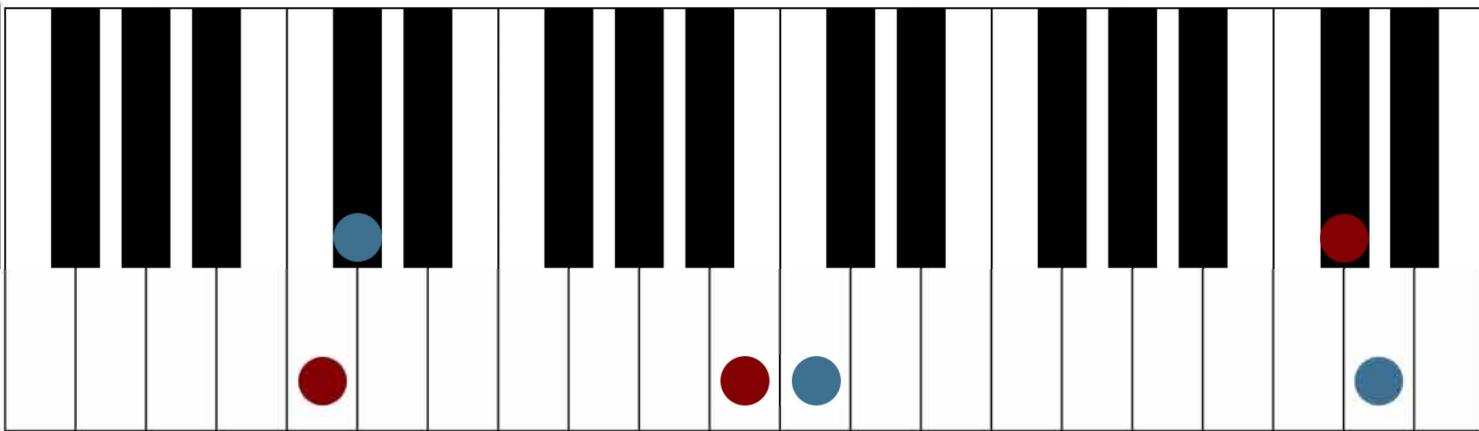


Half and Whole Steps

Before we get started on our chords we need to understand what **half steps** and **whole steps** are.

Half steps are simply the smallest amount we can move up or down our piano - including white keys and black keys.

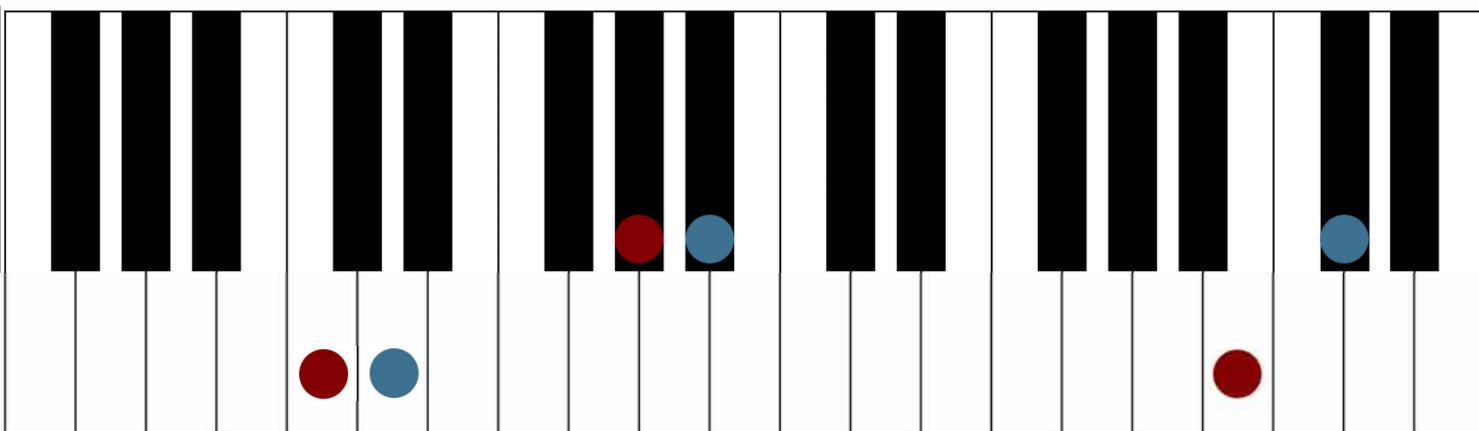
Each of the sets of notes below are examples of half steps.



Notice that it doesn't matter if the key we're moving to is black or white - we can move from a white key to a black key, a black key to a white key, or even a white key to another white key. The most important thing is not the color of the key, but just that we're moving the smallest amount that we can.

Whole steps are two half steps together. Put another way, we're counting two keys now, instead of one key.

The sets of notes below are examples of whole steps.



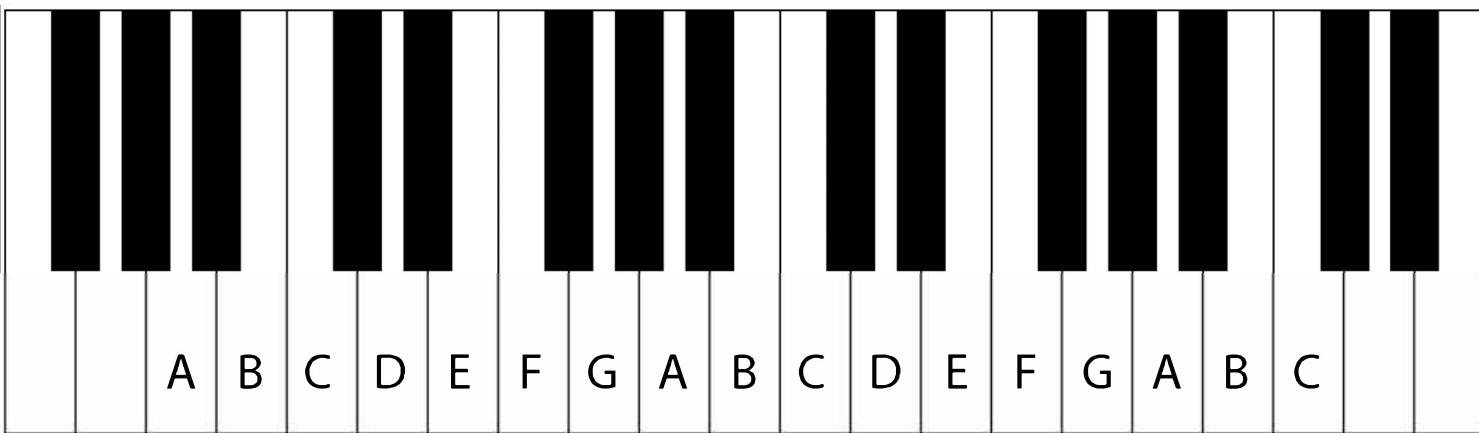
Just like with the half steps, notice that the color of the key doesn't matter. We can move from a white key to a black key, a black key to a white key, a white key to a white key, or a black key to a black key.

What matters is that we are moving two half steps up or down.

Notes on the White Keys

Our musical notes follow the letters of the english alphabet from A to G. Each letter is attributed to one of the white keys.

After a G note, we start back at A. This pattern is repeated across the whole piano, as seen below.



The best way to find notes and aim on the piano is to use the pattern of the black keys - which are in groups of two and three.

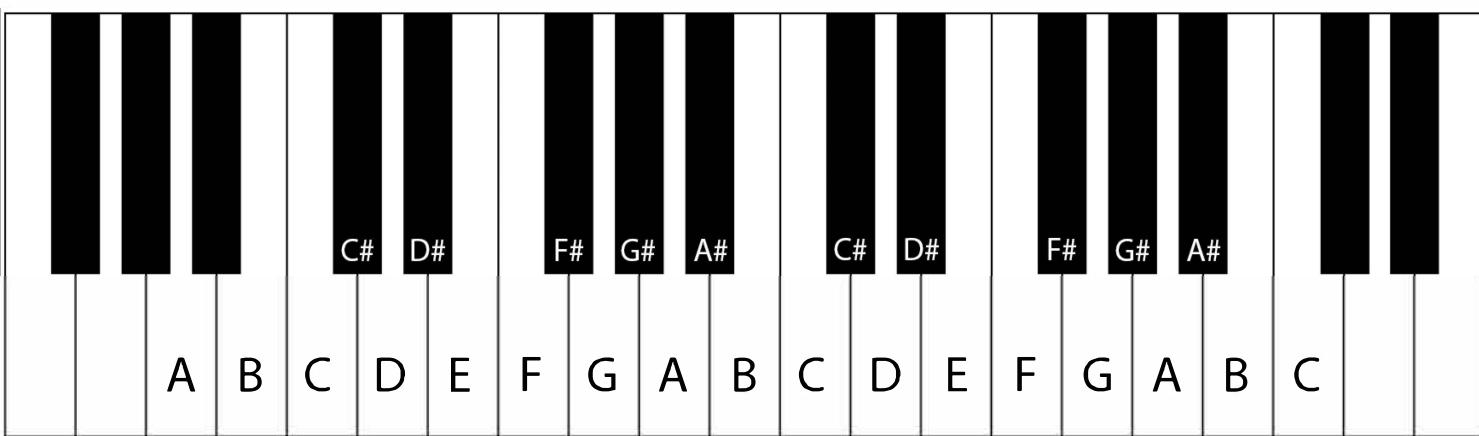
Every group of two black keys is surrounded by the notes: C, D and E.

Every group of three black keys is surrounded by the notes: F, G, A and B.

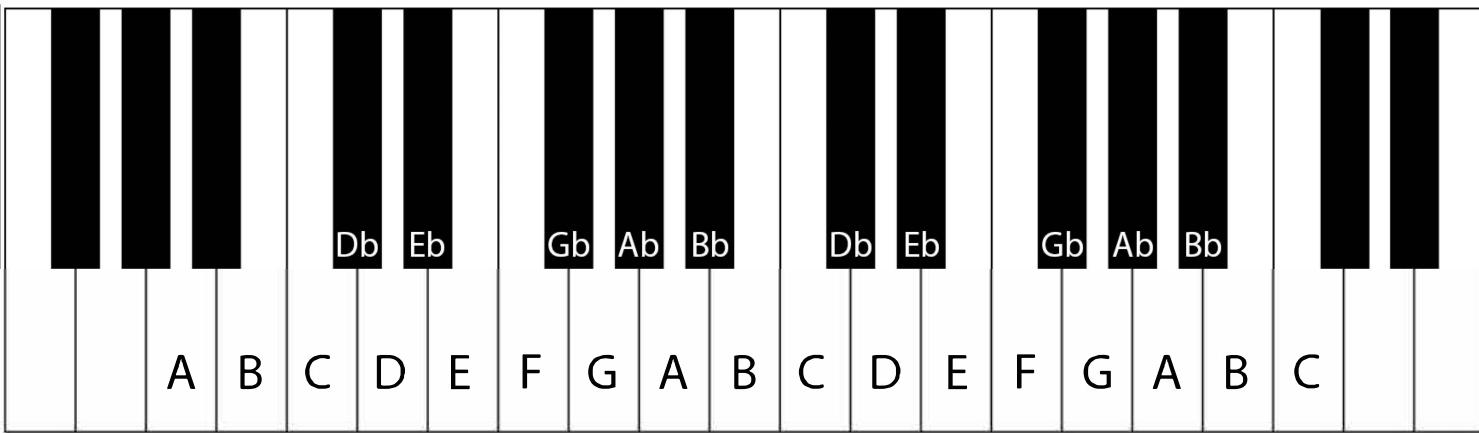
Each of these groupings of seven white keys and five black keys is one **octave**. Moving from one C to the next C up could be called *moving up an octave*.

Sharps and Flats

To know the black keys on the piano we need to understand two words: **Sharp** and **Flat**. Sharps are when we *raise* a letter by a half step to one of the black keys. We show that a note is sharp by putting a # symbol next to the note, as seen on the keys below:



Flat notes are very similar. These are when we *lower* a letter by a half step to one of the black keys. We show that a note is flat by putting a b symbol next to the note:



Does this mean that the black keys share two different names? Absolutely! How do we know whether we should make a note sharp or flat? it all depends on the key we're in.

Notice as well that we have two sets of white keys that do not have a black key between them: E-F and B-C.

These two sets of notes are called natural half steps - two white keys that are a half step apart without a black key between them.

In advanced music you may come across something odd, like a B# note, or an Fb note. But what do we do when there is no black key to move to?

We can play a B# on the C key,
an E# on the F key,
A Cb on the B key,
or an Fb on the E key.

While you will rarely encounter these notes, it is helpful to know where they fit, and how we can manage them.

NOTE LETTER PRACTICE

SONG 1:

C D E C D E C D E F E D C

SONG 2:

C C G G A A G
F F E E D D C

SONG 3:

C G D F A B C
E D C G E D C

SONG 4:

E D C D E E E
D D D E G G
E D C D E E E E
D D E D C

Major and Minor

We're going to be using the terms **major** and **minor** often when learning chords, so we need to understand them well.

Major sounds typically have a happy feel to them.

Minor sounds have a more sad or somber feel to them.

We're going to learn exactly how to play both major sounds and minor sounds, but it is important to know that *it doesn't matter where we play these sounds on the piano.*

Sometimes people's ears believe that higher tones on the piano are happier, while lower tones sound more somber - and this is an important note to make!

If enough people hear that to be true, we can use it to invoke emotion. But that isn't major and minor - we can play major sounds both higher and lower on the piano. Likewise, we could play minor sounds both higher and lower on the piano.

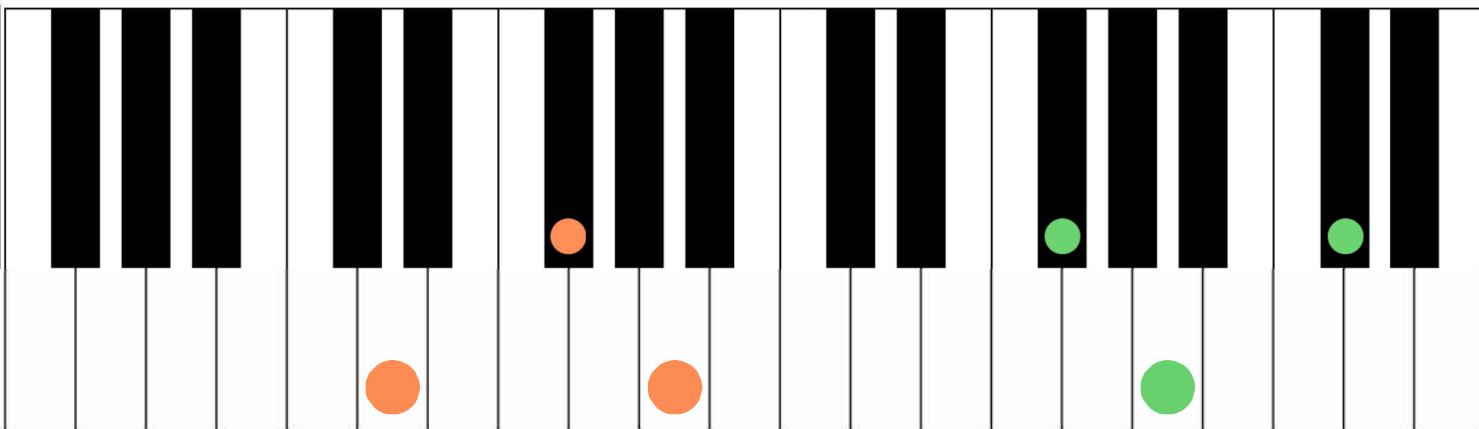
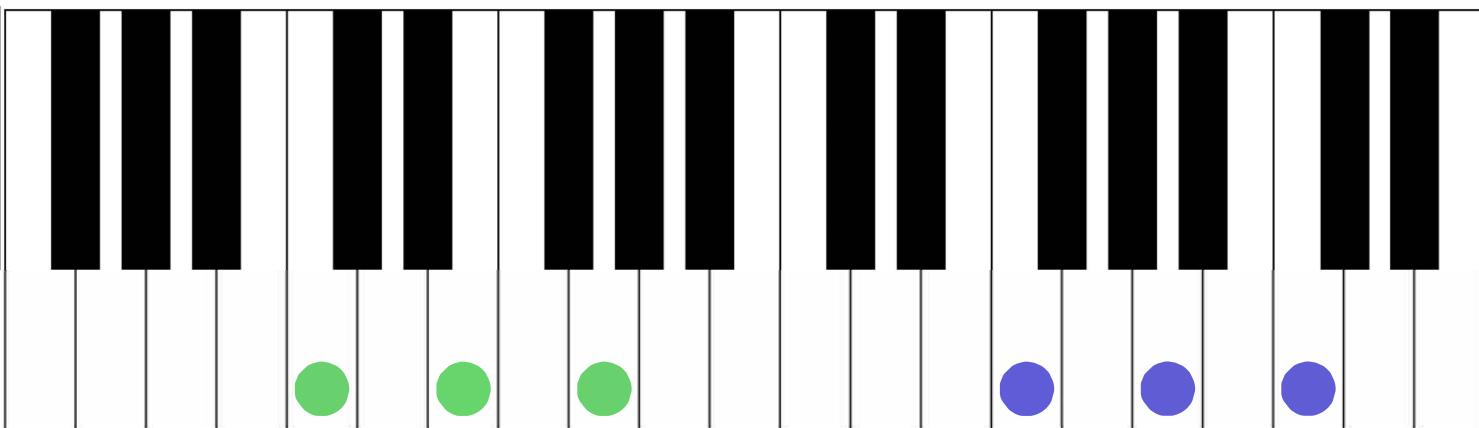
Major vs. minor all has to do with the distance between the notes we're playing. Let's see how that works in the next couple sections.

What is a Chord?

We've learned single notes and intervals, but what is a chord?

Any three (or more) unique notes on the piano played at the same time create a chord. Put another way, a chord must be at least three notes. It can be more, but it can't be less.

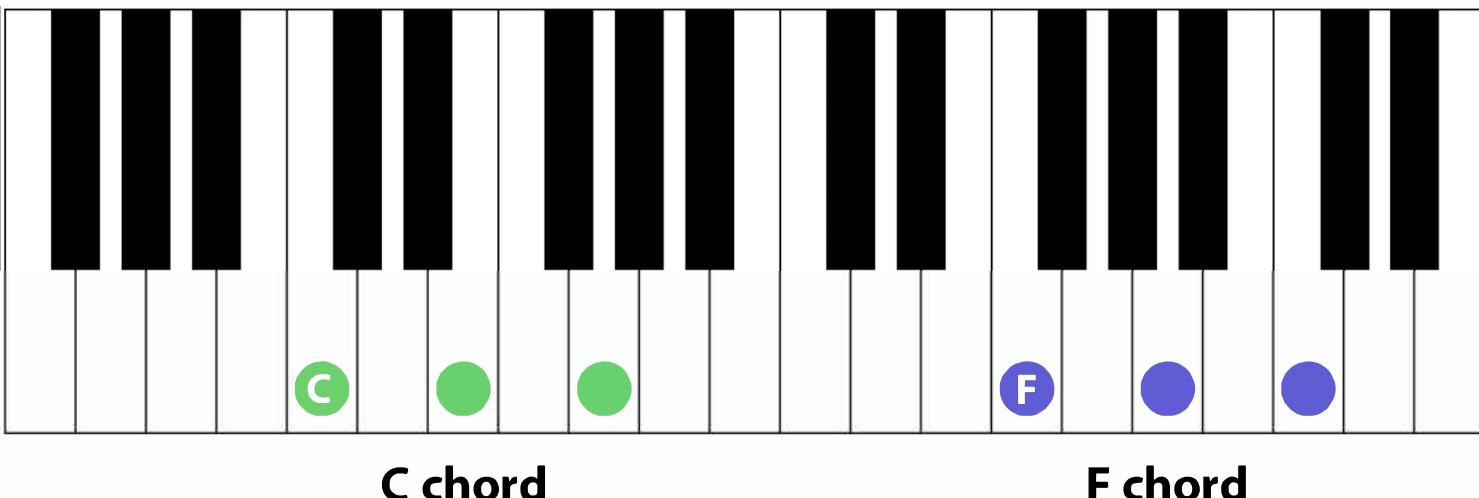
We do have specific chord shapes to learn, but for now this definition is our starting point. Below are examples of chords. Remember that each note in a chord is played simultaneously.



Chords are named letters of the alphabet, just like single notes. The first note in a chord is called the **root**, and this is the letter we call the chord.

For example, a chord beginning on a C note would be a C chord.

A chord beginning on an F note would be an F chord, etc.



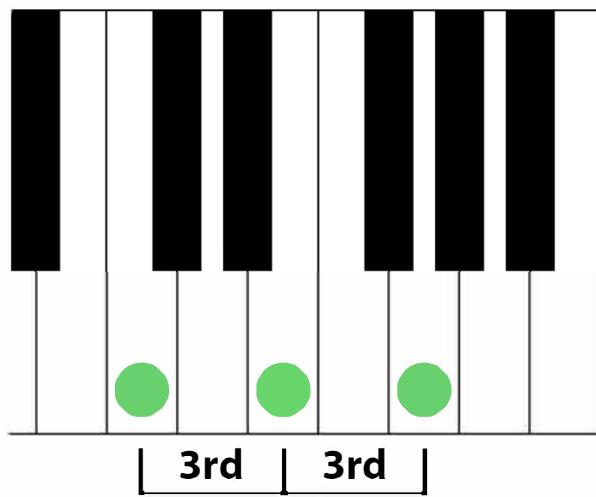
C chord

F chord

Building a Major Chord

Now it is time to turn all of our new knowledge into building our first chords. The kind of chords we'll be learning are called **triad** chords - chords with three notes.

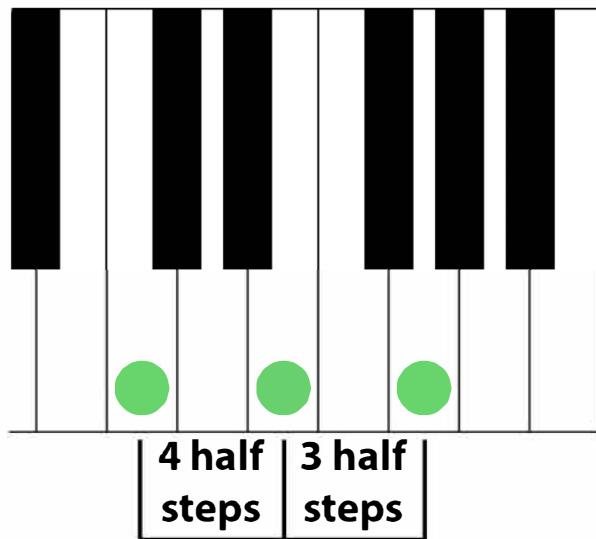
These chords are made out of two intervals: one interval on the left and one interval on the right. These two intervals are sharing a middle note.



Major chords build off of a major third interval. The major interval is the reason the chord is considered a major chord. That means that the interval on the left side of a major chord will always be four steps apart.

The second interval on the right side of the chord is a minor 3rd interval. This means that the right side of a major chord will always be three steps apart.

So when we look at the half steps in a major chord, it would look like this:



So major chords are made out of a major third interval and a minor third interval, and the two intervals are sharing a middle note.

Another way to describe a major chord is that it starts on a key and we build up four half steps, followed by three half steps.

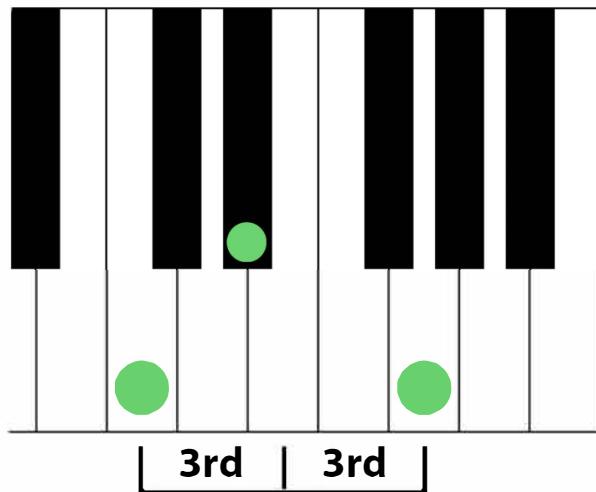
We'll see more examples of major chords as we continue.

Building a Minor Chord

Building and counting minor chords is an identical process to building major chords - but with a slightly different rule. Instead of building the chord out of a major 3rd interval with a minor 3rd on top, we now flip the order and put the minor 3rd on the bottom and the major 3rd on the top. So:

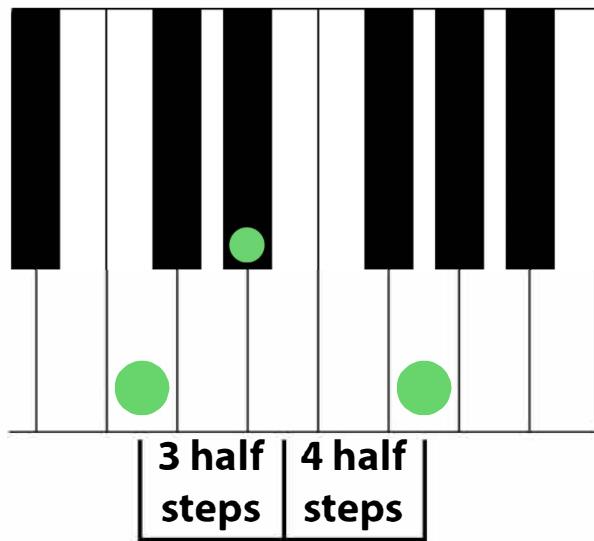
Major: Major 3rd/Minor 3rd

Minor: Minor 3rd/Major 3rd



Just like with our major chords, we can also count minor chords using half steps. This time around, we'll count three half steps from our starting note, and then four half steps on top.

So when we look at the half steps in a minor chord, it would look like this:



Two things should be mentioned here. First, major chords build off of a major interval, and minor chords build off of a minor interval. This is a key point to understanding why these chords sound happy or sad.

Secondly, compare major chords and minor chords starting from the same note. You'll quickly see that only one note changes - the middle note.

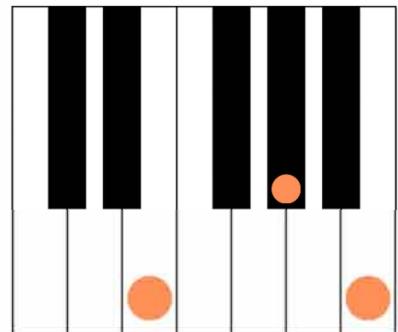
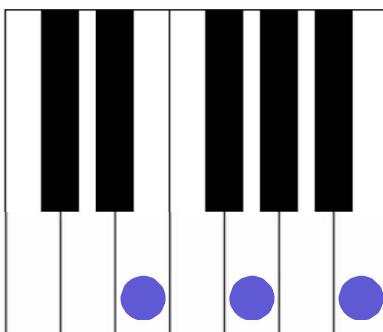
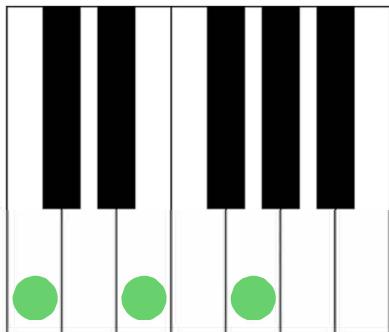
The minor chord has a middle note that is one half step lower than a major chord, and vice versa.

This will be important to help us memorize chords later on.

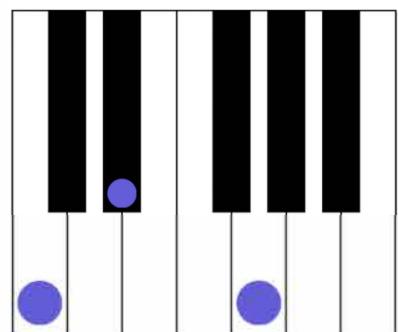
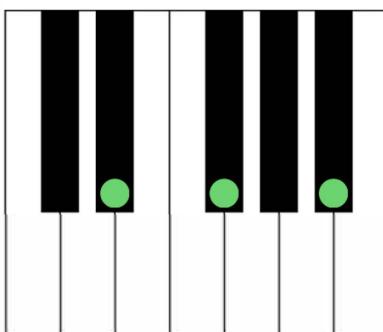
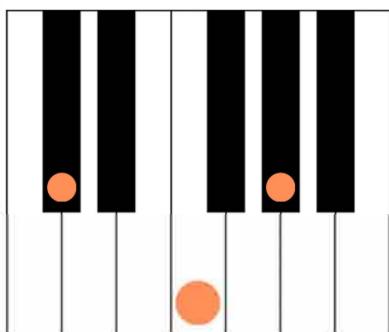
Worksheet:

Basic Chord Practice

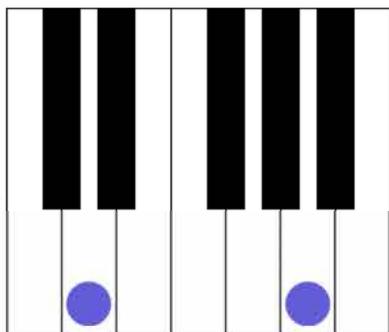
Name whether the chords below are **major** or **minor**:



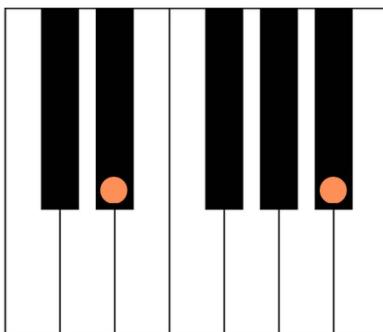
Major



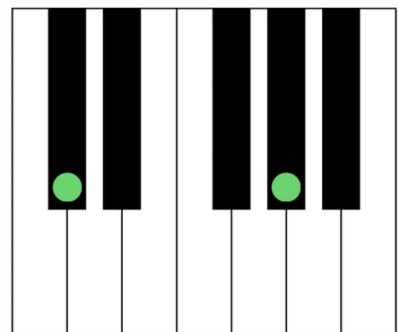
Write the **middle** note to make the chords either major or minor:



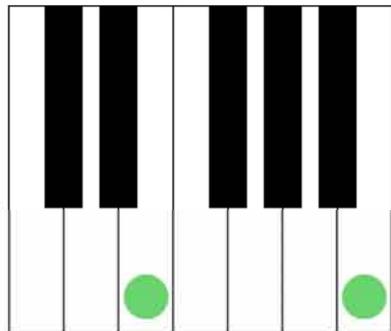
Major



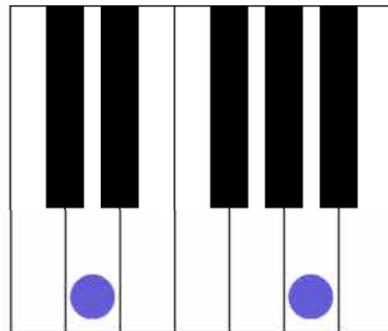
Major



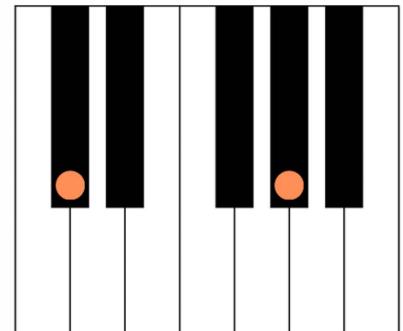
Minor



Minor

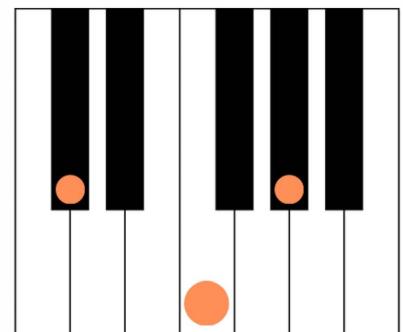
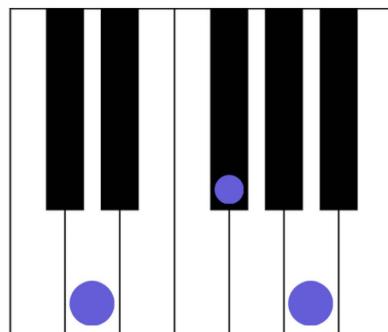
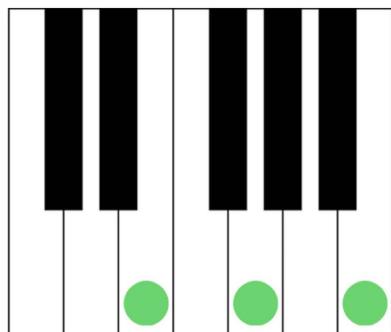
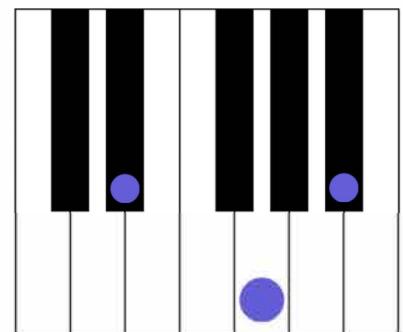
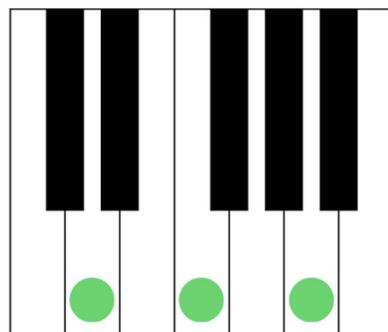
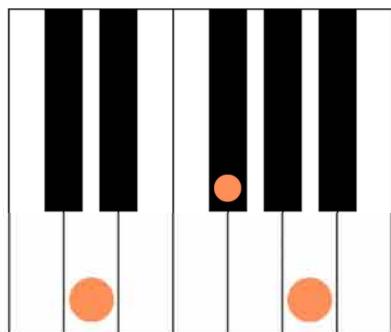


Major



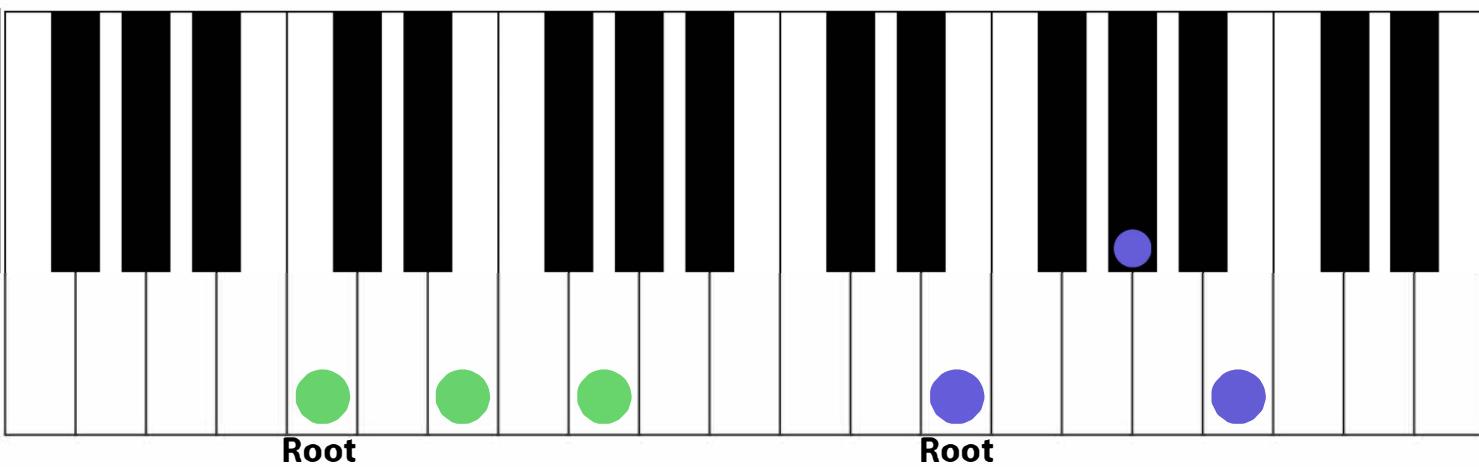
Minor

Play the chords below on your piano:

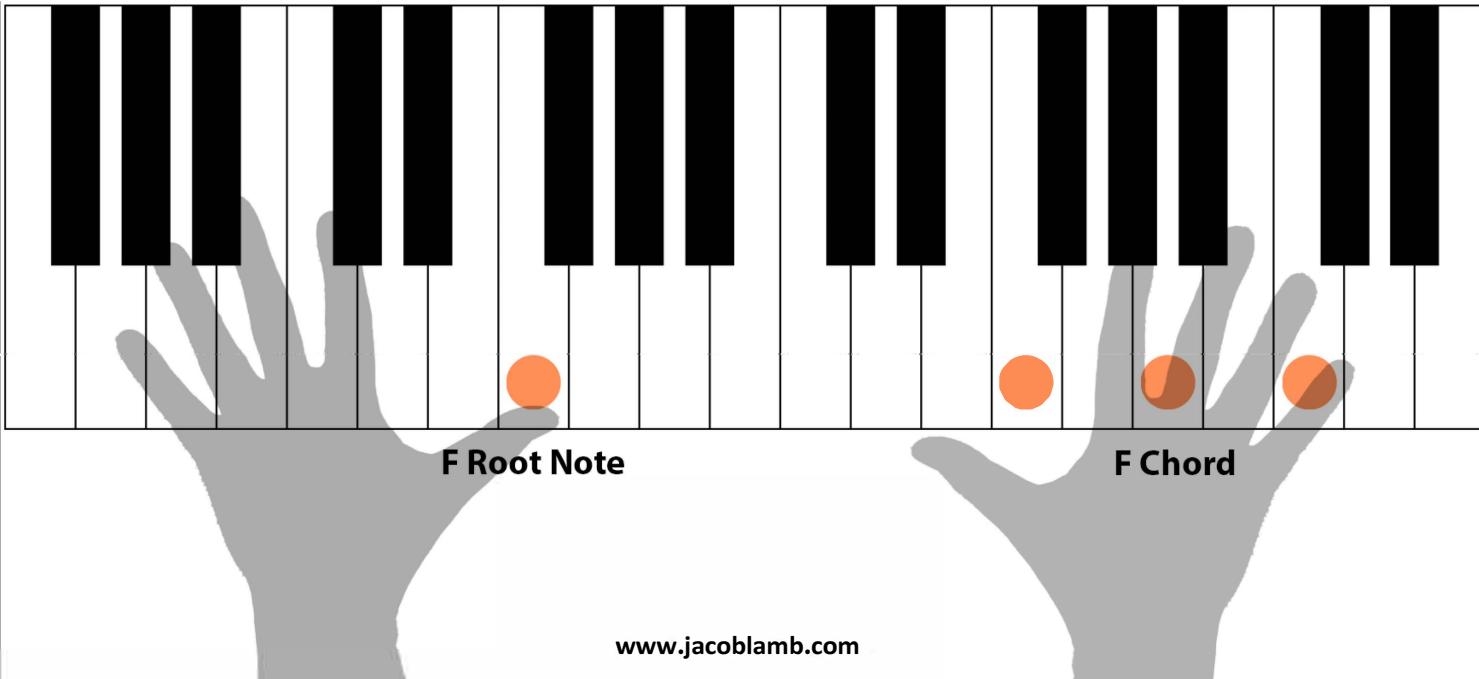


What are Root Notes?

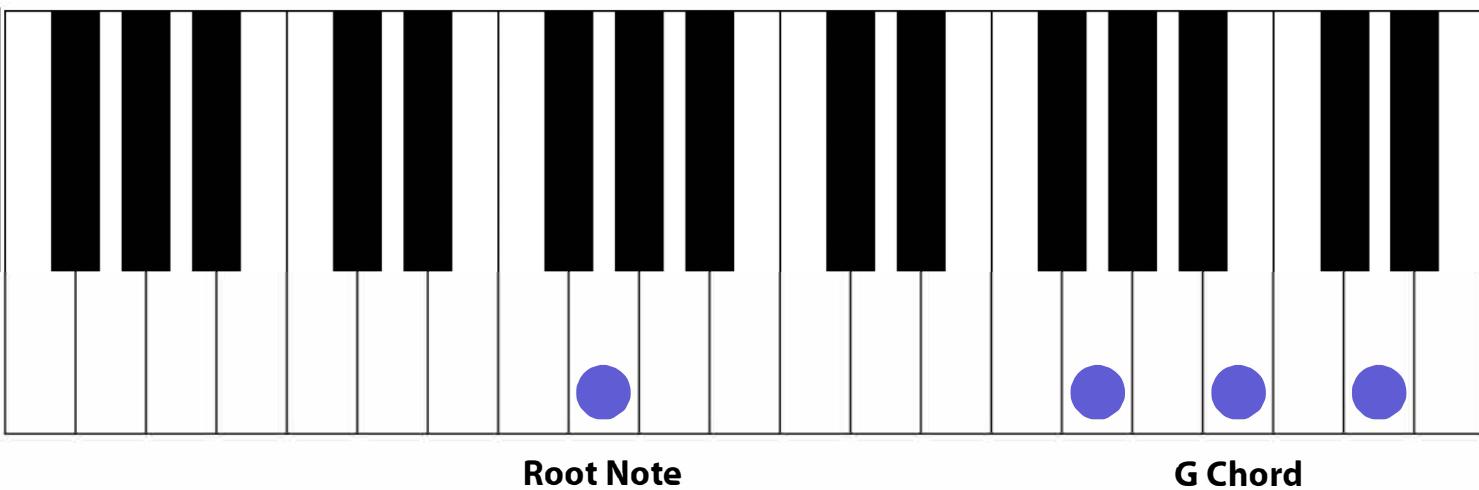
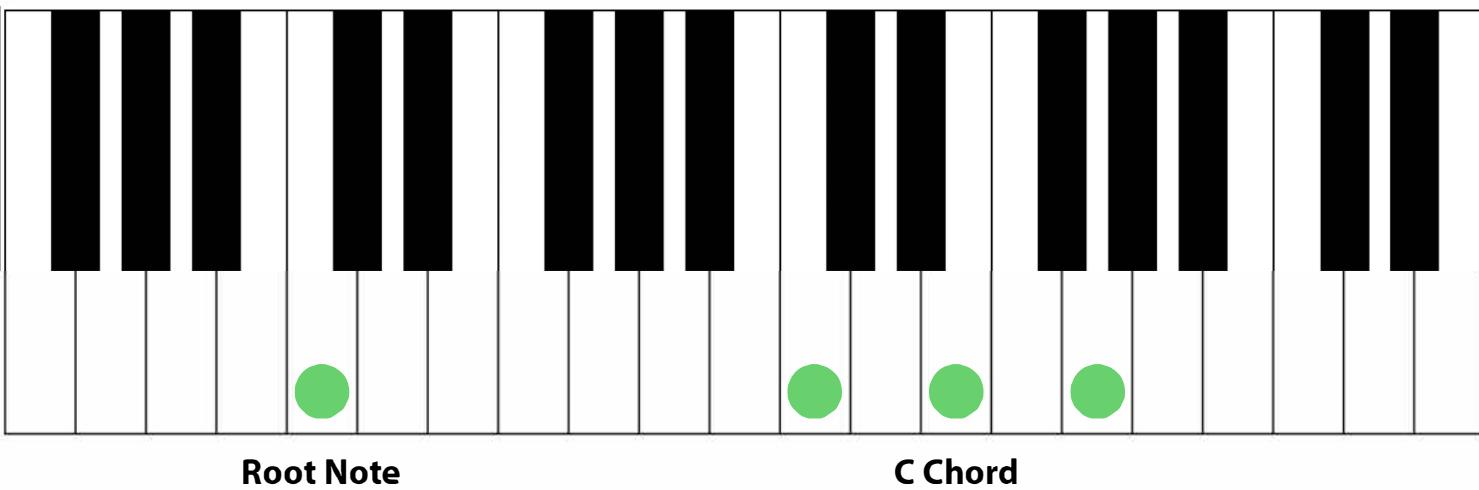
Chords have a great and full sound, but we can add even more depth to them by using **root notes**. The root of your chord is the first note that the chord builds off of, as seen below.



We can add depth by doubling the root note below the chord with the left hand. If we're playing an F chord, our root note would be an F note. So our left hand would play an F note one octave below the chord.



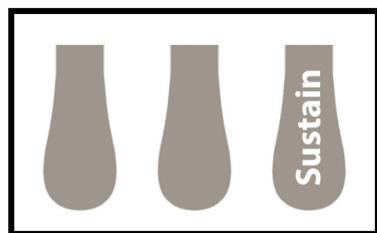
Root notes will follow the chord you're playing. Let's say you're playing a C chord followed by a G chord - your root note will also move from C to G when the chords do.



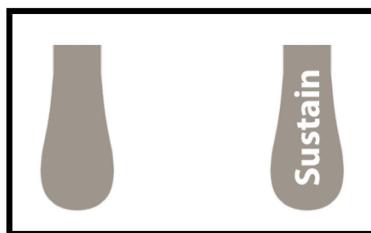
The Sustain Pedal

Very often in piano we need notes and chords to be held down longer than we can keep our fingers pressed down. This is where we begin looking at the pedals below our piano.

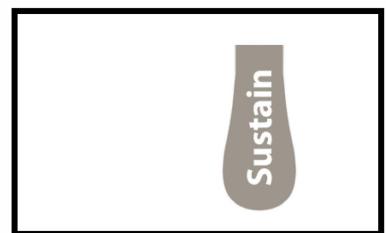
You may have one, two, or even three pedals at your feet. We're looking at the pedal most towards the right - or, if you only have one pedal, that is the one we're using. This is the **sustain pedal**.



Three Pedals



Two Pedals



One Pedal

The sustain pedal will keep the notes or chords being played pressed down, even when we raise our fingers off of the keys.

But it is easy to run into a different issue: now our notes can sustain for too long and begin to overlap. So how can we cancel out the chords we *don't* want, and sustain the ones we *do* want?

We need to develop a technique with our right foot to lift and press the sustain pedal down at certain times.

A good rule of thumb is that when our hands press

down on a new chord, our foot will quickly come up and press down again. This cancels out the previous notes from the chord as soon as our fingers press down for the next one, and then re-sustains our new notes.

For example, let's say we are moving from a C chord to a G chord. Our order would be:

Hands down on C
Pedal down to sustain C

Hands raise to change position
Hands set down for G and pedal raises
Pedal down again to sustain G

Hands raise to change position
Hands set down for C and pedal raises
Pedal down again to sustain C

... and so on. Remember to watch the corresponding video that goes along with this chapter for a clear example.

Just remember: When the hands go down for a new chord, the foot comes up and right back down.