

# A GUIDE ON HOW TO IMPROVE RELATIVE PITCH

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Have you ever wondered how do some people hear intervals or certain notes when they hear music? Some musicians hear better than others because of their training. Every skill requires extensive training. Although we all have a talent, we need to train it in order to get better.

This short guide will give you some ideas on how to start improving your relative pitch, being able to identify everything from notes, intervals, chords, to tonalities.



What do you do first?

How do you start?

Where do you start from?



These are questions I asked myself every time I had an ear training quiz, trying to figure out what to write on that staff paper.

Let's start by making a self-evaluation of what we know and what we don't. The most important part of ear training is the music theory aspect. Knowing all the intervals is a crucial part of learning to identify music. Hearing two notes might be easy but if one cannot identify the relationship between the them, then there is no connection and they cannot be placed in a key or on a scale. Recognizing intervals is a crucial way to improve your relative pitch.

Here is a chart to help you relate the interval with the number of steps each of them contains. (See chart on the right)

The way to start practicing and introducing these intervals is by analyzing familiar songs, tunes that are fairly simple and that you have heard before several times (for example Twinkle Twinkle Little Star). The very first two notes of this song contains the interval of a perfect fifth (D-A part of D major). This fifth is followed by two major seconds, A-B-B-A, and a descending chain of notes made of major and minor seconds. This example is fairly easy, getting an idea of how to use the tool of music analysis by intervals.

After getting a better sense of interval analysis, the next step is to implement a system for defining pitches. In most countries in Europe they are using solfege syllables such as Do, Re, Mi, Fa, etc. This system of assigning a syllable to a pitch has been successful for many years. The system is called *fixed do*.

<b>Interval Name</b>	<b>Number of Semitones</b>
Minor second	1
Major second	2
Minor third	3
Major third	4
Perfect fourth	5
Augmented fifth	6
Perfect fifth	7
Minor sixth	8
Major sixth	9
Minor seventh	10
Major seventh	11

*Do* will always be the pitch C no matter what key you are in. In the United States, most schools use the same system with the exception that they use *moveable do*. In any key you are, *do* will be the tonic of that key, no matter what pitch it is.

One exercise you could do with the use of solfege syllables is to sing a scale. Going forwards and backwards will help you picture the half and whole steps of the notes you are singing. If you play an instrument, even better! Start by playing the lowest scale on your instrument, going through and playing it slowly. Add another scale each week, either major or minor, making sure you think of the distance between each note you play.

If you get bored of playing major and minor scales, go ahead and try something new! I always like to play octatonic scales to challenge even more my ears and my technique. As a string player, trying to play octatonic scales is a great tool because I notice patterns on each string, which fingers are close together (friends) and which fingers are apart (enemies).

Here is a chart for violin I put together to give you an example, both with note names and solfege syllables.

**Octatonic scale  
Whole and half Step**

**Ascending:**

<b>G</b>	<b>A</b>	<b>Bb</b>	<b>C</b>	<b>Db</b>
<b>Eb</b>	<b>F</b>	<b>Gb</b>	<b>Ab</b>	
<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>Eb</b>
<b>F</b>	<b>G</b>	<b>Ab</b>	<b>Bb</b>	

**Descending:**

<b>Bb</b>	<b>Ab</b>	<b>G</b>	<b>F</b>	
<b>Eb</b>	<b>D</b>	<b>C</b>	<b>B</b>	<b>A</b>
<b>Ab</b>	<b>Gb</b>	<b>F</b>	<b>Eb</b>	
<b>Db</b>	<b>C</b>	<b>Bb</b>	<b>A</b>	<b>G</b>

**Ascending:**

<b>sol</b>	<b>la</b>	<b>sib</b>	<b>do</b>	<b>reb</b>
<b>mib</b>	<b>fa</b>	<b>solb</b>	<b>lab</b>	
<b>la</b>	<b>si</b>	<b>do</b>	<b>re</b>	<b>mib</b>
<b>fa</b>	<b>sol</b>	<b>lab</b>	<b>sib</b>	

**Descending:**

<b>sib</b>	<b>lab</b>	<b>sol</b>	<b>fa</b>	
<b>mib</b>	<b>re</b>	<b>do</b>	<b>si</b>	<b>la</b>
<b>lab</b>	<b>solb</b>	<b>fa</b>	<b>mib</b>	
<b>reb</b>	<b>do</b>	<b>sib</b>	<b>la</b>	<b>sol</b>

One technique that has worked in the past is to memorize the lowest note on your instrument. In case of the piano, memorizing middle C and in case you are a vocalist, memorizing the lowest and most comfortable note you can sing with full chest voice. Trying to play that note and repeatedly sing it over and over again, your memory starts recognizing that note and soon you will be able to sing that pitch without going to your instrument and playing it first. Then you can give yourself random notes on the piano or through a piano app for example, calculating the steps between the note you know and the one you gave yourself to identify. This simple exercise will make you fluent in recognizing different pitches, starting to associate them in a scale. Knowing just one note can help you figure out the others.



One exercise I always did was with the help of a tuning fork. If you hit the tuning fork of any kind of material, it gives you a pitch: F5. Once you place it on a surface, it will give you A4. Hitting the tuning fork over and over again, trying to memorize those two pitches is the first step to actually develop perfect pitch. Again, knowing one or two notes can help you discover the others. This



way, if you hear any kind of sound while outside, you can start calculating what you heard based on the note you precisely know, whichever that note may be.

Once you get to know one pitch, you can start thinking of harmonies. Listening to piano sonatas is a great way to start identifying tonalities. I prefer to listen to symphonies starting with all the Mozart, Haydn and Beethoven symphonies. Once I identify the key, I start focusing on the melody. Mozart's melodies are fairly simple and very catchy. You can start singing them in note names or solfege syllables, starting to think of the intervals between each of the notes. One step further from this point is to start writing those melodies down, training your melodic dictation, along with your rhythmic one.

Listening to classical music will always train your ears. Trying to identify the key of a tune is a great tool to sharpen this skill. Once you become comfortable with identifying keys, intervals and respectively notes, there is one more challenge that you can add to your plate: getting into the world of contemporary music. It might sound random, it might not make any sense, but this is exactly the right music for getting even better at

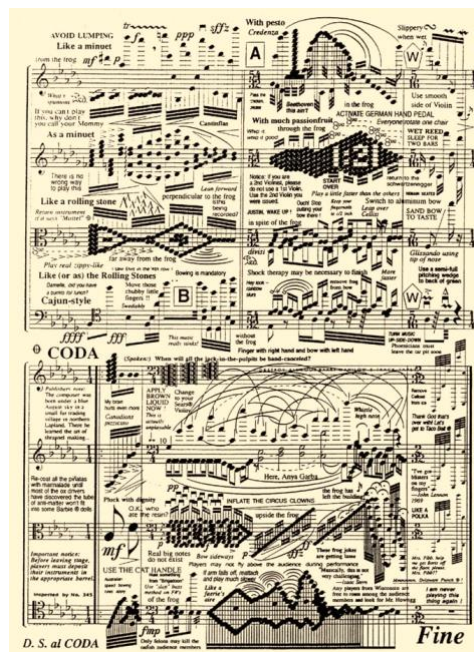
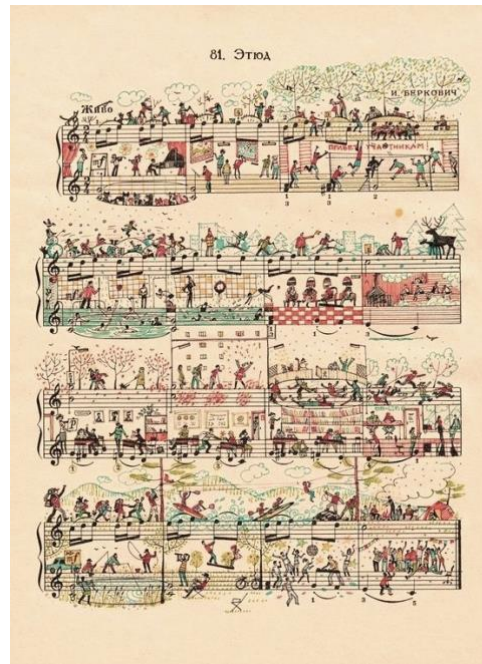


your aural skills. Now that classical music feels like second nature, one can anticipate what key comes next or what note for that matter. With contemporary music, one cannot anticipate what is coming because it takes us by surprise every single time. This is the greatest exercise you can possibly add to your to do list. Don't listen to just your instrument. Try listening to all the instruments of the orchestra, trying to get used to the different timbres and registers that they offer.

No matter how you approach it, you will always have to start small with simple melodies, a few notes at a time. Adding to much too soon will discourage you and you will give up before you even get really into it. I always recommend picking one note to sing over and over again, memorizing it. From there on it gets easier to figure out the rest. As they say, the rest is history. Always remember to have fun in the process and make it colorful!

Never forget to be realistic and train your ear a few minutes every day, an hour or two a week, not more than that. You would be surprised how many people get bored easily by doing the same thing over and over again. Set goals that are true to you and your needs and don't give up once the music gets harder.

If you feel up for it, visit [www.tonedear.com/absolute-perfect-pitch-test](http://www.tonedear.com/absolute-perfect-pitch-test) and test your hearing abilities with this quiz. You can select the amount of pitches you want and the number of questions. I would suggest to start small, 10 questions every other day. In the days you are not taking the quiz, practice in front of the piano, giving yourself different notes in all the octaves. If you start getting bored, you should increase to every day and possibly more than 10 questions. Don't hurt yourself! Take breaks often! You can find a study buddy and challenge yourselves to a month of ear training and see what happens.



You could and should definitely keep track of your progress and training to see what is your pace and how you can improve. That way you can always go back and look at what you have been doing.

There are many resources out there that can help you find the best training for your musical ear. I highly recommend taking the time to do some research and see what is out there. Also, if you are attending an institution, don't be afraid to reach out to your teachers and advisors. They are very much qualified to give you lots of advice and they are a great resource to use in your musical adventures.



Thank you for reading this short guide! I am always interested to know more about your ear training journey! Feel free to email me with any questions you might have!

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Good Luck!

