



Pitch Collections, Scales, and Major Keys

Chromatic vs. Diatonic

- ▶ Examples 3.1-3.3
- ▶ Chromatic (from Greek word for color)—a 12 note pitch class collection
- ▶ Diatonic—a 7 note pitch class collection

Scales

- ▶ Chromatic scale—an ordered chromatic pitch class collection—made up entirely of half steps
- ▶ Major scale—a specific type of ordered diatonic pitch class collection—pattern is W W H W W W H
- ▶ The location of the half steps within a major scale help us orient ourselves aurally. They help us “find” the key.
- ▶ There are 12 major scales (one beginning on each pitch) whereas there is only 1 chromatic scale.
- ▶ A major scale must use each of the seven pitch class letter names.

Scale Degrees

- ▶ Each pitch of a scale is known as a scale degree.
- ▶ The first degree of a scale is known as the tonic and is generally repeated one octave higher at the top of the scale.
- ▶ You can use numbers and/or solfege syllables to refer to scale degrees (see ex 3.6)

Labeling Scale Degrees--Practice

Mary had a little lamb

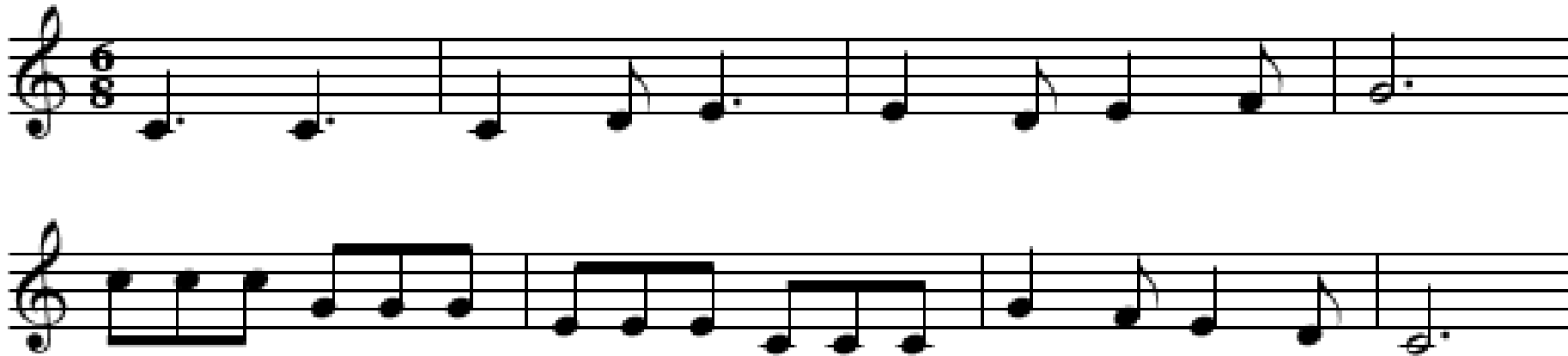
anon. (England)



From Musica Viva - <http://www.musicaviva.com>
the Internet center for free sheet music downloads.
www.abcnotation.com/tunes

Labeling Scale Degrees--Practice

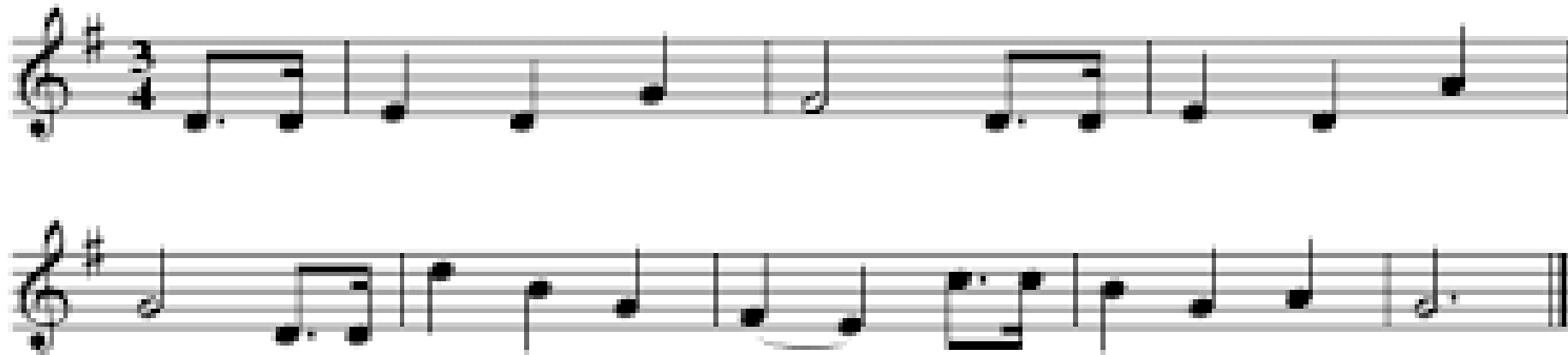
Row, Row, Row your Boat



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Labeling Scale Degrees--Practice

Happy Birthday to You



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Constructing Major Scales

1. Write the given pitch (tonic) on the staff.
2. Write pitches with no accidentals on every line and space from the given pitch up to and including the same pitch class an octave higher, i.e. from middle C to the next highest C.
3. Label the space between each pair of pitches from bottom to top with a W for a whole step and H for a half step.
4. Add accidentals as needed to match the whole steps and half steps you've labeled.
5. Accidentals must either be all flats or all sharps...not a mixture!

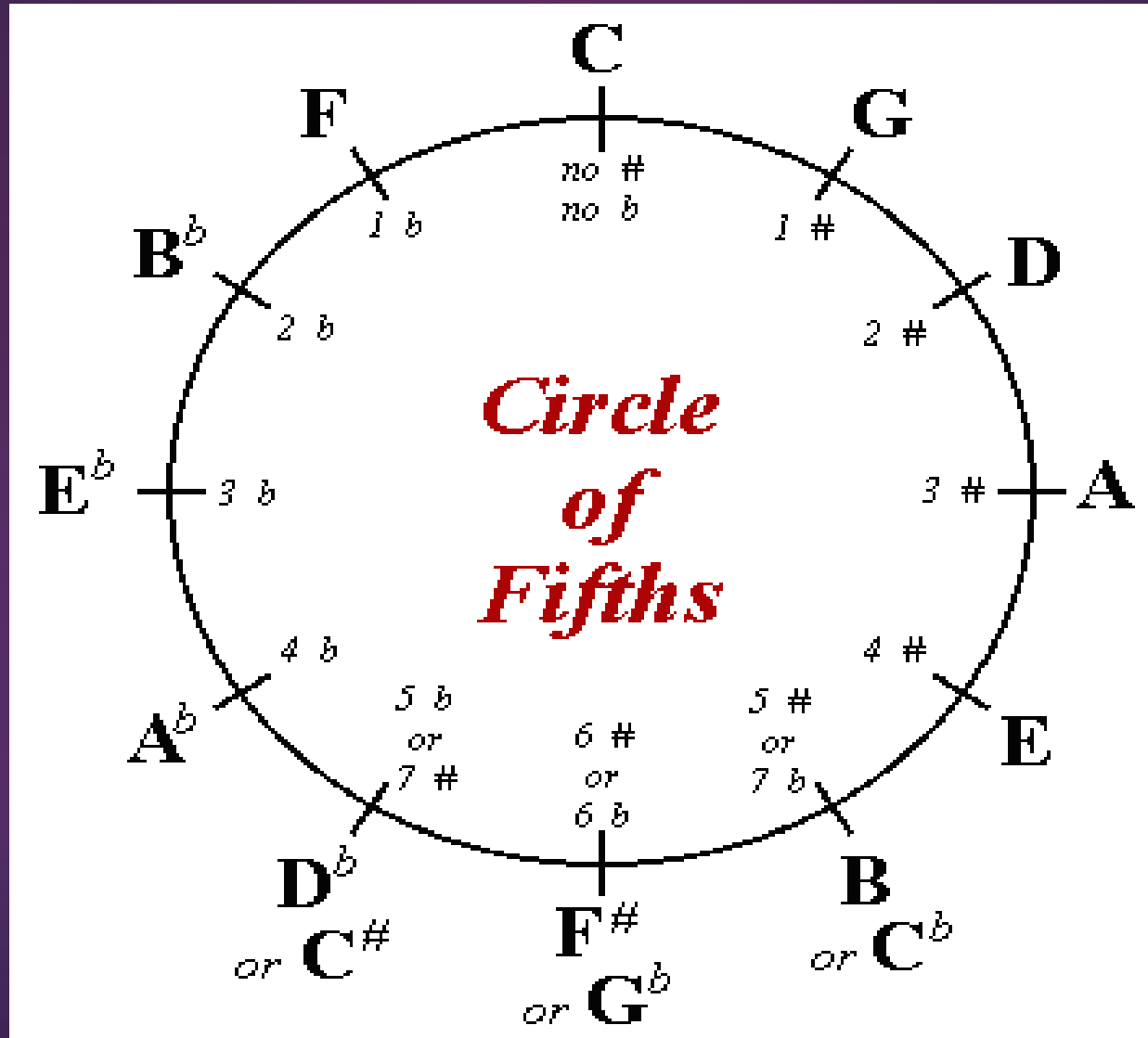
Spelling Chromatic Scales

- ▶ Notes are raised going up the scale (use sharps) and lowered going down the scale (use flats)
- ▶ Use the simplest spelling for a pitch (F not E#)
- ▶ Unlike major scales, letters may be used more than once within the scale.

Key Signatures

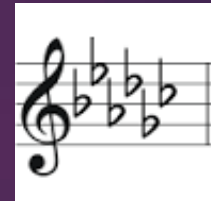
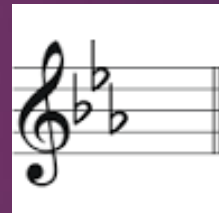
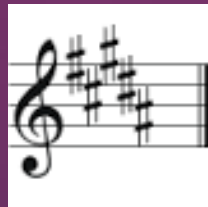
- ▶ Shows what flats and sharps are to be used within a piece
- ▶ Placed at the beginning of each line right after the clef
- ▶ Key signs together with the pitch collection of a piece and the relationship of pitches within the piece determine what key the piece is in
- ▶ Being “in a key” :
 - ▶ Pitches drawn primarily from a single scale
 - ▶ Pitches have predictable relationships of stability and instability, i.e. tonic vs. the seventh scale degree

Circle of 5ths



Identifying Keys from Key Signatures

- ▶ Sharp Keys: Find the last sharp. Go up 1 half step from that sharp.
- ▶ Flat Keys: Count down 4 steps from the last flat in the key signature OR just look at the next to last flat...it's that simple!!
- ▶ Exceptions: F Major and C Major



What's the key?

Check the key signature.

Check the first and last note.

Check beginning and end of piece for note patterns suggested by the key signatures (5-1, or 7-1)

Compare ex 3.13 and 3.14

Scale Degree Names

- ▶ 1—Tonic—the tone on which a scale is built
- ▶ 2—Supertonic—above tonic
- ▶ 3—Mediant—in the median (or middle) position between 1 and 5
- ▶ 4—Subdominant—below dominant
- ▶ 5—Dominant—its musical function “dominates” tonal music
- ▶ 6—Submediant—lies between the tonic and 6
- ▶ 7—Leading tone—tendency to lead upward to tonic

Major Pentatonic Scale

- ▶ A five note ordered pitch class collection that begins on the first 3 notes of a major scale
- ▶ Many folk songs and children's songs are built on this type of scale.
- ▶ Composed of scale degrees 1, 2, 3, 5, 6
- ▶ Interval pattern is W W 1 ½ W

Odds and Ends

- ▶ Practicing and memorizing scales can help you develop technical facility, sightreading ability and improvisational skills
- ▶ Common scale segments:
 - ▶ Major tetrachord: first 4 notes of the major scale (W W H)
 - ▶ Major pentachord: first 5 notes of the major scale (W W H W)