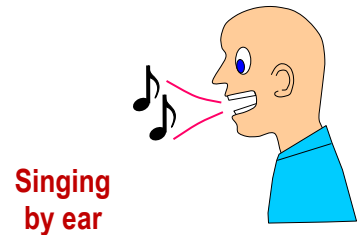


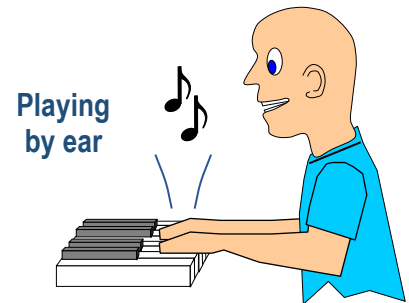
Playing By Ear

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 which version contains the wrong key, you *can* play by ear.

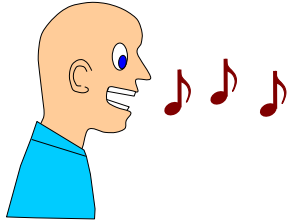
Which version has the wrong key?

	ROW
	ROW
	ROW
	YOUR
	YOUR
	BOAT
	RH
	ROW
	ROW
	ROW
	ROW
	YOUR
	BOAT

Answer: The last key of the second version is incorrect

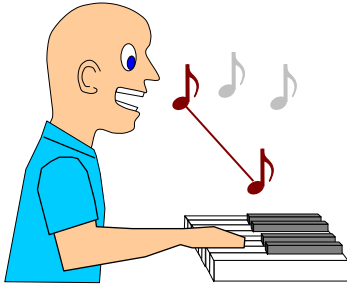
How To Play By Ear

Playing by ear is a matching game—you match each tone of a song to a key on your piano keyboard. At first, this may be a slow 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.



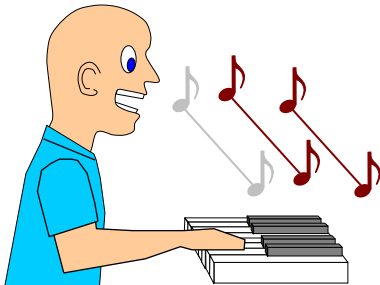
HUM or sing the melody

To play a song by ear, you must know it well enough to hum or sing it (or have someone hum or sing it for you). Try to start and stay within your natural voice range—singing outside of it strains your vocal cords and sounds bad.



Match the FIRST tone

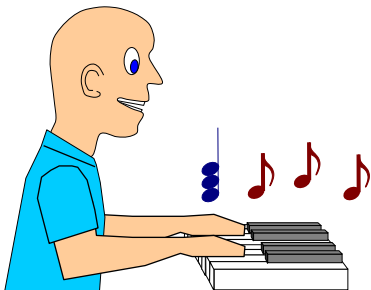
Press piano keys until you find the tone that matches your first hummed tone. This is a trial & error process that gets easier with experience.



Match the NEXT tone(s)

Hum the next tone and press keys until you match it. It will be the same, higher, or lower than the previous tone.

Continue to hum or sing and press keys until you've matched each tone in the song.



Add CHORDS

Adding chords for harmony is also a trial & error process, but here are some guidelines that may help.

- Try chords that contain melody keys.
Example: If the melody includes C, E, and G keys, try a C chord.
- Try chords of the same family.
Example: If a song has C & F it may also have a G chord (All-White family).
- Use the Key (scale) of the song & the Circle of Fifths to select chords (see the *Practical Music Theory* lesson www.maxlearning.net/Piano/PracTheo.pdf).
- If a chord sounds close but not quite right, visit www.maxlearning.net/Piano/ChordVariations.pdf and use the *Chord Constructor* rules to try minor, 7th, and other variations.

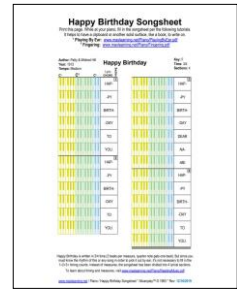
Write It Down

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**. The highest and lowest keys of a song will determine whether you need to print the 2½ or 4-octave version or an 88-key songsheet, which you can download from www.maxlearning.net/topics/piano.htm#songsheets

- By marking keys on a songsheet as you go, you **won't forget** the keys you've already picked out.
- You can more easily add and **arrange chords** on the songsheet to enhance the melody.
- You can experiment and replace the key marks with **finger letters** that work best for you.
- When finished, you'll have a picture of the song that **others can play**.
- You'll be building a *free music collection* of songs *you* like to play.

Happy Birthday – By Ear

For this tutorial, print the blank Happy Birthday songsheet at www.maxlearning.net/Piano/HBDsongsheet.pdf



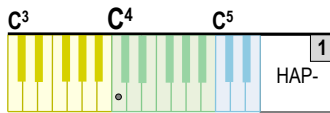
Match Tones

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 C⁴ your songsheet.

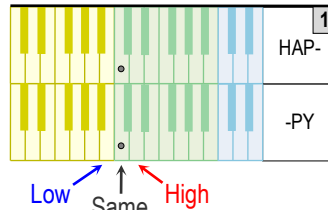


For this tutorial, we'll start on Middle C.

Match the 2nd Tone

Sing HAP-PY.

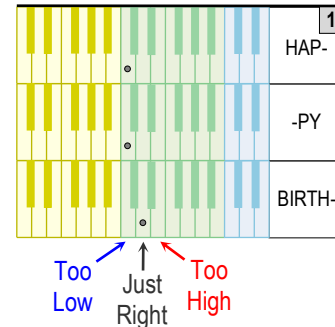
Is PY the same, lower, or higher than HAP? Press keys to see it's the same. Mark C⁴ again.



Match the 3rd Tone

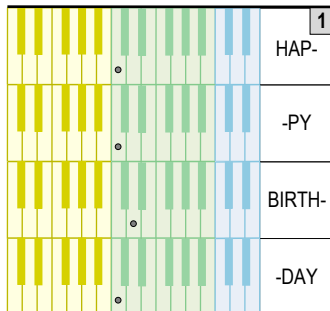
Sing HAP-PY BIRTH.

Is BIRTH the same, lower, or higher than PY? Press keys to see it's 1 higher. Mark D⁴.



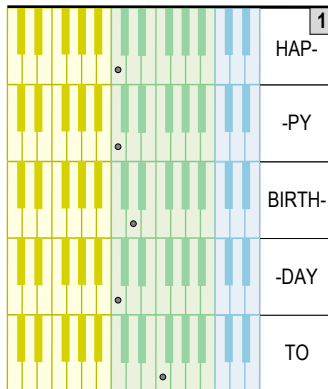
Match the 4th Tone

Sing HAP-PY BIRTH-DAY. Is DAY the same, lower, or higher than BIRTH? Press keys to see it's 1 lower. Mark C⁴.



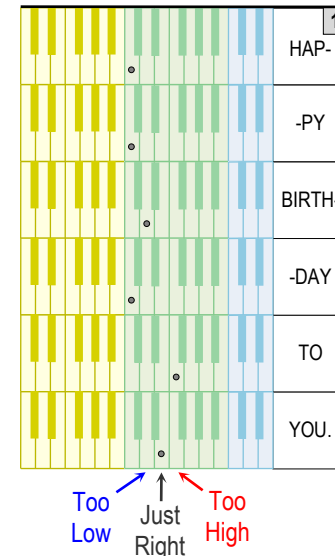
Match the 5th Tone

Sing HAP-PY BIRTH-DAY TO. Is TO the same, lower, or higher than DAY? Press keys to see it's 3 higher. Mark F⁴.



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 E⁴.



Mark the Remaining Melody

Continue to pick out and fill in the remainder of the melody by ear, then compare your markings to those on the following page. 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.

Section 2-4 Melody

Compare your pencil marks to the following and make changes where necessary.

Add Chords

If needed, review the *Chords* lesson: www.maxlearning.net/Piano/Chords.pdf

Mark Section 1 Chords

Using the melody keys as clues, play and pencil in chords to add harmony to the song.

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 C³ instead of C⁴.) 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. The C chord works, but C7 is even better. Pencil it in.

Mark the Remaining Chords

Like many standard songs, this one contains just 3 chords. We've already found two, F and C7. Your challenge is to find the 3rd chord. A good guess, since F & C are in the All-White Family, would be a G chord, but it's not. Turns out it's a flat chord, and if you notice (hint), there is a Bb key in Section 4.

As above, when a chord no longer sounds good as you continue through the melody, try the other two chords to see which works. Then pencil in the appropriate x's and chord names.

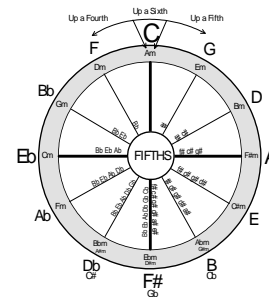
Compare your chords to those shown on the following page.

Section 1-4 Chords

- The F and B^b chords were inverted so they wouldn't encroach on the melody area.
- The chords are shown with *all* their keys. You may prefer to keep and play all keys or only some.
- 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. In the *Fingering* lesson that follows, you'll determine which fingers to use and learn one possible chord arrangement.

	HAP- F		HAP-
	-PY		-PY
	BIRTH-		BIRTH-
	-DAY		-DAY
	TO		DEAR
	YOU. C7		NA- B ^b
	HAP-		-ME.
	-PY		HAP-
	BIRTH-		-PY
	-DAY		BIRTH- F
	TO		-DAY
	YOU. F		TO C7
	YOU. F		YOU. F

Adding chords gets easier with practice, but you can often find chords more quickly using the Circle of Fifths.



Circle of Fifths

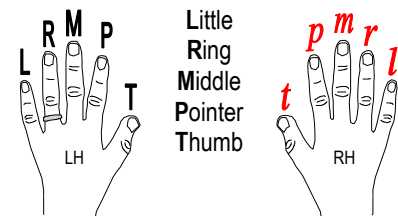
Using the Circle and other info from the *Practical Music Theory* lesson, you'd learn that this version of *Happy Birthday* is in the Key of F, whose three main chords are F, C, and B^b.

www.maxlearning.net/Piano/PracTheo.pdf

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's important to replace the dots and x's with finger letters as soon as possible so you can play the song with the *same* fingers *each* time.



Follow the *Fingering* lesson to figure out the fingers that work best as well as a possible chord arrangement for *Happy Birthday*.

www.maxlearning.net/Piano/Fingering.pdf