

- Write “Lady Come” on the staff by associating the solfège syllables with note names in the D major pentachord.



4.4 Major Hexachord Scales and Melodies

Sing, Memorize, and Analyze



11

Internalizing Music

- Listen to “Twinkle, Twinkle, Little Star” on Track 11. Memorize the song.
- Sing “Twinkle, Twinkle, Little Star” while you clap the melodic contour.
- Stand and face a partner. Sing “Twinkle, Twinkle, Little Star” while you both clap the melodic contour.

Analyzing What You Hear

- Sing “Twinkle, Twinkle, Little Star” with rhythm syllables.
- Pair off in the class. Facing your partner, sing “Twinkle, Twinkle, Little Star” and clap the melodic contour.
- Sing with rhythm names while clapping and showing the melodic contour.
- Sing the lowest pitches in the song.
- Sing the highest pitches in the song.
- Sing the range of notes from the lowest note to the highest note.
- Sing the range of notes from the highest note to the lowest note.

Constructing a Melodic Representation from Memory

- As you sing “Twinkle, Twinkle, Little Star,” draw a representation of the pitches in each phrase.
- As you point to your representation, sing the melody with rhythm syllables.

Music Theory

Describing What You Hear with Syllables

We can describe the pitches in “Twinkle, Twinkle, Little Star” with solfège syllables. Notice that the melodic movement of phrases one and five begins with a leap, but the rest of this melody moves mostly in steps.

Twinkle, Twinkle, Little Star

Phrase 1 ● ●
d d s s l l s

Phrase 2 ● ● ● ● ● ● ● ●
f f m m r r d

Phrase 3 ● ● ● ● ● ● ● ●
s s f f m m r

Phrase 4 ● ● ● ● ● ● ● ●
s s f f m m r

Phrase 5 ● ● ● ● ● ● ● ●
d d s s l l s

Phrase 6 ● ● ● ● ● ● ● ●
f f m m r r d

La will be represented by the solfège syllable *l*. When we arrange the pitches of “Twinkle, Twinkle, Little Star” in ascending order, we discover that there are six adjacent pitches or scale degrees. We can label these pitches with solfège syllables *d-r-m-f-s-l* or numbers $\hat{1}-\hat{2}-\hat{3}-\hat{4}-\hat{5}-\hat{6}$ respectively. We refer to this collection of notes as a **major hexachord scale**. The solfège inventory is *d-r-m-f-s-l*.

Notating What You Hear with Solfège Syllables

We can write “Twinkle, Twinkle, Little Star” in rhythm notation with solfège syllables.

$\frac{2}{4}$ *d d s s l l s* *f f m m r r d*

s s f f m m r *s s f f m m r*

d d s s l l s *f f m m r r d*

The following shows the whole- and half-step relationships of the C major hexachord scale on the staff. Look at the whole-step (W) and half-step (H) pattern.



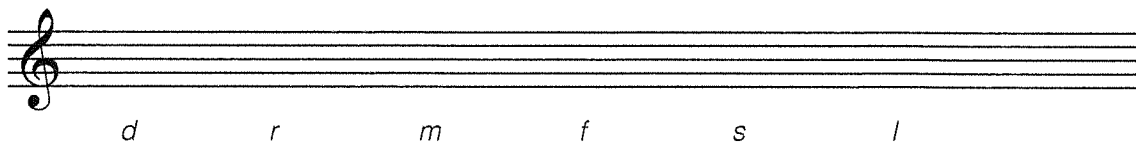
The first degree of the scale is called the tonic note or keynote. There is a half step between the third and fourth degree of the scale. There is a whole step between all other degrees of the scale (one and two, two and three, four and five, five and six).

4.6 Writing a Major Hexachord Scale and Melody Using Accidentals

Writing a Major Hexachord Scale Using Accidentals

The following is a procedure for writing any major hexachord scale on the staff using accidentals. We will write this example as a D major hexachord scale in the treble clef.

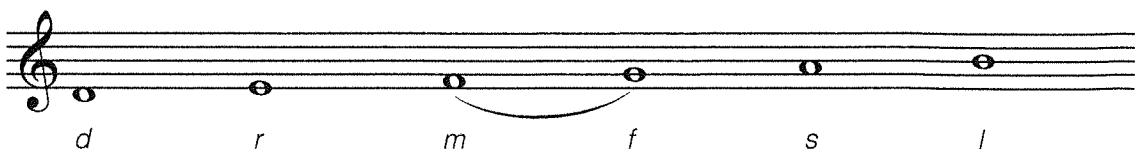
1. Write the solfège syllables *d-r-m-f-s-l* beneath the staff for the major hexachord scale.



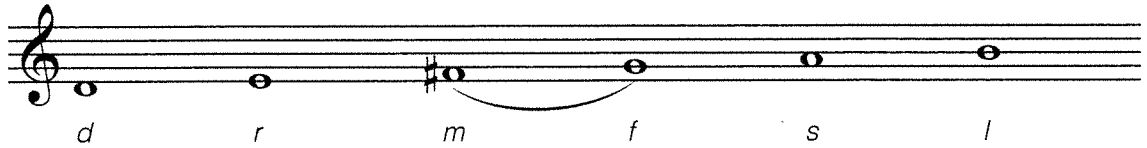
2. Place a note on the staff above each solfège syllable. For a major hexachord scale we use six adjacent notes; therefore, the pitches should also be adjacent on the staff. The first procedure is to remember the sequential alphabetical spelling of scales, then simply put the notes in order. For example, if the tonic note is C, write C-D-E-F-G-A, or if the tonic note is D, write D-E-F-G-A-B. We will write this major hexachord scale beginning on D.



3. Mark the half step between scale degrees three and four and their corresponding pitches on the staff. Remember the intervals between the other degrees will be whole steps.



Check the intervallic relationship between the solfège syllables and the pitch names to insure the correct intervallic distance between the notes. In this case, we have to raise the F to an F-sharp to make the distance between *r* and *m* a whole step. That's the only alteration we need to make in the D major hexachord scale.



Writing a Major Hexachord Melody Using Accidentals

The following is a procedure for writing any major hexachord melody on the staff using accidentals. For an example we will write “Twinkle, Twinkle, Little Star” in the key of D major hexachord in treble clef using accidentals. Remember, music based on a particular scale is said to be in the key of that scale. If music is built on the C major scale, then the work is in the key of C major and the tonic of the music is C. We will write “Twinkle, Twinkle, Little Star” on the staff in the key of D.

1. Write the D major hexachord scale on the staff using accidentals.



2. Write the solfège syllables below the scale.



3. Write “Twinkle, Twinkle, Little Star” on the staff by associating the solfège syllables with note names in the key of D major. Note the placement of accidentals.



We can say that “Twinkle, Twinkle, Little Star” is written in the key of D major, as it uses the notes of the D major scale. The tonic of this piece is D.

Listening

Listening



The following listening examples include subsets of the major pentachord scale. Can you sing the themes using solfège syllables? Can you write the themes of some of these examples using staff notation or stick notation with solfège syllables?

“Ah! Vous dirai-je maman,” Variations on “Twinkle, Twinkle, Little Star” K. 265, by Wolfgang Amadeus Mozart (1756–1791).

“Variations on a Nursery Song,” Op. 25, by Ernő Dohnányi (1877–1960).

“Maypole Dance,” No. 2 from *44 Duets for Two Violins* by Béla Bartók (1882–1945).

“Children at Play,” *For Children* Vol. 1, No. 1, by Béla Bartók (1882–1945).

For Children Vol. 2, Nos. 2 and 3, by Béla Bartók (1882–1945).

4.7 Major Pentatonic Scales and Melodies

Sing, Memorize, and Analyze



12

Internalizing Music

1. Listen to “Rocky Mountain” on Track 12. Memorize the song.
2. Sing “Rocky Mountain” while you clap the melodic contour.
3. Stand and face a partner. Sing “Rocky Mountain” while you both clap the melodic contour.

Analyzing What You Hear

1. Sing “Rocky Mountain” with rhythm syllables.
2. Pair off in the class. Facing your partner, sing “Rocky Mountain” and clap the melodic contour. (Imagine that you are pointing to the shape of the melody on the board without looking at it.)
3. Sing with rhythm names while clapping and showing the melodic contour.
4. Sing the lowest pitches in the song.
5. Sing the highest pitches in the song.
6. Sing the range of notes from the lowest note to the highest note.
7. Sing the range of notes from the highest note to the lowest note.

Constructing a Melodic Representation from Memory

1. As you sing “Rocky Mountain,” draw a representation of the pitches; try to indicate the duration of each sound.
2. Point to your representation as you sing “Rocky Mountain” with rhythm syllables.

Music Theory

Describing What You Hear with Solfège Syllables

Rocky Mountain

Phrase 1

d d d m d d d m d d m s s

Phrase 2

l s m d l s m d m m r r d

Phrase 3

d m s l m m r d r

Phrase 4

d m s l m m r r d

When we arrange the pitches of “Rocky Mountain” in ascending order, we discover that there are five pitches. The solfège inventory of these pitches is *d-r-m-s-l*. There is a skip between the third and fourth notes. This skip is made up of three half steps and creates a **minor-third** interval (m3). We refer to this collection of notes as a **major pentatonic scale**.

Notating What You Hear with Solfège Syllables

We can write “Rocky Mountain” in rhythm notation with solfège syllables.

2/4 *d d d m | d d d m | d d m s s*
l s m d | l s m d | m m r r d
d m s l | m m r d r
d m s l | m m r r d

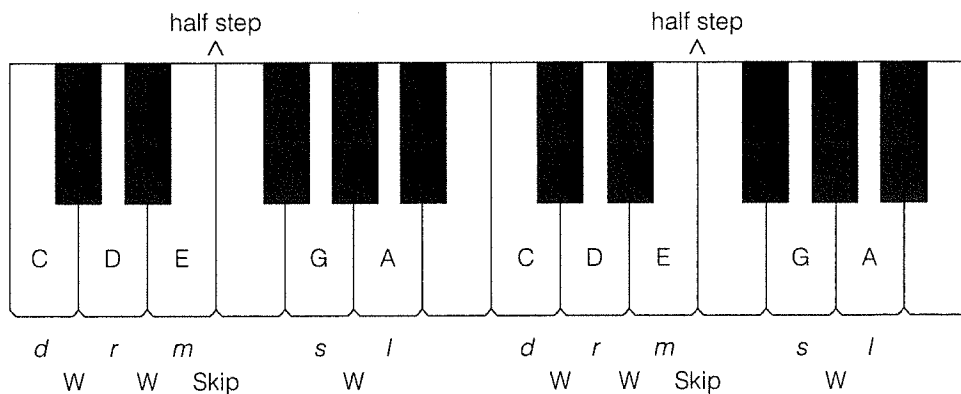
Notating What You Hear on the Staff

We can write “Rocky Mountain” on the staff beginning on C as follows:

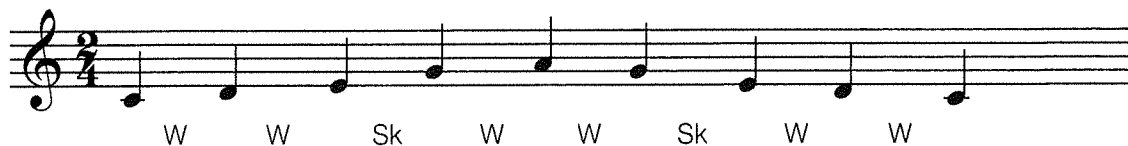
do mi do mi do mi so
la so mi do x mi re do
do mi so la mi re do re
do mi so la mi re do

4.8 Determining the Size and Quality of Intervals Between the Notes of the Major Pentatonic Scale

The following shows the whole-step and skip relationships of the pentatonic scale on the keyboard beginning on C.



The following shows the relationships of the pentatonic scale on the staff. Look at the whole step (W) and skip (Sk) of the C major pentachord scale.

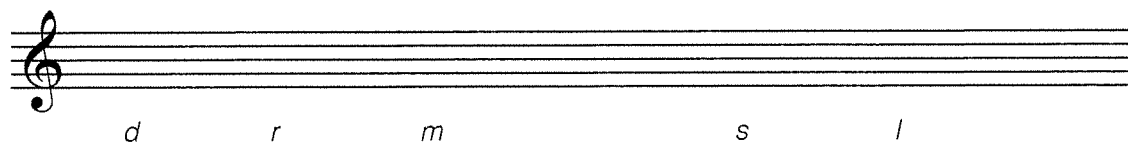


4.9 Writing a Major Pentatonic Scale and Melody Using Accidentals

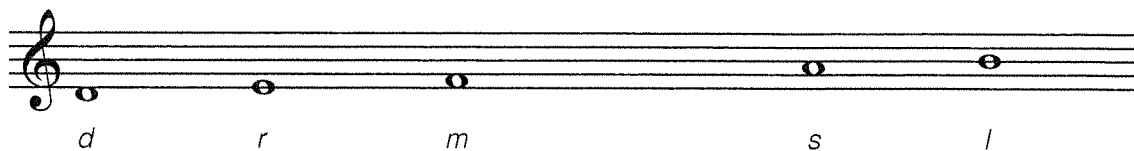
Writing a Major Pentatonic Scale on the Staff Using Accidentals

The following is a procedure for writing any major pentatonic scale on the staff using accidentals. We will write this example as a D major pentatonic scale in the treble clef.

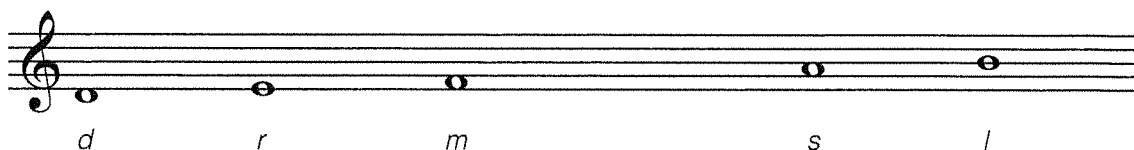
1. Write the solfège syllables *d-r-m-s-l* beneath the staff for the major pentatonic scale.



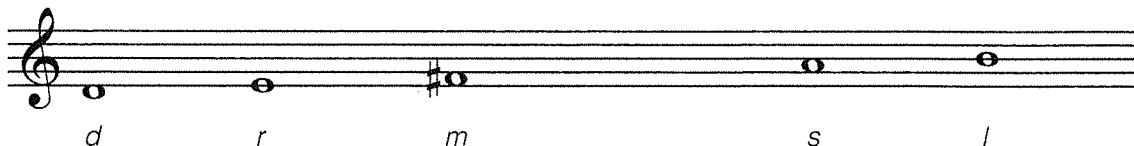
2. Place a note on the staff above each solfège syllable. For a major pentatonic scale we use five notes. There is no half step. The easiest way to think about the major pentatonic scale is to simply omit the *f* from the major hexachord scale. The first procedure is to put the five notes *d-r-m-s-l* on the staff. For example, if the tonic note is C, write C-D-E-G-A, or if the tonic note is D, write D-E-F-A-B. We will write this major pentatonic scale beginning on D.



3. There is no half step in the major pentatonic scale. The easiest way to write a pentatonic scale is to think *d-r-m-f-s-l* and omit the *f*. The distance between the intervals *m* and *s* is a minor third.



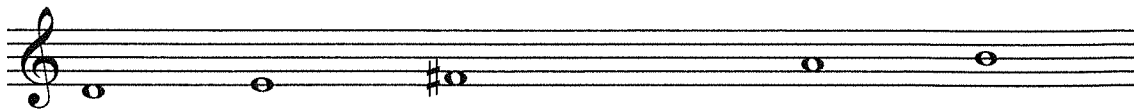
4. Check the intervallic relationship between the solfège syllables and the pitch names to insure the correct intervallic distance between the notes. In this case, we have to raise the F to an F-sharp to make the distance between *r* and *m* a whole step. That's the only alteration we need to make in the D major pentatonic scale.



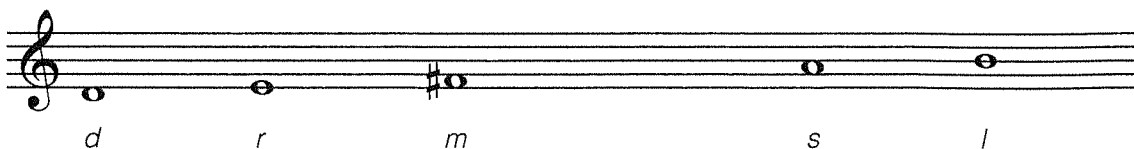
Writing a Major Pentatonic Melody Using Accidentals

The following is a procedure for writing a major pentatonic melody on the staff using accidentals. For an example, we will write "Rocky Mountain" in the D major pentatonic scale in treble clef using accidentals.

1. Write the D major pentatonic scale on the staff using accidentals.



2. Write the solfège syllables below the scale.



3. Write “Rocky Mountain” on the staff by associating the solfège syllables with note names in the key of D major.



- We can say that “Rocky Mountain” is written in the key of D major pentatonic, as it uses the notes of the D major pentatonic scale. The tonic of this piece is D.

Key Terms and Concepts

Melody	Tonic Note	Sequence
Step	Solfège Syllables	Major Hexachord Scale
Skip	Solfège Inventory	Minor Third (m3)
Shape	Major Pentachord Scale	Major Pentatonic Scale
Contour	Interval	
Pitch	Major Seconds (M2)	
Scale	Minor Seconds (m2)	