A Quick Basic Music Course

by Takashi Yogi

Version 2.1
2021

Version 1.0 1994

If you have always wanted to understand music better but have never had the time, this may be your chance. In this brief pamphlet, we provide a concise course which you can do at home in your own time. The course consists of a series of lessons, exercises, and self-tests and covers such material as:

1. Scales -- How to keep from tripping on the half-steps
2. Keys -- How to handle sharps and flats without having to memorize key signatures
3. Intervals -- Why all thirds are not created equal
4. Rhythm -- How to count for yourself

Takashi Yogi November, 1994 Santa Cruz, California

Produced with support from Mary Badarak

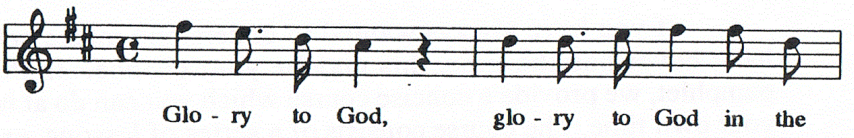
V 2.1 revised 2021

Lesson 1

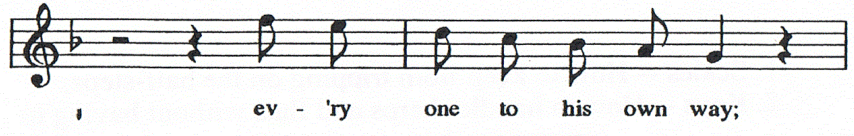
Scales: How to avoid tripping on the half-steps

You probably have been singing for a few years and have a good instinct for pitch changes without having to really worry about keys and intervals. But if given an unfamiliar piece of music with no accompaniment, you may only be able to guess what the notes sound like. Look at the following two examples:

Ex. 1 *The Messiah,* No. 17 by G. F. Handel

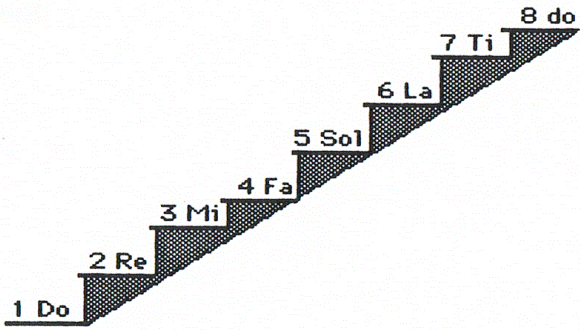


Ex. 2 *The Messiah,* No. 26 by G. F. Handel



The first four pitches for the two examples look identical, but they are not. Why? The answer lies in the foundation of Western music, the major scale, which is built like a set of stairs:

Fig. 1 Major Scale



Look at these steps carefully. If you had to use these stairs, you would probably trip on the uneven steps. The musical stairs are much worse because the uneven steps look even and change for different pieces or even

within a piece. Example 1 has a half-step between the third and fourth notes, while Example 2 has a half-step between the first two notes. Both half-steps are not obvious if you just look at the notes.

At this point, you might be asking if it makes any difference. After all, the difference between a half-step and a whole-step is very small. The small difference has a huge effect. If you were to sing Example I using the same scale as Example 2, it would sound very strange indeed.

Your next question might be why the steps are not made equal. Life would be much easier if things were consistent. But unfortunately, humans seem to need a sense of where home is, and the very unevenness of the scale points to certain notes as being home base. If every note is equally important (as in some modem music), the result is a bit unsettling, like being homeless.

So with some resignation, let's take a closer look at the scaly beast in Fig. 1. The steps are numbered and named. We will be using the names rather than the numbers because they are easier to sing and can be modified when the pitches are changed by half-steps. The steps shown are actually part of a long stairway, with the names repeating in cycles of eight. The distance or interval between successive steps with the same name is called an octave, from octo (eight). You might think of the octave as the distance between floors in a tall building. The pattern of whole-steps and half-steps of Fig. 1 would be repeated between floors, and the ceiling (Do) of one story would become the floor of the next story above. Note that the half-steps are between steps 3-4 (Mi-Fa) and 7-8 (Ti-Do); whenever the pattern is half-steps between 3-4 and 7-8, it is a *major* scale.

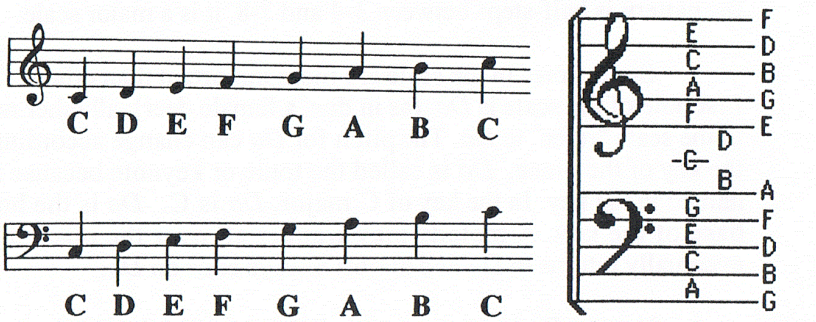
Some notes in the major scale are more important than others. The first note of the scale is Do (as in doe, a female deer); all other notes in the scale "refer" to Do. The pitch for Do can change according to the key of the piece, but the pattern of the major scale remains the same. Do is called the tonic or keynote because it is named in the key. In the key of C major, Do is C. Do is the home base of the key. A melody may wander all over the place but it eventually returns to Do and almost always ends on Do.

Next to Do in importance is Sol. It is called the dominant because it appears so often. Many songs start with Sol. Singers very often sing Sol followed by Do at the end of a line. Do and Sol are the biggies in the scale; Do is the boss and Sol is the VP. They work together to make sure that you know what the key is.

The other notes in the scale are subservient to Do and Sol, but they have important work to do. The half-step between Mi and Fa distinguishes this major scale from a minor scale, which we will cover in a later lesson. The half-step between Ti and Do serves to push a melody toward Do because Ti is unstable. For this pass-the-buck function, Ti is called a leading tone.

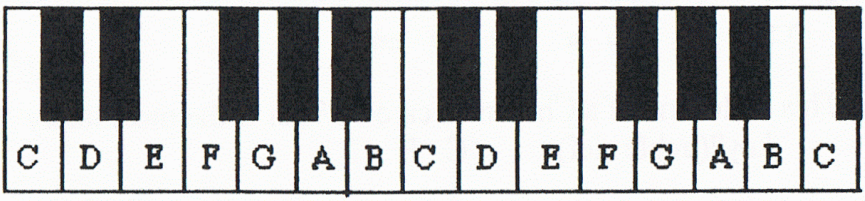
Let's see what we need to play the C major scale on a piano. In Fig. 2, the notes are placed on a set of five lines called a staff. Two of these (pl. staves) are usually used together to cover the range from soprano to bass. The two staves are marked with clef symbols: The top one is the G clef or treble clef, the bottom is the F clef or bass clef. The G refers to the note circled by the G clef symbol, and the F refers to the note between the two dots of the F clef. Note that the letters for the spaces in the G clef spell FACE from bottom to top. The spaces in the F clef read ACEG, which some remember as "All Cows Eat Grass". Notes can be placed above or below a staff, and short ledger lines are drawn if necessary to extend the range. Remembering that the letter after G is A, we can now name any note.

Fig. 2 C Major Scale



The C just below the treble staff and the C just above the bass staff are actually the same note. The two staves are separated to make the notes easier to read and to provide space for words. This particular C is called middle C because it corresponds to the C closest to the middle of the piano keyboard. Which brings us to the piano keyboard:

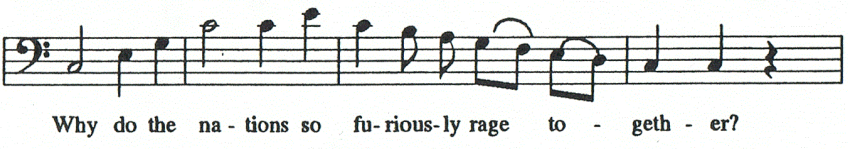
Fig. 3 Piano Keyboard



The key of C major is every beginner's favorite because it uses only the white keys of the piano. Because of the arrangement of the keys on the piano, we don't have to worry about the pattern of whole-steps and half-steps in the C major scale; it's automatic. Try playing the scale while singing the notes in Fig. 1. The half-steps between Mi-Fa (E-F) and Ti-Do (B-C) are assured because there are no black keys between these keys.

Now let's look at some music to see how this works in practice.

Ex. 3 *The Messiah*, No. 40 by G. F. Handel

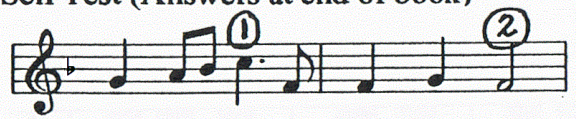


This is in C Major and is written in the bass clef. The first note is C, followed by E, G, and C. So the sequence is Do-Mi-Sol-Do, which uses the keynote Do and dominant Sol to establish the key. Mi is included to tell you that this is a major key, not minor. The second line runs down the entire C Major scale. Try playing this example on the piano.

This short course won't teach you how to play the piano, but you should be able pick out any notes slowly with one finger by the end of the course.

By the next lesson you should be bored with being a C major virtuoso and ready to move on to other keys. We will learn how to deal with all those other keys without memorizing them.

Self Test (Answers at end of book)



"Christ is born in Beth - le - hem."

1. This is the end of a Christmas carol. What is the most likely key?(treble clef) C F G

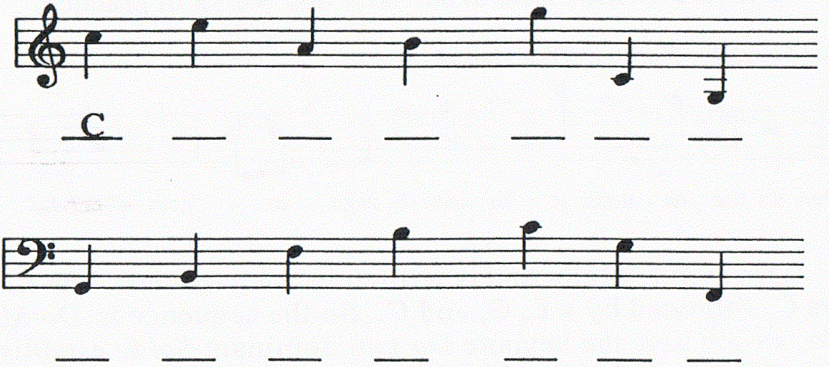
2. In the carol, what is the name of the note marked 1?

Do Mi Sol Ti

3. What is the name of the note marked 2?

Do Mi Sol Ti

4. Name the notes below. The first one is done for you as an example.



5. What note is *Sol* in C major?

A B C D E F G

6. What note is the leading tone in C major?

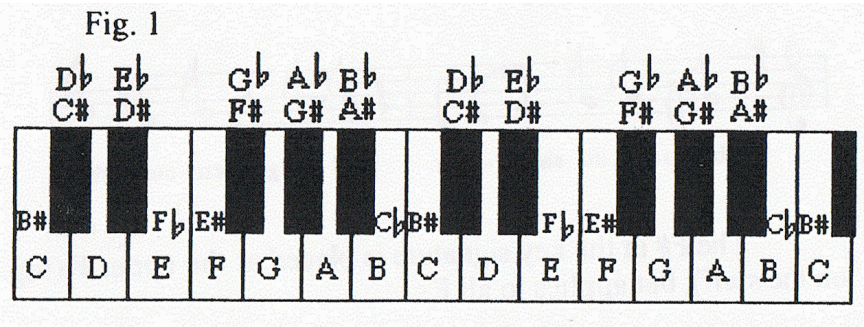
A B C D E F G

Lesson 2

Keys: "Though this be madness, yet there is method in it"

Music would be a lot simpler if we passed a law that forbids all keys other than C major. Pianos would be simpler and singing would be easy. Easy, but dull. As dull as having only plain vanilla ice cream -- no chocolate nor cherry with toasted almonds. When we add the black keys on the piano as shown in Fig. 1, we expand our choices tremendously: Brahms, Bartok, Lou Harrison, jazz, blues, raga -- 1001 flavors of music. If we can't sing the high notes of a song, we can have it transposed to a lower key. Composers are not limited to the notes of one key for a piece, but can move freely to other keys or choose from a large palette of tone colors outside of a given key.

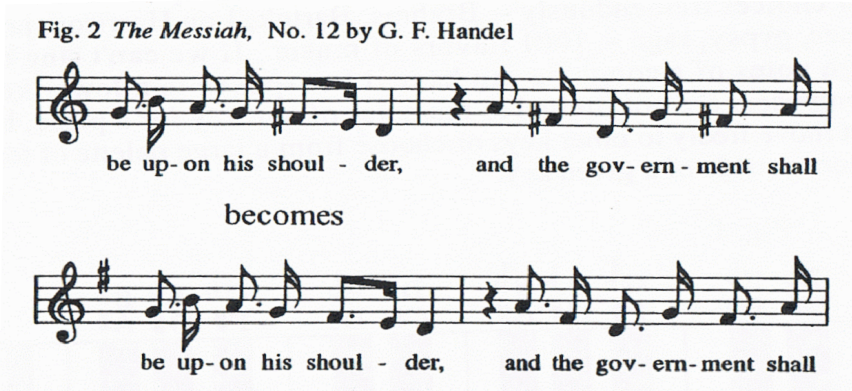
Fig. 1



The price we all have to pay for this glorious freedom is to learn how to keep track of all those sharps (#) and flats (♭). But this task is easier than it appears because it has some simple logic in it. Let's start by creating a key from scratch, say G major. Remember from Lesson 1 that the half-steps of the major scale occur between Mi-Fa and Ti-Do. For our new key, Do will be G, so play Do on the piano and sing it. To get Re, we move up a whole-step, going past the black key to A. We repeat this for Mi (B). Remembering that the next note is a half-step, we are delighted that B and C (Fa) are a half-step apart. Then we resume whole-steps for Sol (D) and La (E). When we get to Ti, we have a problem. Ti should be a whole-step up from La, but the F key is only a half-step up. So we have to use the next key up, which happens to be black. No problem; we happily accept the new note F sharp (F#) into our repertoire. From Ti it's a easy half-step back home to G.

You might be so pleased with your new key that you would like to write a song in G. You have to remember that Ti is now F# and mark every F with a # to remind people who sing your song. This soon gets tedious, so you get the brilliant idea of putting the # only at the start of each line. You have invented the key signature for G major:

Fig. 2 *The Messiah,* No. 12 by G. F. Handel

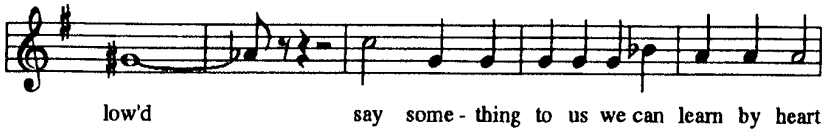


The F# in the key signature is placed at the upper F (top line on the staff), but applies to all F's.

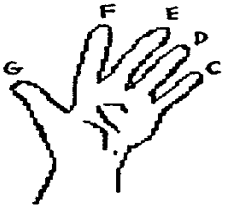
Try creating another key starting on D. You will find that your new key uses F# again and adds another new note. What is it?

You can use this method to create any key. One word of warning, however. If you want a key starting on a black key, call that key by its flat name rather than its sharp name. For example, use B flat rather than A sharp. These two names both refer to the same note, and have the fancy name of enharmonic equivalents. "Enharmonic" is the musical term for homonym: looks different but sounds the same. The reason for this humbug is that the chord names (groups of notes) get weird if we choose the wrong name. Sometimes the name-swapping produces strange effects, as in Fig. 3 where the name changes, but the pitch remains the same (G# =A♭).

Fig. 3 Choose Something Like a Star by R. Thompson



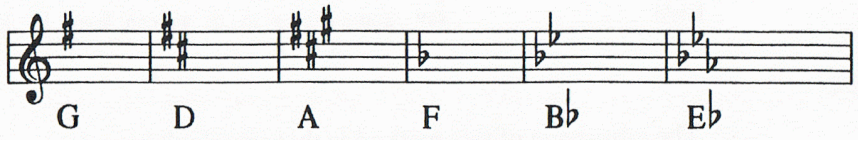
The advantage of this method of creating a key is that you don't have to memorize the key signatures. If you are sitting at the piano, you can re-create any key in a few seconds. If you aren't near a piano and someone asks what key has two sharps, there is an alternate method: Hold up the fingers and thumb of a hand. Start with C as the little finger and name the notes in succession: CDEFG. The thumb is G, the key with one sharp. Remember that the added sharp (Ti) is the leading tone to the keynote, so the sharp is F#, a half-step below G. Now start over using the G: GABCD. D is the key with two sharps, the previous F# and the new leading tone, C#.



If you need a flat key, go backwards from C: CBAGF gives you F as the key with one flat. Repeating this gives FEDCB. But this key with two flats is really B♭ not B. What happened? The problem is that the interval between B and F is weird, so much so that in medieval times it was called the Devil in Music, and religiously shunned. We will look at this heretic in detail in a later lesson on intervals, but for now avoid evil by using B♭ instead of B, and note that all the succeeding flat keys have a flat in the name, e.g., E♭. Another place where we meet the Devil and escape is when we go from five sharps (key of B) to six sharps (key of F#, not F).

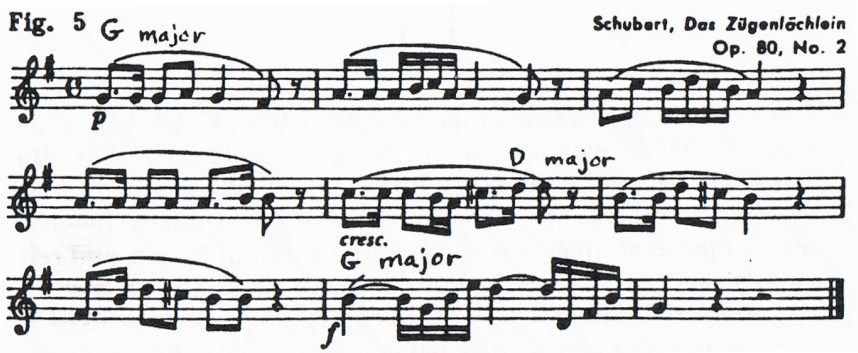
There are some shortcuts if you need to find the key of a piece of music quickly. For a key with sharps in the signature, the last sharp on the right is the leading tone to the keynote. For the key of D, the last sharp in the signature is C#, the leading tone to D. For a flat key, the key is the next-to-last flat. If there are two flats, B♭ and E♭, then the key is the next-to-last one, B♭.

Fig. 4 Some examples of key signatures



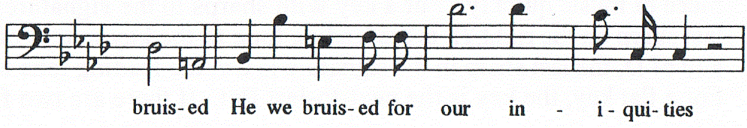
So learning all the key signatures is not so bad. The really bad news is that knowing the key represented by the signature doesn't always tell you the key of the piece. The key may be the relative minor key. For example, one sharp may indicate E minor rather than G major. We will cover minor scales is the next lesson.

Another problem is that composers like to change the key within a piece. A common change is to add or subtract a sharp or flat. For example a piece may start in G (one sharp), change to D (two sharps) and return to G for the ending. If the D section is not very long, the composer may choose to keep the G signature and mark all the individual sharps (C#), as in Fig. 5 below. The sharps placed in front of these C's are called accidentals because they indicate changes to the usual key signature.



Another use of accidentals is to add spice to a piece as shown in Fig. 6. The accidentals bring out the emotion in the word "bruised" because the altered notes don't belong in the key.

Fig. 6 *The Messiah,* No. 24 by G. F. Handel

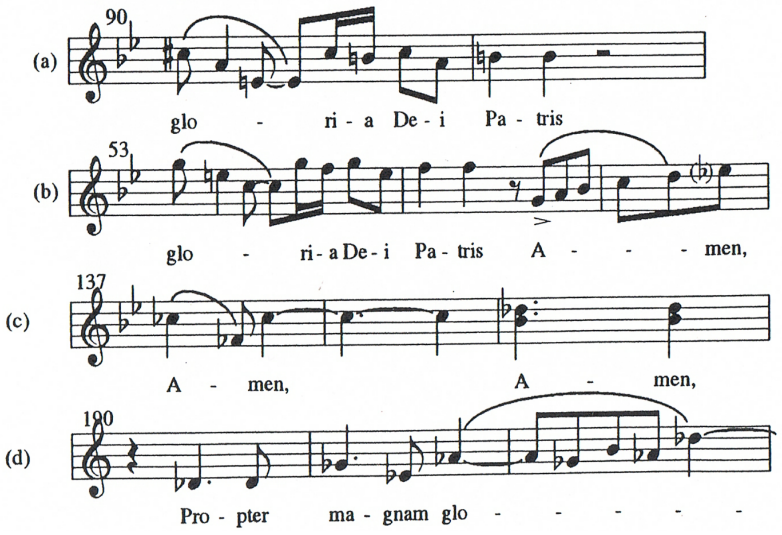


The common accidentals are sharp, flat, and natural (♯ ♭ ♮).

The natural cancels either a previous accidental or a sharp or flat in the signature. In the example above, the naturals cancel the A♭ and E♭ in the key signature. Note that when a flat note becomes natural, the pitch goes up by a half-step.

Accidentals apply to all succeeding notes within the measure (area between vertical bar lines) that have the same position, but not to octaves. Accidentals are canceled at the end of a measure, except when a note is tied across the vertical bar line. In that case, the accidental applies to the tied note, but not to any following notes in the new measure. Look at the examples of accidentals in Fig. 7. In (7a), The C# applies to the following two C's. The E♭ and B♭ are canceled, so you would sing E and B instead. In the next measure, the B♭ would be restored, but is re-canceled by the natural. In (7b), both E flats in measure 53 are canceled by the natural. Measure 55 has a flat in parentheses to remind you that Eb's are in effect again in the new measure. This is not essential, but is done as a courtesy. In (7c), the C changes to C♭ with the accidental, and this applies not only to the second C in the measure, but to the C's in the next measure, because they are tied to a C♭. Incidentally, C♭ is equivalent to B, which points out that not all accidentals are black keys. In (7d), the A♭ in measure 191 is tied across the bar line, but the second A in measure 192 must be explicitly marked as an A♭.

Fig. 7 Examples of Accidentals from Rutter, *Gloria*

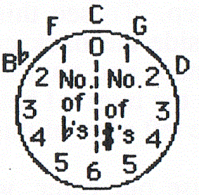


So with all the possible variations, how does one determine the key of a piece? One clue is to look at the bass note at the end; it is almost always the keynote. The soprano line quite often ends on the keynote. Within a piece, watch for accidentals that are a half-step below the following note. These may be leading tones to a new key. Finding the key can be quite difficult, especially for modem pieces, so just do the best you can using what you have learned and your instincts. Even if you can't determine the key, you will be able to tell where the half-steps are.

The next lesson will cover intervals: how far to jump between notes. We've gotten through the tough preparation; the rest gets easier. Hang in there.

Self Test

1. Below is a chart of the major keys called the circle of fifths. Complete the chart by the finger method described in the lesson. Note that the keys for 6 sharps and 6 flats are equivalent (enharmonic).

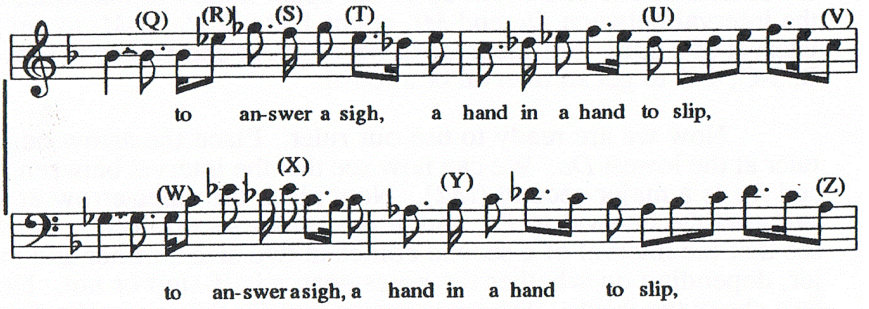


2. Name the first four sharps in the signature sequence starting with F#.

3. What is the last sharp in the key signature for B major?

4. Name the marked notes in the piece below.

The Coolin' **by Samuel Barber**



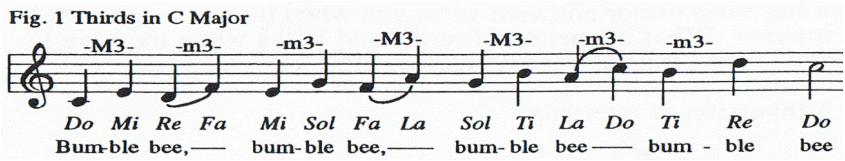
Lesson 3

Intervals: When told to jump, always ask, "How high?"

You will recall the musical stairway in Lesson 1, with its uneven half-steps between Mi-Fa and Ti-Do. Those darn half-steps can cause us to stumble whether we take the steps one at a time or skip steps. The distance we have to jump depends on whether there is an intervening half-step. To see this more clearly, cut out the musical ruler printed inside the back cover of this booklet. This ruler is marked in half-steps and names of the intervals. You can use this ruler to measure the interval between any two notes on the major scale printed on the left edge of the page.

Before we can use our ruler, we need to understand the markings. The names of the intervals come from the relationship between names on the scale or letter names of the notes. The interval between two adjacent notes of the scale or two adjacent letters is called a second. Therefore Do-Re, Mi-Fa, So-La, A-B, D-E, G-A, and B-C are all seconds. A# - B, D♭ - E, B♭ - C# are also seconds since the name is the same regardless of the number of half-steps between the notes. Similarly, if two notes of the scale or letters are separated by an intervening note or letter, the interval is called a third. To determine the name of the interval, start counting with the lower note as one and count up to the upper note. For example, for the interval between Do and Mi, count 1-Do, 2-Re, 3-Mi to get an interval of a third. For the interval between A# and D, count 1-A, 2-B, 3-C, 4-D to get an interval of a fourth. Now we are ready to use our ruler. Place the arrow on the ruler at the lowest Do. We can now see that the interval between Do and Re is a major second (M2). Now place the ruler arrow at Mi and read the interval to Fa, which is a minor second (m2). So we see that the interval of a second comes in two sizes, minor and major, depending on whether the notes span a half-step or not. Now let's check the thirds. The ruler shows that Do-Mi is a major third, and you can see why -- it doesn't span any half-steps. However the next third Re-Fa does span a half-step, so it is a minor third. Try measuring all the thirds in the scale; you should find that four of them are minor and three are major. Now you can see why singing can be difficult if you aren't aware of the underlying intervals. Thirds on the staff are represented by notes on adjacent lines or adjacent spaces.

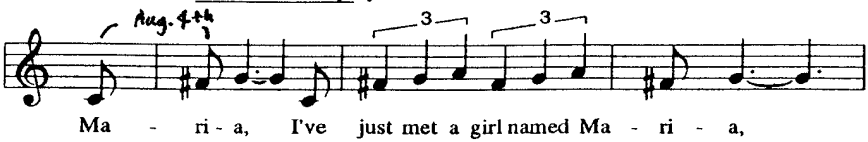
Fig. 1 shows all the thirds in the scale of C major. They all appear alike, but if you were to guess whether the interval was minor or major, you would be wrong about half the time. Try playing and singing the thirds and note whether they are major or minor.



Now let's try measuring all the fifths of the scale. The first is Do-Sol and is seven half-steps. The next is Re-La and is also seven half-steps. The fifths are all the same interval until we get to Ti-Fa. Here we meet the Devil mentioned in Lesson 2. All the fifths except Ti-Fa are seven half-steps and are called perfect fifths (P5) because they are all one size rather than major/minor like the thirds. The ruler shows that Ti-Fa is smaller than a perfect fifth by a half-step. So we call this a diminished fifth (dim5). Another name for the Devil's interval is the tritone, because it comprises three whole-steps. It divides the octave evenly; the distance from Ti up to Fa is the same as the distance from Fa up to the next Ti. Try playing this trio of notes (Ti-Fa-Ti or B-F-B in C major) on the piano and notice the peculiar sound, reminiscent of diesel train horns.

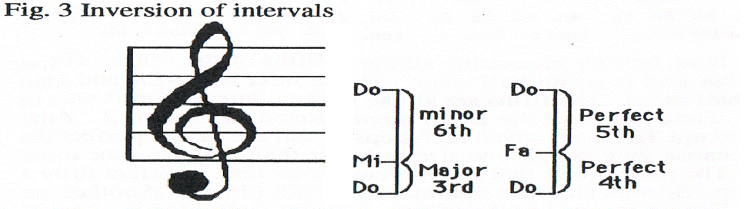
You might have noticed that the interval between Fa and Ti is not a fifth, but a fourth. So the tritone (six half-steps) can be a diminished fifth, or in this case, an augmented fourth (Aug4). Try measuring all the other fourths to verify that they are all the same size (five half-steps) and therefore perfect. Try playing all the fourths on the piano and note that all the fourths span a half-step except for Fa-Ti, which spans only whole-steps. Similarly, if you play all the fifths, you will see that they all span a half-step except for Ti-Fa which spans two half-steps, Ti-Do and Mi-Fa. So there is really no basis for the tritone superstition; it's just an anomaly of the major scale. This interval is now quite acceptable, as in Fig. 2.

Fig. 2 *Maria* from West Side Story by Leonard Bernstein



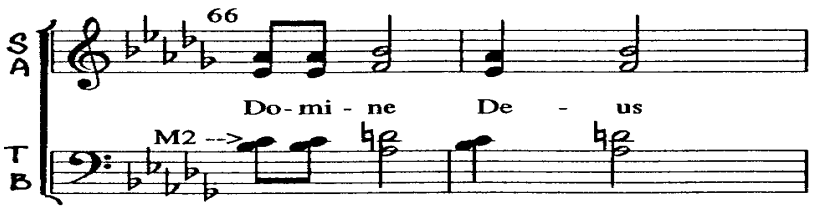
Now let's move on to sixths. Measure from Do to La and you will find it to be a major sixth. Measure from Mi up to Do and you get a minor sixth. Remember that we found Do up to Mi to be a major third. This points out a interesting fact about intervals. Fig. 3 shows that a major third becomes a minor sixth when we jump to the upper Do rather than the lower. This happens for all major and minor intervals; major becomes minor and vice versa you when invert the interval in this manner. What happens to fourths and fifths when they are inverted? Perfect fourths become perfect fifths and vice versa.

Fig. 3 Inversion of intervals



Try playing all the intervals on the keyboard, sounding both notes together. You will note that some intervals sound more pleasant than others. The fifth is easy to take, but the major second is disturbing. But music is an acquired taste; mixing sweet and sour makes life more interesting. Major seconds can be beautiful, as in Fig. 4, where the tenor sings C and the bass sings B♭.

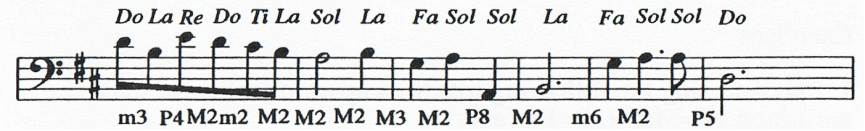
Fig. 4 ***Gloria***



Now we can apply all that we have learned to some music. In Fig. 5, we note that this is bass clef, and the two sharps in the key signature tell us that this may be in the key of D Major. This is the end of a bass solo, and the ending note D confirms our suspicion. The first interval is D down to B, or Do-La. We can use our ruler to tell that this is a minor third. The next interval is La up to Re, a perfect fourth. The next interval Re-Do is a major second.

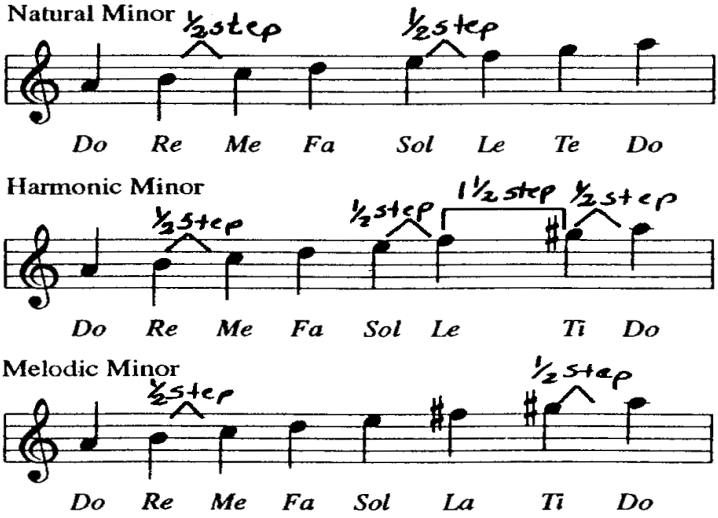
Then from Do we go to Ti, the leading tone. This is a half-step or a minor second. The minor sixth jump toward the end is unusual and difficult, and nearly impossible if you aren't aware of this interval. Continuing in this manner, we can analyze all the intervals. Sure, it's a lot of work at first, but it gets easier with practice. And once you have seen one major third (M3), you've seen (and sung) them all.

Fig. 5 ***The Messiah*** **by G. F. Handel**



If the music has accidentals, we can still determine the intervals. If the second note in Fig. 5 was a B♭, we would know that the interval from D was a half-step larger than for B natural, so it would be a major third. We need to look at minor scales now to expand our musical abilities. Fig. 6 shows the steps of several minor scales.

Fig. 6 Minor Scales



The natural minor scale has half-steps between Re-Me (pronounced meh) and Sol-Le. But this is not entirely new. Look at the step pattern in the major scale on page 1 and you will see that the minor scale pattern occurs between the two La's.

In other words, if we start singing the major scale starting at La, we are singing a minor scale. Since the interval between Do and La is a minor third, the relative minor key of a major key is a minor third below the major key. For example, the relative minor key of C major is A minor. The natural minor scale lacks a leading tone, which is supplied by the harmonic minor scale. The harmonic minor has its own problem, which is the awkward interval between Le and Ti (augmented second). So the melodic minor uses two patterns to solve the problem, melodic minor going up and natural miror going down.

Exercises

1. Play and sing the following intervals upward (abbreviations m=minor, M=Major, P=Perfect):

Do-Re, M2	Do-Mi, M3	Do-Fa, P4	Do-Sol, P5
Do-La, M6	Do-Ti, M7	Do-Do, P8	

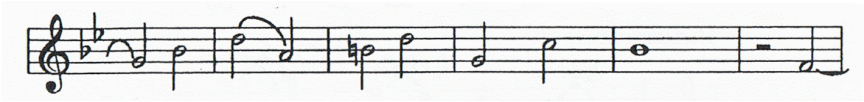
2. Play and sing the following intervals downward:

Do-Ti, m2	Do-La, m3	Do-Sol, P4	Do-Fa, P5
Do-Mi, m6	Do-Re, m7	Do-Do, P8	

3. Play and sing the A natural minor scale, which is the white keys from A to A. Notice that it has a more somber tone than a major scale.

Self Test

1. Write in all the intervals between successive notes in the following:



2. What is the major key and relative minor key for a signature with one sharp?

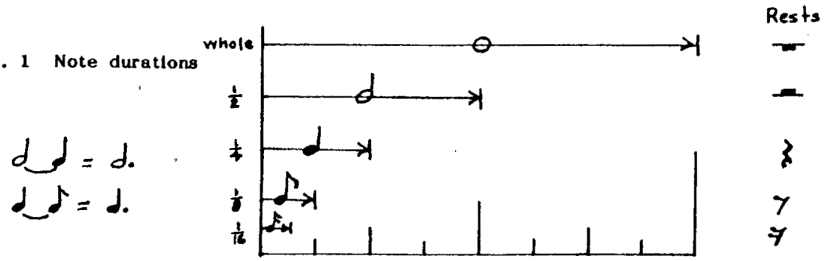
3. The song, "My Bonnie" starts withs the note Sol and then goes up to Mi. What is this interval?

4. If Do down to Ti is a minor second, what interval is Do up to Ti? (This interval is sometimes called the Santa Cruz octave.)

Lesson 4
Rhythm: "Time is what keeps everything from happening at once"

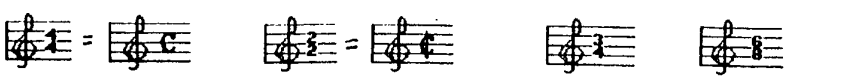
With this lesson we will shift our focus from pitch to deal with the other half of music: rhythm. To get rhythm, we take a unit of time and subdivide it. Fig. 1 shows how we divide a whole note by splitting it into halves repeatedly to get shorter notes. This is similar to fractions of an inch on a ruler. Sometimes we need a duration that is not available by simple division. If we want a note that is three-quarters of a whole note, we can use a device called a tie to join a half note to a quarter note to form a three-quarter note. An easier way is to place a dot after a half note to signify that the half note is to be lengthened by half of its value. Similarly, a dotted quarter note is equal to a quarter note plus an eighth note. Notice the symbols for the note durations and the corresponding rests (silences). The divisions can be extended by adding flags to the symbol. For example, a 32nd note has 3 flags.

Fig. 1 Note durations



When several voices are singing together, we need an easy way to keep them together. So we group the notes into measures with a fixed number of beats in each measure to form a meter. One common meter is four beats per measure with each beat equal to a quarter note. This information is conveyed by the time signature at the start of a piece. Fig. 2 shows some common time signatures.

Fig. 2 Time signatures



4 beats per measure, quarter note per beat

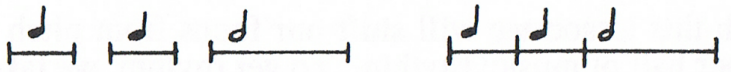
2 beats per measure, half note per beat

3 beats per ms. quarter note/beat

6 beats per ms. eighth note/beat

To distinguish one beat from another we generally emphasize the first beat of a measure, and the conductor's pattern for beat one has a special flourish. One common misconception is that notes are a series of separate events with gaps between them, as shown in Fig. 3a. But notes are really a continuous string of events between time points, as shown in Fig. 3b. The end of one note is the beginning of the next.

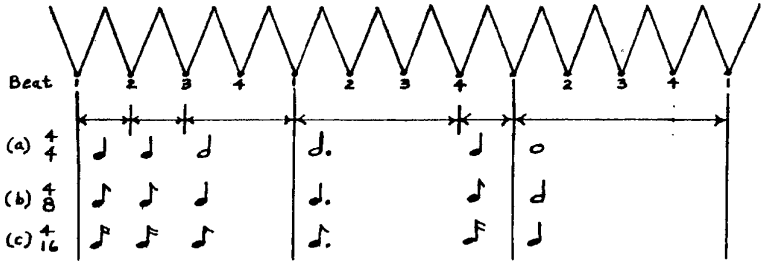
Fig. 3 (a) Wrong (b) Right



One problem with reading rhythm is that the notes are not usually drawn to scale. For example, the spacing of eighth notes may not be twice that of sixteenth notes on paper. This is because it is often impractical to fit in words of the text if the notes are drawn to scale.

Now let's get to the practical details of counting out the rhythm. Fig. 4a shows a simple rhythm in 4-4 meter, that is four beats per measure with a quarter note per beat. The wavy line represents the motions of your hand as you tap the beat. The bottom point of the wavy line represent the exact instant when your hand hits the table, and is the exact timing of the beat. Tap a steady beat with your hand as you say the rhythm with "ta". Note that the dotted half note is held for three beats and that the last note of each measure is held until beat one of the next measure.

Fig. 4 Beat patterns

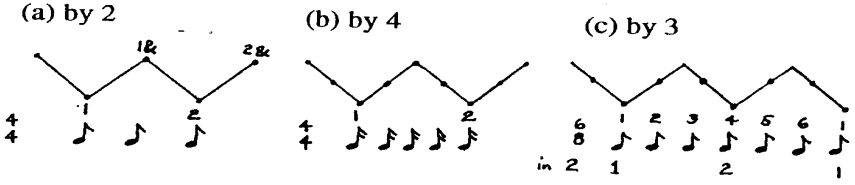


The rhythm pattern would be the same if we used 4/8 time as in Fig. 4b, where each beat is an eighth note, or Fig. 4c, where each beat is a sixteenth note.

These patterns are easy because the shortest note is a whole beat. This points out one way to deal with more difficult rhythms like dotted eighth notes: simply change the meter so that the shortest note gets one beat.

Changing the meter is fine when you're all by yourself, but with a large chorus or orchestra, the meter and speed (called tempo) is set by the conductor. You can still learn to subdivide the beat in your head so that your beat may be twice as fast as the conductor's beat. There are ways to visualize the beat to make the subdivision easier. Fig. 5a shows the beat divided by two so that we have downbeats at the low points and upbeats at the high points. So the pattern is 1 & 2 & 3 & 4 & 1. . . . The upbeats are designated according to the preceding downbeat; upbeat 1& is between beats 1 and 2. Fig. 5b shows how to divide the beat into four parts: say 1- ta-ta-ta, 2-ta-ta-ta. . . . Practice these subdivisions by 2 and 4. When this feels comfortable, try changing the subdivision, e.g., 1, 2, 3-&, 4-ta-ta-ta, 1, 2-&, 3-ta-ta-ta, 4-&, 1-&,...

Fig. 5 Subdivisions of the beat

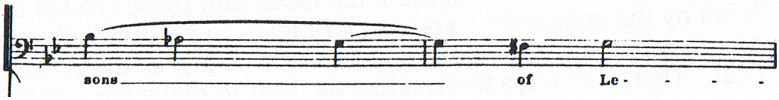


Subdividing the beat can be important when the piece is in 6-8 time. Technically, this would mean that there are 6 beats per measure with an eighth note for each beat. But when the tempo is fast, this time signature is usually conducted "in two" (two beats per measure) because conducting six beats is too tedious and too difficult to read at fast tempo. So you have to do the subdivision into two groups of three beats as shown in Fig. 5c. Fig 6 is an example of 6-8 time.

Fig. 6 *The Messiah*, No. 9 by G. F. Handel

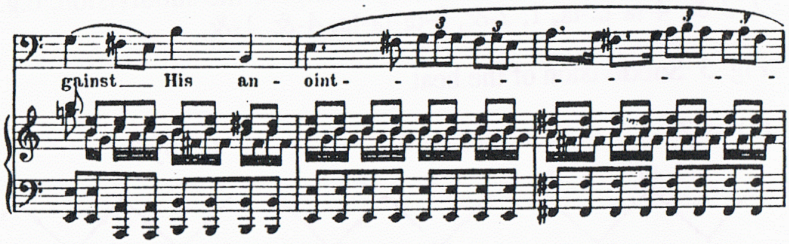
Composers tend to get bored with the regularity of even measures, so they have tricks to trip unwary singers. One of these is the tie, which is used to connect between beats or between measures. Fig. 7 shows how a tie is used to blur the division between measures and shift the emphasis from the normal beat one to beat two. This trick is called a syncopation and is commonly found in jazz. Another way to syncopate is to put an eighth rest on beat one so that you start on 1&.

Fig. 7 *The Messiah*, No. 7 by G. F. Handel



Another trick is to change the beat pattern for a group of notes. Fig. 8 shows triplets in a 4-4 meter. The three notes of a triplet are sung in the time allotted to a quarter note.

Fig. 8 *The Messiah*, No. 40 by G. F. Handel



Conducting patterns vary widely, so you need to get familiar with the favorite gestures of your conductor. Sometimes the conducting gestures are so delicate that you need to watch closely to see the exact timing of a beat, which is the instant when the baton reverses direction.

The conductor may choose to conduct a section in a different meter than the written one. For example, a fast section may be conducted "in one" where the conductor marks only beat one of each measure. Or a very slow section in 4-4 may be conducted "in eight" where each eighth note gets a beat. Fig. 9 is an example of a 4-4 piece often conducted in 8. You would count out three beats of rest before starting, and "God" would be held for two beats.

Fig. 9 *The Messiah*, No. 22 by G. F. Handel

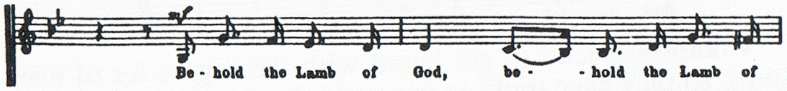
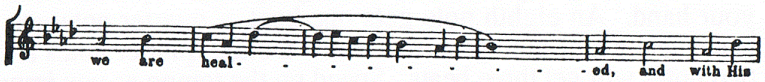


Fig. 10 is an example of 2-2 meter, where each beat is a half note. This is tricky because we have to subdivide the beat to sing the quarter notes.

Fig. 10 *The Messiah*, No. 25 by G. F. Handel



Suggestions for Reading Rhythm

1. Hang on to the rhythm at all cost. If you can't keep up with the words or pitches, just keep track of the rhythm

2. Try to look ahead as you sing, especially at page turns.

3. Hold your music up so that you can see the conductor.

4. Count out rests so that you know exactly when to come in. Don't rely on the conductor for entrances.

5. Don't tap your foot during rehearsals, especially if you aren't watching the conductor. If you need to tap the beat, do it with your big toe inside your shoe.

Exercises and Self Test

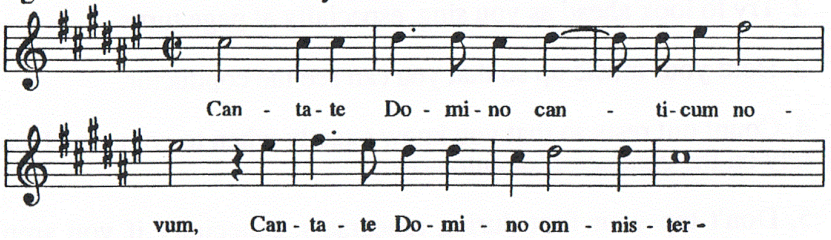
1. (a) What is the meter in Fig. 11?

   (b) On what beat does "vum" end?

   (c) On what beat does "om" start?

Ta-ta the rhythm while beating eight beats per measure with your hand. An eighth note gets one beat, a quarter note gets two beats, and a half note gets four beats. Dotted quarter notes and the tied notes will get three beats. Speed up the tempo as you improve. When you feel comfortable with eight beats, try four beats per measure (quarter note = one beat), then two beats (half note = one beat). Finally, speak the words in rhythm.

Fig. 11 *Cantate Domino* by Hans Leo von Hassler



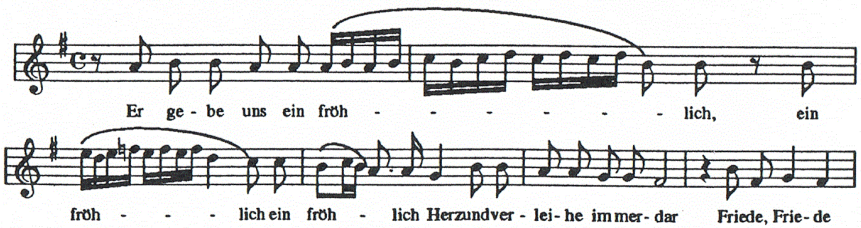
2. (a) In Fig. 12, what is the meter?

   (b) On what beat does "uns" start?

   (c) The syllable "lich" occurs three times. On what beat does "lich" end in each case?

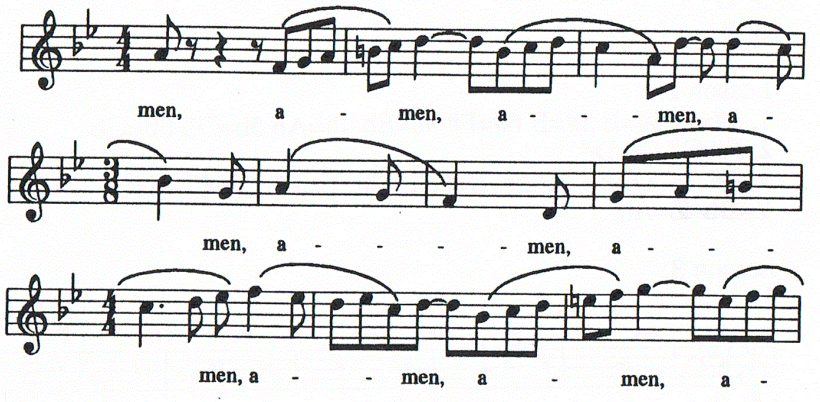
Ta-ta the rhythm while beating eight beats per measure with your hand. Eighth notes will get one beat, and sixteenth notes will get a half-beat. When that feels comfortable, change to four beats per measure.

Fig. 12 *Nun danket alle Gott* by J. Pachelbel



3. Fig. 13 has tricky rhythm with meter changes and syncopations. On what beat does the "a" in the second measure start? Say the words in rhythm using one beat per eighth note, then one beat per quarter note. (Use 3 beats in the 3-8 measures.)

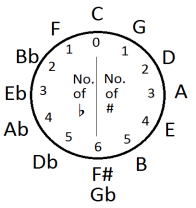
Fig. 13 *Gloria* by J. Rutter



Answers to Self-Tests

Lesson 1:
1. F
2. *Sol*
3. *Do*
4. C E A B G C G G B F B C G F
5. G
6. B

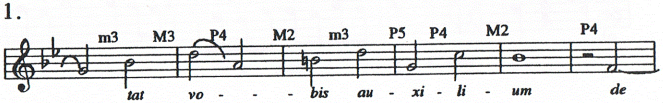
Lesson 2:
1.



Circle of Fifths

2. F# C# G# D#
3. A# 4. Q=Bb R=Eb S=F T=Eb U=Db V=C W=Gb X=Eb Y=Bb Z=Ab

Lesson 3:
1.



2. G major, E minor. (E is a minor third below G.)
3. Major sixth.
4. Major seventh.

Lesson 4:
1. (a) 2-2 (b) 2 (c) 1&
2. (a) 4-4 (b) 3 (c) 4, 4&, 3
3. 3&

Notes

Musical Ruler