical journeys at Grace Notes Music Studio.

As a performer, Ms. Grace has been a soloist with Portland Gay Symphonic Band and Aurora Chorus. She has performed and recorded with Zoa Smith Band, Felina's Arrow, Poeina Suddarth, Terri Grayum, and Portland Lesbian Choir. She performs regularly with her own jazz quartet, The Grace Group, as well as Matt Stanley Quartet, Pacific Crest Wind Symphony, Rose City Swing, and the saxophone quartets Three Men and A Babe and SaxQuatch, as well as in various pit orchestras for area musicals.