Please feel free to ask questions on any point, or about the meaning of any word, on this sheet (or any other). Don’t be ashamed – this is part of the learning process – only the fool is afraid to ask questions. Remember, if you don’t “get” something now, it’ll probably hang you up later. So please, ASK QUESTIONS.

One of the common threads that links almost all types of music that you might hear (like popular, jazz, classical, blues, rock, folk, etc.) is the concept of Tonality or Key. If you’ve ever played a song, classical piece or jammed on the blues, the chances are good that you were aware that it was in a certain key. But what does this mean, to be in a certain key or tonality? How does anybody know what key they’re in (“Hey Egbert, what key you in?” “Key of A, man, key of A.”)? It’s very hard to give simple answers to these questions, and the only way you’ll really understand what this is all about is to study music, to analyze music, and then the answers will appear.

But for now, so we have some working basis, let’s say that the concept of tonality or key has to do with the idea of one note or sound being the “center of attraction.”

Example: Play this chord progression: A D E A A D E A

Can you hear that it is in the key of A major (key of A, for short)? Why is it in the key of A, and not D or E? Because the A major chord is the “center of attraction.”

If all examples were as easy to analyze as this (as far as finding the key), you wouldn’t have to do much studying. But unfortunately…..

In case you are asking yourself at this point, “Do I really want to study all this just about tonalities and keys?” remember: Virtually all music as we now know it is based on the concept of tonality or key. If you want to be a musician, and you don’t want to study this concept, it is like wanting to be a farmer but not wanting to study agriculture….you might as well forget the whole thing—‘you ain’t goin’ very far.”

But don’t worry—it won’t be too painful—many have come this road before you and even lived to tell about it. So, here we go….

**Major Key Tonality** (Based on the Major Scale)

The Major Scale has been the foundation of musical theory in the Western world for hundreds of years. One who has a friendly, working relationship with the major scales will progress many, many times faster in some very important areas like chord building, chord progressions, and true musical understanding (the knowledge of what sounds work together, and why) than one who does not. Time and time again, I have seen this to be true; in fact, I personally tried to avoid learning about major scales, and I floundered for years, especially in the area of retention (the long-term ability to remember). So many facts seemed unrelated or would slip away too easily because there was no common thread (namely, the major scale) to tie them all together. But all that has changed now – things make sense, there is order, there is logic, much of the seeming complexities of music can be easily understood….but you have to have a good foundation to build on.

So now you might be asking, “What is a major scale?” or “What is a scale?” for that matter. OK. A Scale is a fixed group of notes, almost always constructed in an ascending direction, from a given starting note.

Before we can discuss the major scale in more detail, we must first talk about intervals. The word Interval, in music, refers to the distance between any 2 notes. Two of the most basic kinds of intervals are the 1/2 step and the whole step. The term 1/2 step refers to the interval between 2 notes that are adjacent (right next to each other) in the musical alphabet. Examples: A and Bb, Bb and B, B and C, C and C#, etc. (If you are at all shaky on your musical alphabet, there are 4 easy drills that will sink it in fast – ask for them if necessary). Back to intervals….

The term whole-step refers to the interval between any 2 notes that are separated by one note in the musical alphabet. Examples: A and B, Bb and C, B and C#, C and D, etc.

So how does all this relate to the major scale? The next page will explain this, but first, re-read any point that is not absolutely clear, or you might get lost on page 2.
A major scale has, starting from any note, the following intervals between its successive notes:

Whole step, whole step, 1/2 step, whole step, whole step, whole step, 1/2 step.

Example: starting from A:

```
A B C# D E F# G#
\vee \vee \vee \vee \vee \vee \vee
whole whole 1/2 whole whole whole 1/2
```

Notice that the notes C#, F# and G# were used rather than Db, Gb and Ab. This is a good reason for this, but it’s too complicated for now, but the following guideline will produce good results at this stage of the game: All letters of the musical alphabet must be present in a major scale.

Write out the notes in the D major scale:

Write out the notes in the Bb major scale:

(A fast way to write out a major scale it to write out the “bare” letters first—that is, with no sharps and flats, and then add the necessary #’s and b’s).

Here is a listing of the common major scales (some are admittedly less common than others). Make it a point to mentally memorize (physically too—this will be discussed soon) at least one scale per week.

<table>
<thead>
<tr>
<th>Key</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>C D E F G A B C</td>
</tr>
<tr>
<td>G</td>
<td>G A B C D E F# G</td>
</tr>
<tr>
<td>D</td>
<td>D E F# G A B C D</td>
</tr>
<tr>
<td>A</td>
<td>A B C# D E F# G# A</td>
</tr>
<tr>
<td>E</td>
<td>E F# G# A B C# D# E</td>
</tr>
<tr>
<td>B</td>
<td>B C# D# E F# G# A# B</td>
</tr>
<tr>
<td>F#</td>
<td>F# G# A# B C# D# E# F#</td>
</tr>
<tr>
<td>C#</td>
<td>C# D# E# F# G# A# B# C#</td>
</tr>
<tr>
<td>F</td>
<td>F G A Bb C D E F</td>
</tr>
<tr>
<td>Bb</td>
<td>Bb C D Eb F G A Bb</td>
</tr>
<tr>
<td>Eb</td>
<td>Eb F G Ab Bb C D Eb</td>
</tr>
<tr>
<td>Ab</td>
<td>Ab Bb C Db Eb F G Ab</td>
</tr>
<tr>
<td>Db</td>
<td>Db Eb F Gb Ab Bb C Db</td>
</tr>
<tr>
<td>Gb</td>
<td>Gb Ab Bb Cb Db Eb F Gb</td>
</tr>
<tr>
<td>Cb</td>
<td>Cb Db Eb Fb Gb Ab Bb Cb</td>
</tr>
</tbody>
</table>

The notes in major scales are commonly numbered from 1 to 8. The 1st and 8th tones are also called the Root or Tonic or Keynote (different people use one or more of these 3 terms, but they all mean the same thing).

As you may have guessed, the 1st note of a major scale also “names” the scale. Example: the scale that starts on the G note is called the G major scale (makes sense, right?).

The distance between the 1st and the 8th notes is called an Octave.

**Playing the Major Scale**

Depending on what direction(s) you want to go in, musically, you will find it very important—to mildly important, to be able to fluidly play the major scales. Here are some common diagrams (given in the key of D only):

As far as emphasis goes, remember your goals — is a command of the major scale necessary (let’s discuss it again if you’re in doubt as far as your priorities go)?
Chords Built from the Major Scale

1) First of all, in case you’re not aware of it: Every scale has chords inherent in it, or to put it another way: You can build chords from any scale. How? Well, to start with, the 1st chord in a scale is built by combining every-other note (non-adjacent notes) in the scale, starting with the 1st note. Example: Using the D major scale, we will combine every-other note in the scale, starting with the D note, and stopping after 3 notes are combined, for now. Result: we would have a chord consisting of the notes D, F# and A. Three-note chords built in this fashion are called Triads.

2) Triads can also be built by combining every-other note in a scale but starting from other notes than the 1st one. Example: In the D major scale you also have the following triads: E G B, F# A C#, G B D, A C# E, B D F#, and C# E G.

Don’t go any further if all this is not perfectly clear. Reread whatever you have to and/or ask questions.

Naming of Triads, 3rd Intervals

In order to be able to name the triads in a major scale, we have to talk a little more about intervals. **IMPORTANT:** most intervals are classified according to at least 2 characteristics:

1) Their general name, which is found by counting up the alphabet and adding up the number of letters included.
   - Examples: C to F is a 4th (because there are 4 letters included → C, D, E, F), C to F# is still a 4th (#’s or b’s don’t matter in the general name), A to G is a 7th, F to D is a 6th, F# to C is a 5th, Gb to C is a 4th, and so on.

2) Their specific name, which is found by counting the number of whole steps or 1/2 steps between the notes (there is also another method used to find specific names, and it will be discussed later).

Before you work with examples of this principle, the following should be said: Triads are built in 3rd intervals. One definition of a triad then is: A 3-note chord built in 3rd. (Notice the term “3rds” used for the term “3rd intervals” — this kind of slang is common).

Go back and check those triads in the key of D now, and see if you think they are built in 3rds.

Now for the specific names — there are two types of 3rd intervals in all of the commonly used triads, namely, the Major 3rd and the Minor 3rd. (The major and minor are the specific names.) What is the difference between the two? It’s in the number of whole or 1/2 steps involved:

1) A Major 3rd has 2 whole steps between the 2 notes involved.
   - Examples: A to C#, B to D#, C to E, Db to F, D to F#, etc.
2) A Minor 3rd has a step and a half (one whole step and one 1/2 step) between its notes.
   - Examples: A to C, B to D, C to Eb, Db to Fb (notice that Db to E would be a 2nd interval, not a 3rd)
   - D to F, Eb to Gb, F to Ab, G# to B, etc.

Stop now, and reread anything that is not clear to you before you forge on.
There are 4 types of common triads, all of which are distinguished from each other by the types of 3rd intervals used in their construction:

1) The **Major Triad** has the following intervals (from the bottom up): a **major 3rd** and a **minor 3rd**.
   Example: a D major triad has the notes D, F#, A
   (D to F# is a major 3rd, and F# to A is a minor 3rd).
   Another example: An Ab major triad has the notes Ab, C, Eb
   (Ab to C is a major 3rd, and C to Eb is a minor 3rd).

2) The **Minor Triad** has the following intervals (from the bottom up): a **minor 3rd** and a **major 3rd**.
   Examples: a D minor triad has the notes D, F, A;
   an F minor triad has the notes F, Ab, C;
   a B minor triad has the notes B, D, F#.

3) The **Diminished Triad** has the following intervals (from the bottom up): a **minor 3rd** and a **minor 3rd**.
   Examples: a D diminished triad has the notes D, F, Ab;
   an F diminished triad has the notes F, Ab, Cb;
   a B diminished triad has the notes B, D, F.

4) The **Augmented Triad** has the following intervals (from the bottom up): a **major 3rd** and a **major 3rd**.
   Examples: a D augmented triad has the notes D, F#, A#;
   an Ab augmented triad has the notes Ab, C, E;
   an F# augmented triad has the notes F#, A#, C (double sharp)

There are common symbols used to identify the different triads:

1) A major triad is written *without* any symbol other than the letter name itself. Example: if you see a chord diagram labeled D, it is understood that this is supposed to mean a D major chord.

2) A minor triad is symbolized by a small “m” or the word “min.” Example: Am or Amin.

3) A diminished triad is symbolized by a little 0. Examples: C0, B0, G0, etc.

4) An augmented triad is symbolized by a little +. Examples: C+, B+, G+, etc.

Stop now and review anything that is at all fuzzy. (You are not expected to have *all* this information memorized now, but you should at least understand it before moving on). Then fill out the 1st Quiz Page.
Tonality Quiz #1

Try to answer the following questions without referring to your notes (the “Tonality” pages). Exercise your mind a little. Use your own words if you like, instead of memorized definition, but don’t be ashamed to use the given definitions….the main thing is to understand the principles, no matter whose words you use to describe them.

1) What is a scale?

2) What does the word *interval* refer to?

3) Write ten examples of whole step intervals.

4) Write ten examples of 1/2 step intervals.

5) What is wrong with this supposed major scale? A B Db D E F# G# A

And this one? Bb C D# F G A Bb

And this one? B C# D# E F G# A# B

6) Write out the following major scales: C, G, D, Ab, Bb and E.

7) What does the word *root* refer to?

8) What does the word *octave* refer to?

9) How are chords built from scales?

10) What is a triad? (Give at least 2 definitions)

11) Identify the following intervals by their *general* name only:

   - F to C# _______ G to Bb _______ A to D _______ C to F# _______ G to F# _______
   - Bb to Db _______ D to B _______ Eb to F _______ F# to A# _______ Cb to Ab _______

12) Tell whether the following 3rd intervals are a major or minor:

   - B to D _______ C to E _______ E to G# _______ Ab to Cb _______ F to A _______
   - G to Bb _______ Db to F _______ C# to E# _______ Eb to Gb _______ Bb to D _______
   - A# to C# _______ D# to F# _______ G# to B# _______ Cb to Ebb _______ D to Gb _______  

   (watch out)

13) Tell what kind of intervals (from the bottom up) are in the different types of triads:

   1) major triad:
   2) minor triad:
   3) diminished triad:
   4) augmented triad:
Please feel free to ask questions or submit comments about the meaning of any words you don't understand. Only the fact is important, not the language. If you don't like a particular word, it probably means the same thing in another language.

### TONALITY

One of the common threads that links almost all types of music you might hear (like popular, jazz, classical, blues, rock, folk, etc.) is the concept of **TONALITY** or **KEY**. If you've ever played a song, classical piece, or jammed on the piano, the chances are good that you were aware that it was in a certain **key**. But what **does** this mean to be in a certain **key** or **tonality**? How does anybody know what **key** they're in? "**Key Expert** what key you in?" "**Key of A, man, key of A.**" It's very hard to give simple answers to these questions, and the only way you'll really understand what this is all about is to study music, to analyze music, and then the answers will appear.

But for now, let's take a few working basics, let's say that the concept of tonality or key has to do with the idea of one note or sound being the "center of attraction". **Example:** "Hey, this chord progression: A D E A D E A (can you hear that it's in the key of GMAJOR? Why? A E A, for short?"

**Why isn't it in the key of A, and why not D?** Because the Amajor chord is the "center of attraction". All examples were so easy to analyze as this (far as defining the key), you wouldn't have to do much studying. But unfortunately, this isn't the case you are asking yourself at this point, "Do I really want to study all this junk about tonalities and keys?" Remember:

**Virtually all music as we now know it, is based on the concept of tonality or key.** If you want to be a musician and you don't want to study this concept, it is like wanting to be a farmer but not wanting to study agriculture...... you might as well forget the whole thing---you ain't goin' any far."

But don't worry, it won't be too painful—many have come this road before you and even lived to talk about it. So, here we go......

### MAJOR KEY TONALITY (based on the MAJOR scale)

The **MAJOR SCALE** has been the foundation of musical theory in the Western world for hundreds of years. One who has a friendly, working relationship with major scales, will progress many, many times faster in some very important areas like chord building, chord progressions and true musical understanding (the knowledge of what sounds work together, and why). Than one who does not. Time and time again, I have seen this to be true; in fact, I personally tried to avoid learning about major scales, and I floundered for years, especially in the area of composition (the long-term ability to remember). So many facts seemed unrelated or would slip away too easily because there was no common thread (namely the major scale) to tie them all together. But all that has changed now—things make sense, there is order, there is logic, much of the seemingly complex nature of music can be easily understood—but you have to have a good foundation to build on.

So now you might be asking "What is a major scale?" or "What is a scale?" for that matter. **OK A SCALE** is a fixed group of notes almost always constructed in an ascending/descending fashion, from a given starting note.

Before we can discuss the major scale in more detail, we must first talk about INTERVALS. The word **interval**, in music, refers to the distance between any 2 notes. Two of the most basic kinds of intervals are the **STEP** and the **WHOLE STEPS**. The term **STEP** refers to the interval between 2 notes that are adjacent (right next to each) in the musical alphabet: Examples—A and B, B and C, C and D, etc. (If you are at all shaky on your musical alphabet, there are 4 easy drills that will make it in fact ask for them, if necessary). Back to intervals......

The term **WHOLE STEPS** refers to the interval between any 2 notes that are separated by one note in the musical alphabet: Examples—A and B, B and C, C and D, etc. Complete.

So how does all this relate to the major scale? The next page will explain this, but first, we need any point that is not absolutely clear, or you might get lost.
Tonalità

A major scale has, starting from any note, the following intervals between its successive notes: whole, whole, half, whole, whole, whole, half.

Example: Starting from A → A, B, C#, D, E, F#, G, A

Notice that the notes C, F# and G are used rather than D, G# and A#. There is a good reason for this, but it's too complicated for now, but the following guidelines will produce good results at this stage of the game. All letters of the musical alphabet must be present in a major scale.

Write out the notes in the D major scale:

D E F G A B C

A way to write out a major scale is to write out the "bore" letters first—those with sharp s and flats, and then add the necessary #s or b's.

Here is a listing of the common major scales (some are admittedly less common than others). Make it a point to mentally memorize (physically too—this will be discussed soon) at least one scale per week.

C D E F G A B C

The notes in major scales are commonly numbered from 1 to 8. The 1st and 8th tones are also called the Root or Tonic (different people use one or more of these 3 terms, but they all mean the same thing). As you may have guessed, the 1st tone of a major scale also "names" the scale. Example: the scale that starts on G is called the G major scale (make sense, right?).

The distance between the 1st and 8th tone is called an octave.

Depending on what direction(s) you want to go in, musically, you will find it very important to mildly important to be able to fluidly play the major scales. Here are some common diagrams (given in the Key of D only):

Playing The Major Scale

CHORDS BUILT FROM THE MAJOR SCALE

1. First of all, in case you're not aware of it: EVERY SCALE HAS CHORDS INHERENT IN IT. Or to put it another way, YOU CAN BUILD CHORDS FROM ANY SCALE. How? Well, to start with, the 1st chord in a scale is built by combining every other note (non-adjacent notes) in the scale, starting with the 1st note. Example: Using the D major scale, we will combine every other note in the scale, starting with the D note, and stopping after 3 notes are combined, for now. Result: We would have a chord consisting of the notes D, F# and A. These note chords built in this fashion are called TRIADS.

2. Triads can also be built by combining every other note in a scale but starting from other notes than the 1st one. Example: In the D major scale, you also have the following triads: E G B, F# A C, G B D, A C# E, B D F#, and C# E G. Don't go any further if all this is not perfectly clear, since whatever you have to ask (and to answer)
NAMING OF TRIADS (3RD INTERVALS)

In order to be able to name the triads in a major scale, we have to talk a little more about intervals. IMPORTANT: Most intervals are classified according to at least 2 characteristics:

1. Their general name, which is found by counting up the alphabet and adding the number of letters included. Examples:
   - C to F is a 4th (because there are 4 letters included: C, D, E, F).
   - C to F# is still a 4th (#5 or b5 don't matter in the general name).
   - A to G is a 7th.
   - F to D is a 6th.
   - F# to C is a 5th.
   - Gb to C is a 4th, and so on.

2. Their specific name, which is found by counting the number of whole steps or half steps between the notes (there is also another method used to find specific names and it will be discussed later). Before you work with examples of these principles, the following should be said: TRIADS ARE BUILT IN 3RD INTERVALS. One definition of a triad then is: A 3 NOTE CHORD BUILT IN 3RDS.

Now for the specific names - there are two types of 3rd intervals in all of the commonly used triads, namely the MAJOR 3RD and the MINOR 3RD. (The MAJOR and MINOR are the specific names.) What is the difference between the two? It is the number of whole or half steps involved:

1. A MAJOR 3RD has 2 WHOLE STEPS between the 2 notes involved. Examples: A to C#, B to D#, C to E, D to F, E to F#, etc.
2. A MINOR 3RD has a STEP AND A HALF (one whole and one half step) between the notes. Examples: A to C, B to D, C to E, D to F (notice that D to E would be a 2nd interval, not a 3rd!), D to F, E to G, F to A, G# to B, etc.

Stop now, and reread anything that is not clear to you before you forge on.

There are 4 types of common triads, all of which are distinguished from each other by the type of 3rd intervals used in their construction:

1. The MAJOR TRIAD has the following intervals from the bottom up:
   - a MAJOR 3RD and a MINOR 3RD. Example: A, D, A. (D to C# is a major 3rd and F to A is a minor 3rd). Another example: A, D, A. (A to C is a major 3rd and C to E is a minor 3rd).
2. The MINOR TRIAD has the following intervals (from the bottom up):
   - a MINOR 3RD and a MAJOR 3RD. Examples: A, D, a, A. (D to F is a minor 3rd and A to D is a major 3rd). Another example: A, D, A. (A to C is a major 3rd and C to E is a minor 3rd).
3. The DIMINISHED TRIAD has the following intervals (from the bottom up):
   - a MINOR 3RD and a MINOR 3RD. Examples: A, D, A, A. (D to F is a minor 3rd and A to F is a minor 3rd). Another example: A, D, A, A. (D to F is a minor 3rd and A to F is a minor 3rd).
4. The AUGMENTED TRIAD has the following intervals (from the bottom up):
   - a MAJOR 3RD and a MAJOR 3RD. Examples: A, D, A, A. (D to F is an augmented 3rd, and A to D is a major 3rd). Another example: A, D, A, A. (D to F is an augmented 3rd, and A to D is a major 3rd).

There are common symbols used to identify the different triads:

0. A major triad is written without any symbol other than the letter name itself. Example: If you see a chord diagram labeled D, it is understood that this is supposed to mean a D MAJOR chord.
8. A minor triad is symbolized by a small "m" or the word "min." Example: Am or Ammin.
8. A diminished triad is symbolized by a small "dim." Example: Cdim.
8. An augmented triad is symbolized by a "+". Example: C +, B +, G +, etc.

Study and review anything that is not clear to you before moving on. Fill out this quiz page.
TONALITY QUIZ #1

Try to answer the following questions without referring to your notes (the "Tonality" pages). Exercise your mind a little. Use your own words if you like instead of memorized definitions, but don't be ashamed to use the given definitions...the main thing is to understand the principles, no matter whose words you use to describe them.

1. What is a scale?
2. What does the word interval refer to?
3. Write ten examples of whole step intervals?
4. Write ten examples of 1/2 step intervals?
5. What is wrong with this supposed major scale?
   A B D♭ E F♯ G♯ A
   And this one? B♭ C D D♯ F G A B♭
   And this one? B♭ C D♯ E F G♯ A♯ B
6. Write out the following major scales: C, G, D, A♭, B♭ and E.

7. What does the word root refer to?
8. What does the word octave refer to?
9. How are chords built from scales?
10. What is a triad? (Give at least 2 definitions)

11. Identify the following intervals by their general name only:
   F to C♯
   G to B♭
   A to D
   C to F♯
   G♭ to F♯
   B♭ to D♭
   D to B
   E♭ to F
   F♯ to A♯
   C to G♭

12. Tell whether the following 3rds are MAJOR or MINOR:
   B♭ to D
   C to E
   E to G♯
   A♭ to C♭
   F to A
   G to B♭
   D♭ to F
   C♯ to E♯
   E♭ to G♭
   B♭ to D
   A♯ to C♯
   D♯ to F♯
   G♯ to B♯
   C♭ to E♭
   D♭ to G♭

13. Tell what kind of intervals (from the bottom up) are in the different types of triads:
   1) MAJOR TRIAD:
   2) MINOR TRIAD:
   3) DIMINISHED TRIAD:
   4) AUGMENTED TRIAD: