# Dainis W. Michel's <br> Right Hand Full Hand-o-Music www.music-composition-studio.com 



Dainis W. Michel © 2007

# Dainis W. Michel's <br> Left Hand Full Hand-o-Music www.music-composition-studio.com 



Dainis W. Michel © 2007

# Simplified Solfeggio System 

An e-Report

by
Dainis W. Michel

Dainis W. Michel © 2006
Published by music-composition-studio.com

## Acknowledgements

Special thanks to Dr. Torkewitz, Professor Urbanner, Raphael Thoene, Martin Kapeller, Mark Rubel, Professor U. Milo Kaufmann, William R. Norman III, and our daughter Emilīja.

This e-report is dedicated to Emīlija, may it magnify her health, abundance, and joy!

## Navigation and TOC

I put a navigable TOC on the first page to make your navigation of this document a breeze. Enjoy!
ESSENTIAL SIGHT SINGING INFORMATION ..... 1
ACKNOWLEDGEMENTS ..... 4
NAVIGATION AND TOC ..... 5
HOW TO USE THIS INFORMATION ..... 6
FOR FOLKS WHO`ํ LEARNED MOVABLE DO OR SCALE-DEGREE SYSTEMS. ..... 7
1 RHYTHM (RHYTHM AND TEMPO) ..... 8
1.1 Action: Count ..... 8
1.2 RHYTHMIC COUNTING CONVERTED INTO THE VISUAL GRAPHICS OF MUSICAL NOTATION . 8
1.3 COUNTING IS THE BRIDGE BETWEEN RHYTHM AND FEELING ..... 10
2 NOTES AND SCALES ..... 12
2.1 Action. ..... 12
2.2 THE CLOCK AND THE NOTES ..... 13
2.3 The Piano Keyboard, the typewriter of music ..... 14
2.4 Hands-o-music ..... 17
2.5 SING SCALES WITH ME! ..... 17
2.5.1 All Names on Clock ..... 23
2.6 InTERVALS ..... 23
2.7 Solfeggio Systems. ..... 25
2.8 FIXED DO (FRENCH SYSTEM) ..... 26
2.9 FIXED DO (NO DOUBLE FLATS/SHARPS) ..... 26
2.10 Variations ..... 27
2.11 Common scales ..... 27
2.12 Movable Do: ..... 27
2.13 Mixed ..... 27
2.14 Options by Dainis W. Michel ..... 27
2.15 Recommended Option by Dainis W. Michel ..... 28
3 MUSICAL GAMES ..... 30
3.1 FOLLOW ME! ..... 30
3.2 OH-TWO-FOH ..... 30
3.3 AdDING BEATS ..... 30
4 APPENDIX ..... 31

## How to use this information

Remember: Go SLOW to go FAST!
The basic premise of this sight singing method is for you to use the note numbers whenever you sing anything. To solidify your pitch recognition, also touch the appropriate area on your hand for whatever pitch you are singing. Practice on real note names (develop one syllable names as referenced below), and always practice on the numbers as well.

You can use the note number system with the hands-o-music to supplement any sight-singing text, course, or method. If the method you are being taught right now confuses you, you can just sing the numbers in your head while singing whatever your teacher wants out loud. The hands-omusic will also be there for you to make sure you sing the right notes.

This report is basically my way of getting this information out to you as quickly as possible. It's not exactly refined, and you are expected to apply yourself in making sense out of the diagrams. The text is secondary, as all the information you need is in diagrams.

If you do that, you'll go very far.

## For folks who've learned movable do or scale-degree systems

The stumbling block that some find cumbersome is that when singing note numbers, you might have problems knowing which scale degree you are on... and you may have learned to sing on scale degrees in the past (one, two, three, four, five, six, seven, one). The way to convert from such a system to my note number system is to recognize that scale degrees are actually first, second, third, fourth, fifth, sixth, seventh, first.

If you've sung things like one, five, one, seven, one before to recognize scale degrees, just think to yourself, "one" represents the "first" scale degree in a scale. You can even go back and sing your scales with the syllables "first, second, third...etc." You'll notice (or you've noticed already) that just singing major and minor modes are difficult using the "one two three" method, because, for example the minor "three" is different than the major "three." I find it annoying, and if you've never heard of what I'm writing about here...you're better for it. Just skip it and start singing while using the note number names and the hands-o-music.

You can use note names and note numbers.

## 1 Rhythm (Rhythm and Tempo)

## B.B. King

The beautiful thing about learning is that no one can take it away from you.
http://www.heartquotes.net/Education.html

### 1.1 Action: Count

Here's what we're going to practice.
Say and repeat each of the following lines of text. Pronounce bold text a bit louder than the rest and say each syllable at an even pace.

1. One two
2. One two three
3. One two three four
4. One and two and three and four and
5. One and two and
6. One e and a two e and a three e and a four e and a
7. Wa hun e e a and a a two o e e a and a a three e e e a and a a
8. One ti ta Two ti ta Three ti ta
9. One ti ta Two ti ta Three ti ta Four ti ta
10. Wa kan ti ki ta ka two kan ti ki ta ka three kan ti ki ta ka

If you need to, read about time signatures in other sources, for example:
http://en.wikipedia.org/wiki/Time signature

### 1.2 Rhythmic counting converted into the visual graphics of musical notation

1. One two


I'm using x's as the noteheads, because it doesn't matter what pitch you sing. Just count and repeat and gain a sense for the meters.
2. One two three


## 3. One two three four

four-four is often abbreviated as common time and designated with a C . Therefore the two excerpts below are equivalent. Try them in different tempi. See what happens.

4. One and two and three and four and

5. One and two and

Two-two time is often abbreviated as "cut time." It's important to have the right feel for the time, which is why I recommend the following counting method.

6. One e and a two e and a three e and a four e and a

7. Wa hun e e a and a a two o e e a and a a three e e e a and a a

8. One ti ta Two ti ta Three ti ta

9. One ti ta Two ti ta Three ti ta Four ti ta

10. Wa kan ti ki ta ka two kan ti ki ta ka three kan ti ki ta ka


### 1.3 Counting is the bridge between rhythm and feeling

Play with these counting methods, mix them up and around, make up new syllables, and have fun! Here are some helpful counting suggestions.

| Beat <br> divided by | Good way to count out loud |
| :---: | :--- |
| 1 | One |
| 2 | One and |
| 3 | One ti ta |
| 4 | One e and a |
| 5 | Wa bu ku du ku |
|  | Wa bu du ku du |
| 6 | Wa kan ti kan ta ka |
| 7 | Wa pa ka la ka pa la |
| 8 | Wa pa la ka pa la ka |
| 9 | Wa ta da ti ta da ta ta da |
| 10 |  |
| 11 | Wa a un e e e a a an da a a |
| 12 |  |
| 13 |  |
| 14 |  |
| 15 |  |
| 16 | TRRRRRRRRR |

See the additional rhythmic counting charts in the Appendix.

## 2 Notes and Scales

Everyone thinks of changing the world, but no one thinks of changing himself.
~Leo Nikolaevich Tolstoy
http://www.quotegarden.com/mlk-day.html

### 2.1 Action

1) Count up from 0 to 11 , then count backwards back to 0 .
2) Say: "oh one two three four five six seven eight nine ten eleven oh."
3) How many numbers did you count? 11, 12? Count them.
4) Look at the clock below. Point to the numbers as you count.

Please don't let the simplicity of these exercises fool you!

5) Start on any number and skip hours in the following pattern: $2,2,1,2,2,2,1$.

That is, if you start on 0 , you would point to: $2,4,5,7,9,11,0$.
If you start on 8 , you would point to $8,10,0,1,3,5,7,8$.
Go clockwise and counterclockwise. So, now sour examples expand to:
$2,4,5,7,9,11,0,11,9,7,5,4,2,0$ and $8,10,0,1,3,5,7,8,7,5,3,1,0,10,8$.

TIP: You can group the skips as two sets of " $2,2,1$ " separated by a 2 hour skip, resulting in the following grouping: $(2,2,1) 2(2,2,1)$. It makes it easier to remember.
6) Great job!

My guess is that you'll be amazed at how relevant the above exercise is and was to your musicianship!

### 2.2 The clock and the notes

So, now we've done rhythm. I bet you're better than when you started, congrats! If you're just skimming through, OK, but I invite you to get yourself to about $80 \%$ on notating your rhythms before moving on.
(if you need to look up terms as you go, that's just fine!)
Folks, I really don't want you to make this any more complicated than it is. There are only 12 notes. It's true that, depending on the direction of the harmony and melody, we gently tune the notes a bit differently (kind of like a boat leaning while turning), but, basically there are 12 notes. They've been called a jillion names, and it's important for us to be familiar with those names. But remember...there are only 12 notes, so just relax. It's just 2 more than most of us have fingers...no big deal!

Check this out:


What I've done is relate the notes to the clock. You may have seen the circle of fifths displayed on a clock. What a useful tool...the clock! It can represent all of the keys (as in all of the scales), and it can also represent all of the notes themselves. Nifty!

### 2.3 The Piano Keyboard, the typewriter of music

Some composers consider the piano the "typewriter" of music. Some pianists find that a bit insulting! If you don't already, you're going to get to know the piano keyboard, which is designed to make sense.

I invite you to gain a sense for the keyboard and inspect it, see how it's organized. Recognize its features. 3 black notes 2 white notes. What are the note names? What are the note numbers? If
you have a piano, pick a key, press it, and then sing the pitch using appropriate number for that pitch. Just pick random keys and sing a bit later than you play. Later, you can sing before you play and see if you get the right pitch. Ahh the fun we'll be having! For now, just take it easy and spend a little while pressing pitches and repeating them using the right syllable (note number) when you sing. You can also sing the note names in German, English, or in any other language you like!

# Dainis W. Michel's <br> Snappy Note Syllable System <br> wWW.music-composition-studio.com 



Red = Sharp Note Names
Black = Note Names (no sharps or flats)
Blue = Flat Note Names
Yollow = Note Number
Green $=$ Note Syllable (derived from Note Number)

### 2.4 Hands-o-music

Next, we're going to incorporate my magic hands-o-music.
Check 'em out!


Pretty awesome, huh?
Whenever you sing an individual note, touch the hands-o-pitches point for the note you are singing. That's going to give you a tactile sense for the pitches themselves. Also, it will be almost impossible for you to mess up your intervals, since you'll know their sizes much more intimately as a result combining thought and touch.

### 2.5 Sing scales with me!

Scales are like going up or down a spiral staircase, skipping a step or two along the way! The steps themselves are known as "steps" (German: "Stufen"), "scale degrees," "notes," and other designations. In many types of music, it's quite relevant which step you are on related to the step you started on. So, we keep track. Am I on the fourth step, the fifth, and so on!

Now, we're going to sing the C major scale on numbers. Sing oh two foh (for four) fah (for five) sev (for seven) nah (nine) lev (eleven) oh. Great job!

Let's now sing the same thing on note names:

| C | D | E | F | G | A | B |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Sea | Dee | eat | Ef | Gee | Hay | Bee |

Let's now sing the same thing on German note names:

| C | D | E | F | G | A | B |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Tseh | Deh | Eh | Ef | Geh | Ahh | beh |

And finally, let's sing the same thing on solfeg syllables

| C | D | E | F | G | A | B |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Do | Re | Mi | Fa | Sol | La | Ti/Si |

Notice how we're only using 7 out of the 12 notes? That's the magic of scales! See how, on the diagram of the piano (or on your keyboard), there's a note in-between C and D? See how I've numbered each note from left to right, starting on 0 for C ?

Note: for those interested, yes, we could start on 1 and thereby have the note B/H be 12. It's a decision I made to call the note C 0 , so that C could be on top of the clock, so to speak. Also, the 0 for C technique relates to the modern method of Integer Notation.

Also, do you see how, when moving from one note in the C scale to the next, sometimes you go to the next piano key, but other times, you skip a key?

We call the "skips," also known as intervals, whole steps when they skip one lever/note/key, and we call them $1 / 2$ steps when they go to the next lever/note/key. The result is the fantastic phone number of music...see below!

So, you see, the famous phone number of music is 221-2-221!
Now we're going to start with the C Major scale, but then we'll expand to any major scale, starting on any note.

Say "c" 221 2221. The last 1 takes you back to C. You can also say "c" 221222 "c" Do it up and down.


As you practice, move your hand and point around the clock.
We're working out a system for you that goes "backwards" in music history; we're working from today backwards in time. Because of that, you'll have a system ingrained in your musicianship that works for music using modern and historical systems (written now and then, tonal and advanced).

Now, start on any key and play the magic phone number.
The exercise is the same as your action step for this lesson, however, now, you are doing the exercise with the awareness that we are relating the phone number to pitches. You can go to the piano or find an online piano to play through your scales.

Say:
"Starting \#" 221222 "Starting \#"
So, let's say, you start on 9 . you would say
92212229
or
" 1 " means that you press the next lever on the keyboard, which makes the interval 1. " 2 " means that you skip one lever, so that the interval is 2 . Show visually all 2 's and 1 's possible in a graphic.

Remember, relax your mind, just be open and have fun. If you've had enough for one day, just stop. These lessons aren't going anywhere. Take breaks, take walks and assign this "learning" to your subconscious mind. Stop working to learn and just play.

Neato, huh? With \#221 222\#, you can now play all major scales. Sure, a piano teacher might need to help you with fingering, but the basics are there!


You may find some internal or external resistance to your progress. Also, some of these things do need to be drilled (like which mode goes with which position). All of that is normal, let it pass.

The question comes, can it really be this easy? Folks, I have to ask myself that all the time. Go slow to go fast, think clearly and don't let ANYONE tell you you CAN'T be doing what you are doing.

Also, why resist now, it just gets more fun from here and all we're doing is establishing the basics. Just wait until you can do two of these lines simultaneously...that's for another eCourse.

If you think about it logically, you could create any kind of scale. (A scale is a system containing a particular number of notes). Historical scales contain

| 5 | Pentatonic scale |
| :--- | :--- |
| 6 | Blues scale |
| 7 | All modes, major, minor, |
| 9 | Melodic minor (could be seen as a 7 note scale, <br> because two of the notes are altered on the way <br> up or down, so they could be seen as variations <br> of the "same" note) |
| 12 | 12 tone system |

Composers have always sought to expand on the basic musical systems available to them. Messiaen developed just about every imaginable mode one can think of, and some composers have branched off into microtonal composition (things like 24-tone composition, basically doubling the number of keys on the piano, even 48 tones, etc.), and there have been developments in overtone music, where we can enjoy the high, beautiful tones generated "automatically" by the sounds we make. Some of the musical developments haven't appealed to the public ear, however, you might just be the composer to synthesize "advanced" compositional concepts with publicly acceptable music.

Now, take these systems and practice. Sing everything on numbers and note names. Sing the numbers at church, sing them at practice, sing them and touch the appropriate point on your hand. Don't stress about the octaves too much, you can just mentally be aware of which octave you are singing in. Work on it for several years and you'll get better and better and better.

### 2.5.1 All Names on Clock



### 2.6 Intervals

Here's something that threw me off for many years and I'm just bubbling to be able to share it with you now at this stage in your musical career!

The tones, within their scales, have tendencies. We actually sing the notes differently depending on where we are in the scale, which scale we are using, and which direction we are going (the musical line and its harmonic context).

We stretch our intervals and we actually sing frequencies that are a bit higher or lower than what the piano plays! Am I saying that the piano isn't playing the notes in tune? Yes! That's what I'm saying. The piano serves as a compromise. It's a kind of in tune reference. When we sing we either fudge a bit with our voices, to cover up the "wrong" notes of the piano, or we actually "bend" our hearing so that we "hear" the right notes. So, basically, our ears and voices bend to be "in" tune, not "out" of tune. One of the best strategies to learn intonation is to relax and wait
for the tuning to "feel" right. You step out of hearing and into "feeling." Ahh, and then the overtones fly...wow is it beautiful...reference a few artists.

Can you believe that? But it makes sense, we "lean" in the direction we're going, kind of like walking, Mention the interval people. Here's some very cool research on intervals and tuning...we're sticking to one melodic line here, but if you're interested, I suggest you follow up on your interest and explore.

When you sing two notes either simultaneously or one after another, you create an interval. While singing scales, we mostly dealt with whole steps ( 2 semi tones) and half steps ( 1 semi tone). Well, you can also jump around and sing or write any interval you want to. The most basic form of the interval is the number of half steps between the two notes. In tonal music, that number is traditionally simplified using the scale degrees of a particular scale.

So, in the scale C D E F G A B C, or 024579110 . When using our numbered system, it's important to remember that, for example, "oh" is the $1^{\text {st }}$ number in the scale, "two" is the second, "foh (4) is the third number, and "lev" is the $7^{\text {th }}$ number.

Since our musical vocabulary has evolved along with the music we write, we've referred to notes as belonging to a scale and having a scale degree.

Here's a chart of intervals up and down according to their number of half steps. Study the chart. Find out more about intervals. Be able to sing them using note names and the appropriate note numbers. Start singing groups of intervals, that way they'll make more sense. Figure out which intervals do what in a key, from which scale degree, in which direction, etc. Investigate, have fun, and fill in the gaps of your knowledge.

| Down |  | Up |  |
| :--- | :--- | :--- | :--- |
| Interval Name | \# of half-steps | \# of half-steps | Interval Name |
| equivalent | 0 | 0 | equivalent |
| m2 | 1 | 11 | M7 |
| M2 | 2 | 10 | m7 |
| m3 A2 | 3 | 9 | M6, d7 |
| M3 | 4 | 8 | m6, A5 |
| P4 | 5 | 7 | P5 |
| A4 or tritone | 6 | 6 | A4 or tritone |
| P5 | 7 | 5 | P4 |
| m6, A5 | 8 | 4 | M3 |
| M6, d7 | 9 | 3 | m3 A2 |
| m7 | 10 | 2 | M2 |
| M7 | 11 | 1 | m2 |
| Octave | 12 | 12 | Octave |

Additional help here:
http://www.dolmetsch.com/musictheory12.htm
http://en.wikipedia.org/wiki/Musical_intervals

### 2.7 Solfeggio Systems

Say I recommend the following practice method.

1) Sing on numbers
2) Sing on note names
3) Sing on solfeg syllables fixed do
4) Sing on movable do syllables

Why the numbers really help:

| $\mathrm{C} \# \#$ | $\mathrm{D} \# \#$ | $\mathrm{E} \# \#$ | $\mathrm{~F} \# \#$ | $\mathrm{G} \# \#$ | $\mathrm{~A} \# \#$ | $\mathrm{~B} \# \#$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathrm{C} \#$ | $\mathrm{D} \#$ | $\mathrm{E} \#$ | $\mathrm{~F} \#$ | $\mathrm{G} \#$ | $\mathrm{~A} \#$ | $\mathrm{~B} \#$ |
| C | D | E | F | G | A | B |
| Cb | Db | Eb | Fb | Gb | Ab | Bb |
| Cbb | Dbb | Ebb | Fbb | Gbb | Abb | Bbb |

35 names for 12 notes, in my opinion, are difficult to remember.

German note names

| C\#\# tsisis | D\#\# disis | E\#\# e-isis | F\#\# fisis | G\#\# gisis | A\#\# a-isis | H\#\# hisis |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| C\# tsis | D\# dis | E\# e-is | F\# fis | G\# gis | A\# a-is | H\# his |
| C tseh | D deh | E eh | F ef | G geh | A ah | H ha |
| Cb tses | Db des | Eb es | Fb fes | Gb ges | Ab as | Bb beh |
| Cbb tseses | Dbb deses | Ebb eses | Fbb feses | Gbb geses | Abb asas | Bbb bes |

My version of the German note names

| C\#\# tsisis | D\#\# disis | E\#\# e-isis | F\#\# fisis | G\#\# gisis | A\#\# a-isis | H\#\# hisis |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| C\# tsis | D\# dis | E\# mis | F\# fis | G\# gis | A\# lis | H\# his |
| C tseh | D deh | E eh | F ef | G geh | A ah | H ha |
| Cb tses | Db des | Eb es | Fb fes | Gb ges | Ab as | Bb beh |
| Cbb tseses | Dbb deses | Ebb eses | Fbb feses | Gbb geses | Abb asas | Bbb bes |

I may have gotten through the "normal" notes, but I didn't come up with one syllable note names for all of the notes in German. I find it very important to use one syllable for the notes.

| C\#\# see <br> double <br> sharp | D\#\# dee <br> double <br> sharp | E\#\# e <br> double <br> sharp | F\#\# ef <br> double <br> sharp | G\#\# gee <br> double <br> sharp | A\#\# ay <br> double <br> sharp | B\#\# bee <br> double <br> sharp |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| C\# see <br> sharp | D\# dee <br> sharp | E\# e sharp | F\# ef sharp | G\# gee <br> sharp | A\# ay <br> sharp | B\# Bee <br> sharp |
| C see | D dee | E ee | F ef | G gee | A ay | B bee |
| Cb see flat | Db dee flat | Eb ee flat | Fb ef flat | Gb gee flat | Ab ay flat | Bb bee flat |
| Cbb see <br> double flat | Dbb dee <br> double flat | Ebb ee <br> double flat | Fbb ef <br> double flat | Gbb Gee <br> double flat | Abb ay <br> double flat | Bbb B <br> double flat |

### 2.8 Fixed do (French system)

| Do | Re | Mi | Fa | Sol | La | Si |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

The syllable remains the same, regardless of whether the note is flat or sharp. In my opinion, this leads to fudging regarding the intervals, especially when there are less common notes like double sharps or even just a sharp note to a flat note involved. Leads to a lot of visualization while singing.

### 2.9 Fixed do (no double flats/sharps)

| Di | Ri | Mis | Fi | Si | Li | Tis |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Do | Re | Mi | Fa | Sol | La | Ti |
| De | Ra | Me | Fey | Sey | Ley | Tey |

### 2.10 Variations

From: http://en.wikipedia.org/wiki/Solfege

### 2.11 Common scales

From: http://en.wikipedia.org/wiki/Solfege

### 2.12 Movable Do:

Advantages: Really easy to learn
Disadvantages: Constricting and unusable for more advanced musicianship. Doesn't apply to a lot of modern music.

Look here:
http://www.robertkelleyphd.com/solfege.htm
http://en.wikipedia.org/wiki/Guidonian_hand
http://en.wikipedia.org/wiki/Guido of_Arezzo
http://www.robertkelleyphd.com/clausula.htm
http://www.robertkelleyphd.com/chordtypes.htm
http://en.wikipedia.org/wiki/Solfege
http://en.wikipedia.org/wiki/Pitch_class
http://en.wikipedia.org/wiki/Pitch \%28music\%29
https://www.menc.org/networks/chorus/openforum/messages/2517.html
http://en.wikipedia.org/wiki/Properties_of_musical_modes
http://en.wikipedia.org/wiki/Musical_notation
http://www.robertkelleyphd.com/tonalfunction.htm

### 2.13 Mixed

Say the note names in your language and then say $1,3,6,8,10$ for the rest of the notes.
Be able to do this, but I wouldn't stress it.
http://www.denisbach.com/musictheoryprimer.htm
More background:
http://logic-users.org/forums/LUG/thread/5346
http://www.dolmetsch.com/defss3.htm
http://www.medieval.org/emfaq/harmony/hex4.html

### 2.14 Options by Dainis W. Michel

Here's an interesting option you might try, but I really recommend the numbers.
di ri mis fi si li ti di
do ro mo fo so lo to do de re me fe se le te de

### 2.15 Recommended Option by Dainis W. Michel

I recommend you just sing numbers. The strength of the number system is that you can always figure out what interval you are singing. Also, you only have 12 syllables to sing, as opposed to up to 35 ! Even though the French system uses only 7 syllables, in more advanced situations, the sight singer needs to use major brain power to figure out what interval he/she is singing. Also, singing two syllables, one after the other does not always yield the same interval.
There are a few challenges in using numbers as singing syllables. Here are some of them along with proposed solutions.

When you start working with scale degrees, it can seem confusing at first that, for example, the seventh scale degree in $G(7$, or sev), is $F(5$, or fah). Some teachers use a counting system of 1-7 to replace do-re-mi-fa-sol-la-ti-do, which can cause some mental work when moving to the numbered 12 -tone system. Here's a cool way to get through the mental work:

Recognize that our standard scales are a selection of 5-9 of 12 possible notes. They are arranged in half and whole steps, and use minor thirds as well. When you pick your first note in a scale, that's the first note you pick! The next note is the second note. Sounds silly, but the difference between cardinal (one, two, three, four, five, six, ...) and ordinal (first, second, third, fourth, fifth, sixth, seventh, etc.) numbers is a real key to being able to mentally use the 12 -tone, note-number system for singing scales and knowing what scale degree you are on.

If you have 12 blocks in front of you, and the first one you pick is the one with the number 9 on it, big deal, that's the first one, and it has the number 9 on it. If you are going to sing a natural minor scale starting on 9 , then you start on the $6^{\text {th }}$ number of the magic phone number of music (221-2221) and move through its little circle, meaning that you'll use the pattern 212-2122.

| Natural Minor Scale starting on 9 (na), a.k.a. "A." |  |  |
| :--- | :--- | :--- |
| This is the order in which <br> you picked the numbers. The <br> order corresponds with the <br> designation "scale degree." | What you would sing in <br> movable do with alterable <br> syllables | Note numbers and their <br> syllables |
| First | Do | 9 (na) |
| Second | Re | 11 (lev) |
| Third | Me | $0(\mathrm{oh})$ |
| Fourth | Fa | $2($ two $)$ |
| Fifth | Sol | $4($ foh $)$ |
| Sixth | Le | $5($ fah $)$ |
| Seventh | Te | $7(\mathrm{sev})$ |

Another way out of any potential fog is to just consider the syllables (oh, un, two, thee, foh, etc.), as if they were just syllables and not numbers. Whenever you need the numbers, think about them as numbers, if you don't need the numbers, forget that you are singing syllables that represent numbers.

Things again, seem confusing (but aren't), when one comes across designations such as a 6/4 chord, figured bass numbers, and jazz chord numbers. Again, realizing that we've selected 7 out
of possible 12 tones to create a scale, and that we think of those scale degrees as ordinal numbers (not cardinal numbers), we completely sidestep the "problems" of singing 0 (oh) as the seventh of Db Major ("1" Major). Db Major is 1 (un), 3 (thee), 5 (fah), 6 (sih), 8 (ay), 10 (ten), 0 (oh), 1 (un). The $3^{\text {d }}$ number is 5 , the $5^{\text {th }}$ number is $8 \ldots$ and that's great!

## 3 Musical Games

### 3.1 Follow me!

Sing one note, your partner sings your note and another note, you sing the two notes already sung and add a note, and it keeps going until someone messes up.

### 3.2 Oh-two-foh

Start with the three pitches $0,2,4$ (C, D, E). Play with a partner.
a) Partner A randomly plays the pitches at a steady tempo while singing the numbers of the pitches (of course, singing correctly). Partner B needs to repeat the numbers of the pitches, singing correctly, in response to the played pitch.
A: Sings and plays "oh"
B: Repeats "oh"
A: Sings and plays "foh"
B: Repeats "foh"
A: Sings and plays "two"
B: Repeats "two"
A: Sings and plays "foh"
B: Says "oh"

Whoops, game over..start again. Partners can switch who plays
b) Eventually, Partner A stops singing the note numbers, and Partner B just has to sing the right note number in response.
c) Keep adding notes!
d) Close your eyes!

### 3.3 Adding beats

Partner A taps a beat. Partner B adds one beat. Partner A repeats the whole thing and adds a beat... and the game continues!

## 4 Appendix

The following pages have complete charts and exercises for you. Be sure to make sense out of the diagrams, copy them by hand, work through them, and sing a lot using your magic hands-omusic!

