

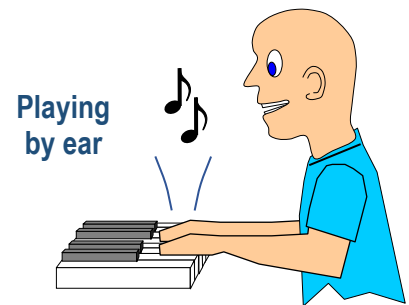
# Playing By Ear

Playing by ear means to pick out and play a song *without* written music. Most people assume that playing by ear is an inborn ability. But barring any hearing problems, *anyone* can do it!

In fact, you already play an instrument by ear—your voice! Of course, some of you would admit that you don't "play" your instrument very well! But the problem isn't always your singing; it's your *listening*, or more precisely, your lack of it.



When you first heard your voice on a tape recorder, you probably thought it sounded awful. To your surprise, others said it sounded just like you. Why the difference? Listeners hear only the vibrations that come *out* of you. But your ears also pick up the vibrations that come from *within* your head, so you sound different to yourself.



People singing along with portable-music players usually think they sound great. But because headphones prevent them from hearing their outer voices, they usually sound terrible to everyone else!

To sing well, you must listen to your voice's *external* vibrations, making corrections as needed. Perhaps you've seen images of singers in a recording studio holding a headphone to one ear and assumed they were listening to the music. In fact, they were listening to their *own* voices and making adjustments to ensure they were in tune.

Similarly, to play piano by ear, you must listen to the keys you press and make corrections as needed.

## Hearing Test

Below are two versions of a common song. One contains a wrong key. Play them both. Assuming you know the melody, if you can hear the wrong key, you *can* play by ear.

**Which version has a wrong key?**

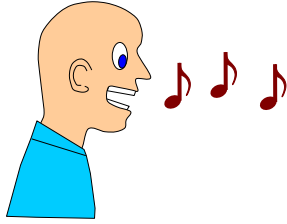
Version 1		Version 2	
	ROW		ROW
	ROW		ROW
	ROW		ROW
	YOUR		YOUR
	BOAT		BOAT

RH

Answer: The last key of the Version 2 is wrong.

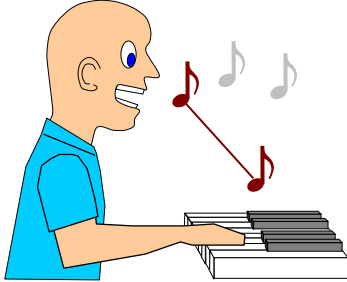
# How To Play By Ear

Playing by ear is a matching game—you match each tone of a song to a key on your piano.



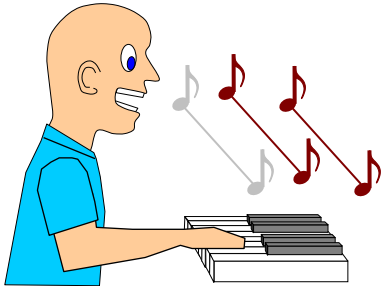
## Sing the MELODY

To play a song by ear, you must know the melody well enough to sing, hum, or “hear” it in your head.



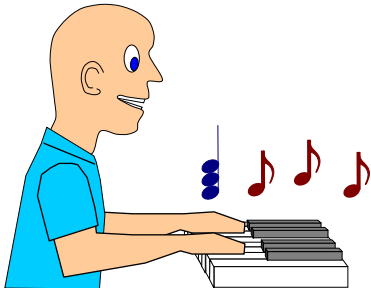
## Match the FIRST tone

Press piano keys until you find the tone that matches the first tone of the melody.



## Match the NEXT tone(s)

The next tone will be the *same*, *higher*, or *lower* than the previous tone. Match each remaining tone.



## Add CHORDS

After you pick out the melody with your right hand, add chords in the left hand for harmony.

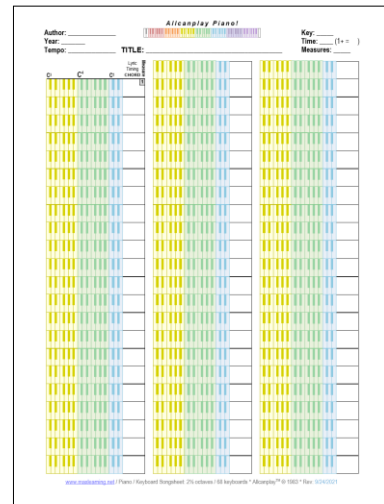
*At first, playing by ear can be a slow trial and error process. But in time the piano becomes an extension of your body, and your fingers will “know” which keys to press, just as your voice “knows” which tones to sing.*

## Write It Down

Although playing by ear means playing *without* written music, there are advantages to writing down songs you pick out by ear on a **RAINBOW** keyboard songsheet.

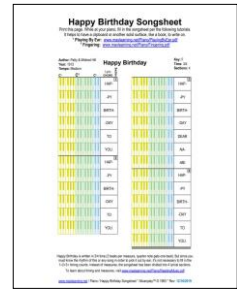
- You **won't forget** the keys you've already picked out.
- You can more easily add and **arrange chords**.
- You can replace the key marks with **finger letters**.
- You'll have a picture of the song that **others can play**.
- You'll be building a *free music collection*.

The highest and lowest keys of a song will determine whether you need to print the 2½ octave, 4 octave, or 88-key songsheet, which you'll find at [www.maxlearning.net/piano.htm#songsheets](http://www.maxlearning.net/piano.htm#songsheets)



# Happy Birthday – By Ear

For this tutorial, print the blank Happy Birthday songsheet at [www.maxlearning.net/Piano/HBDsongsheet.pdf](http://www.maxlearning.net/Piano/HBDsongsheet.pdf)



## Match Tones

### Find & Mark Section 1 Melody

You'd normally match a play-by-ear song to your personal voice range, but we'll start on Middle C so we can stay together for this tutorial. Since we don't yet know which specific fingers to use, we'll use dots (right hand) and x's (left hand) as placeholders to mark keys.

**Match the 1st Tone**  
Play Middle C and sing HAP- to match it. Use a pencil and lightly mark a tiny dot on C<sup>4</sup> your songsheet.

C<sup>3</sup> C<sup>4</sup> C<sup>5</sup>

HAP- 1

For this tutorial, we'll start on Middle C.

**Match the 2nd Tone**  
Sing HAP-PY.  
Is PY the same, lower, or higher than HAP? Press keys to see it's the same. Mark C<sup>4</sup> again.

HAP- 1

-PY

Low Same High

**Match the 3rd Tone**  
Sing HAP-PY BIRTH.  
Is BIRTH the same, lower, or higher than PY? Press keys to see it's 1 higher. Mark D<sup>4</sup>.

HAP- 1

-PY

BIRTH-

Too Low Just Right Too High

**Match the 4th Tone**  
Sing HAP-PY BIRTH-DAY.  
Is DAY the same, lower, or higher than BIRTH? Press keys to see it's 1 lower. Mark C<sup>4</sup>.

HAP- 1

-PY

BIRTH-

-DAY

Too Low Just Right Too High

**Match the 5th Tone**  
Sing HAP-PY BIRTH-DAY TO.  
Is TO the same, lower, or higher than DAY? Press keys to see it's 3 higher. Mark F<sup>4</sup>.

HAP- 1

-PY

BIRTH-

-DAY

TO

Too Low Just Right Too High

**Match the 6th Tone**  
Sing HAP-PY BIRTH-DAY TO YOU.  
Is YOU the same, lower, or higher than TO? Press keys to see it's 1 lower. Mark E<sup>4</sup>.

HAP- 1

-PY

BIRTH-

-DAY

TO

YOU.

Too Low Just Right Too High

### Find & Mark the Remaining Melody

Continue to pick out and fill in the remainder of the melody by ear. As you gain experience, you'll find that you won't have to sing from the beginning of the song or section each time to find the next key.

Compare your marked keys to those shown on the following page.

## Check Section 2-4 Melody Keys

Compare your pencil marks to the following and make changes where necessary.  
Slowly play the whole song through to make sure all your marked keys are correct.

	2	HAP-
		-PY
		BIRTH-
		-DAY
		TO
		YOU.
	3	HAP-
		-PY
		BIRTH-
		-DAY
		DEAR
		NA-
		-ME.
	4	HAP-
		-PY
		BIRTH-
		-DAY
		TO
		YOU.

## Add Chords

Chords are *named groups of keys* typically used to add harmony to the melody of a song. For playing by ear, we can typically restrict our choices to the Major (bright, happy) and minor (sad, wistful) chords shown below. But there are dozens of variations (sustained, sixth, seventh, diminished, augmented...) that can add modern sounds and sophistication to any melody.

To learn about chords, see the [Chords and Chord Variations lessons on the Allcanplay Piano web page.](#)

To build chords based on simple rules, download the [free Chord Constructor Chart.](#)

7 WHITE Root Major Chords		
All-White Family		
	C	C
	F	F
	G	G
Black-Middle Family		
	D	D
	E	E
	A	A
White-Black-Black Orphan		
	B	B

5 BLACK Root Major Chords		
All-Black Orphan		
	F#	F# / Gb
White-Middle Family		
	C#	C# / Db
	D#	D# / Eb
	G#	G# / Ab
Black-White-White Orphan		
	A#	A# / Bb

### Major Chords

It's easier to memorize the 12 Major chords when they are grouped into families based on their black & white key patterns.

### Minor Chords

To form the minor chord, lower the *middle* note of the Major chord one key.

## Find & Mark Section 1 Chords

We could cycle through all the Major and minor chords to see which ones fit Happy Birthday, but the melody keys can give us clues.

For example, since this melody includes C, E, and G keys, we could try a C chord.

Since we'll be playing chords with the left hand, we'll use tiny x's to mark their keys. Later, we can overwrite the x's with preferred finger letters.

1. Since it starts on a C key, play Section 1 with a C chord. It doesn't sound right.
2. Since it has a D, replay the melody with a D chord, which also doesn't sound right.
3. Since it has an F, try an F chord. (Invert it by playing C<sup>3</sup> instead of C<sup>4</sup>.) It works!

4. Pencil in an inverted F chord and a bold F beneath HAP-.

5. Play the melody with the F chord until it no longer sounds good—at lyric YOU. Try other chords until you find a fit.

6. Although it didn't at the start, the C chord works here!

## Find & Mark Section 2 Chords

Continue with the C chord from the end of Section 1. It sounds good until the lyric YOU.

Experiment to find that the song shifts back to the F chord. Pencil it in.

## Find & Mark Section 3-4 Chords

Continue to play the song with the last chord found. When it no longer sounds good, try another. Then pencil in the appropriate x's and chord names.

Like many standard songs, this one contains just 3 chords. We've already found two: F & C.

*Your challenge is to find the third chord!*

Since F & C are in the All-White Family, a good guess would be the G chord, but it's not.

Turns out it's a black-root chord, and if you notice, there is a Bb key in the melody.

Referring to the Black Root chord chart, three chords contain a Bb key: Gb, Eb, and Bb. But which one is the right chord?

Compare your marked chords to those shown on the following page.

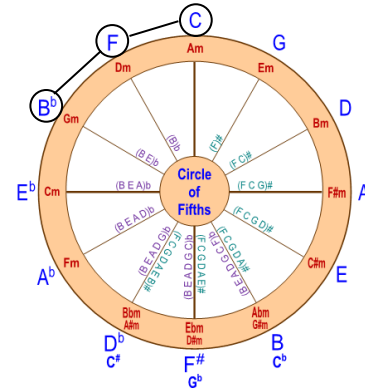
## Check Section 1-4 Chords

Did you find that B<sup>b</sup> was the missing chord played on *NA- -ME*? As with the F chord, it needed to be inverted so it didn't encroach on the melody.

We've penciled in each chord with all its keys. You may prefer to play only some of those keys. You'll also want to choose how often to play or hold (tie) each of the chords and whether to play them blocked, broken, or arpeggiated as described in the *Chords* lesson on the Allcanplay web page.

	HAP- <b>F</b>		HAP- <b>B<sup>b</sup></b>
	-PY		-PY
	BIRTH-		BIRTH-
	-DAY		-DAY
	TO		DEAR
	YOU. <b>C</b>		NA- <b>B<sup>b</sup></b>
	HAP- <b>2</b>		-ME.
	-PY		HAP- <b>4</b>
	BIRTH-		-PY
	-DAY		BIRTH- <b>F</b>
	TO		-DAY
	YOU. <b>F</b>		TO <b>C</b>
	YOU. <b>F</b>		YOU. <b>F</b>

Adding chords gets easier with practice, but you can find chord patterns more quickly using the “magical” Circle of Fifths.

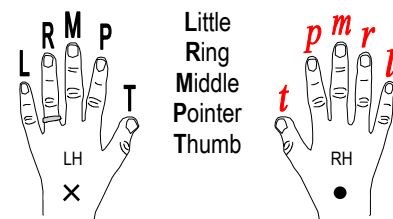


Using the Circle and other info from the *Practical Music Theory* lesson on the Allcanplay Piano web page, you'd learn that this version of *Happy Birthday* is in the Key of F, whose three main chords are F, C, and B<sup>b</sup>.

You'd also learn that many songs follow a I-IV-V7-I chord progression, making C7 a better fit for this song than C.

## Fingering

Because you'll be training your *muscle memory*, it helps to replace the dots and x's with finger letters so you learn to play the song with the *same* fingers *each* time.



**To continue the tutorial, open the *Fingering* lesson on the Allcanplay Piano web page to determine which fingers to use as well as a possible chord arrangement for *Happy Birthday*.**