

# "UPSIDE-DOWN" SCALE STUDIES FOR IMPROVISATION

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This collection contains the exact same scales as Craig Fraedrich's *Scales for Improvisation*, but by using different patterns it treats the entire study much differently than you are accustomed to seeing.

The late, great, Dr. Donald S. Reinhardt ("Doc") used to recommend for brass players that they practice scales from top to bottom and back up again. This way you (1) play the higher notes twice as often as the lower notes, and (2) learn to play lower notes on a "higher" setting rather than trying to play higher notes on a "lower" setting. That is, many players develop their ranges more easily when they prepare to play high notes and use that embouchure setting to play low notes rather than the opposite.

We have all been taught our scales from the bottom up and most of us "visualize" our scales that way. Craig's resource is absolutely invaluable for that reason: all those scales are presented in a way that's easier for us to learn, memorize, and visualize.

But we can also practice scales in a manner designed to build embouchures, and that's precisely what this "Upside Down" Scale Studies for Improvisation collection is all about. Thanks, Craig, and thanks, Doc Reinhardt!

### Tips for practicing this material

1. Use a metronome. Set it slow enough so that you don't miss any notes; over time, gradually speed it up.
2. Practice with a partner; this permits you to rest at least as much as you play. Practice two bars at a time; you play two bars and your partner plays those same two bars, then you play the next two bars and so on.

© 2010 Rich Willey. A trumpet-specific, embouchure-building supplement to Craig Fraedrich's *Scale Studies for Improvisation*. NOT FOR SALE

If you don't already have it, Craig Fraedrich's free PDF download *Scale Studies for Improvisation* is available at: <http://craigfraedrichmusic.com/Contents.htm>

For most students, seeing and playing all these scales from both viewpoints will help the student internalize them rightside-up and upside-down.

Interestingly, many players when learning their scales may play them flawlessly on the way up and then stumble on the way down. Therein lies another advantage of learning them upside-down. Getting right to the descending scale first will "cure" that tendency.






Incidentally, you are encouraged to play any or all of these studies up an octave. These are mostly presented in the lowest possible octave (for trumpet) so you have "room to grow" above that.

Also, since we are "Reinhardtizing" Craig's studies, here's a tip for maximizing the embouchure response factor, especially early in your playing day: start with breath attacks. When we get the tongue out of the way and let the air start the lip vibration, we enhance the response factor of our embouchure. After playing many using breath attacks, add the tongue as a "refining factor" and then alternate between breath attacks and some tongued attacks to keep the vibrating points supple.

About dynamics: make your starting note a mezzo forte to a forte (no more than that), and decrescendo when you descend so that your lowest notes are your softest notes (*p* or *pp*). Then crescendo from the low note back to your starting dynamic level. This develops aperture control which in turn helps you develop range.

Craig presents his studies with instructions for using swing articulations, and that's great. Since this is, after all, a Reinhardt-influenced version, we can also offer....

### Donald S. Reinhardt's Twelve Standard Articulations:

1. 	8. 
2. 	9. 
3. 	(9) 
4. 	10. 
5. 	11. 
6. 	12. 
7. 	

*Rich Willey*

Perfecting short phrases narrows your focus and permits rapid progress. Team practicing gets you "honest," too.

3. Occasionally, memorize each two bar phrase before you move on (be able to play it with your eyes closed).

4. Record yourself practicing often, and listen to your recordings from time to time.

5. Treat scale practice as fun, not something boring.

## Ionian Mode (Major Scale)

1

2

# Ionian Mode (Major Scale)

**3**

**4**

# Ionian Mode (Major Scale)

5

6

# Dorian Mode

The image displays two exercises, labeled 1 and 2, for the Dorian mode. Each exercise consists of two lines of music, each line containing five staves. The music is written in 4/4 time and features a sequence of chords and melodic lines. The chords are handwritten in black ink above the staves. Exercise 1 covers measures 1 through 24, and Exercise 2 covers measures 25 through 48. The chords for Exercise 1 are: Cm7, Fm7, Bbm7, Ebm7, Abm7, C#m7, F#m7, Bm7, Em7, Am7, Dm7, and Gm7. The chords for Exercise 2 are: Cm7, Fm7, Bbm7, Ebm7, Abm7, C#m7, F#m7, Bm7, Em7, Am7, Dm7, and Gm7. The melodic lines are written in a single treble clef on each staff, with measure numbers 1 through 48 indicated at the beginning of each measure.

## Dorian Mode

3

4

# Dorian Mode

5

1 2 3 4

5 6 7 8

9 10 11 12

13 14 15 16

17 18 19 20

21 22 23 24

6

1 2 3 4

5 6 7 8

9 10 11 12

13 14 15 16

17 18 19 20

21 22 23 24





# Phrygian Mode

3

1 Cm7 Fm7  
2 Bbm7 Ebm7  
3 G#m7 C#m7  
4 F#m7 Bm7  
5 Em7 Am7  
6 Dm7 Gm7  
7 Cm7 Fm7  
8 Bbm7 Ebm7  
9 G#m7 C#m7  
10 F#m7 Bm7  
11 Em7 Am7  
12 Dm7 Gm7  
13 Cm7 Fm7  
14 Bbm7 Ebm7  
15 G#m7 C#m7  
16 F#m7 Bm7  
17 Em7 Am7  
18 Dm7 Gm7  
19 Cm7 Fm7  
20 Bbm7 Ebm7  
21 G#m7 C#m7  
22 F#m7 Bm7  
23 Em7 Am7  
24 Dm7 Gm7

4

1 Cm7 Fm7  
2 Bbm7 Ebm7  
3 G#m7 C#m7  
4 F#m7 Bm7  
5 Em7 Am7  
6 Dm7 Gm7  
7 Cm7 Fm7  
8 Bbm7 Ebm7  
9 G#m7 C#m7  
10 F#m7 Bm7  
11 Em7 Am7  
12 Dm7 Gm7  
13 Cm7 Fm7  
14 Bbm7 Ebm7  
15 G#m7 C#m7  
16 F#m7 Bm7  
17 Em7 Am7  
18 Dm7 Gm7  
19 Cm7 Fm7  
20 Bbm7 Ebm7  
21 G#m7 C#m7  
22 F#m7 Bm7  
23 Em7 Am7  
24 Dm7 Gm7

# Phrygian Mode

5

1 *Cm<sup>7</sup>* 2 3 *Fm<sup>7</sup>* 4 5 *Bbm<sup>7</sup>* 6 7 *Ebm<sup>7</sup>* 8 9 *G#m<sup>7</sup>* 10 11 *C#m<sup>7</sup>* 12

13 *F#m<sup>7</sup>* 14 15 *Bm<sup>7</sup>* 16 17 *Em<sup>7</sup>* 18 19 *A<sup>7</sup>m* 20 21 *Dm<sup>7</sup>* 22 23 *Gm<sup>7</sup>* 24

6

1 *Cm<sup>7</sup>* 2 3 *Fm<sup>7</sup>* 4 5 *Bbm<sup>7</sup>* 6 7 *Ebm<sup>7</sup>* 8 9 *G#m<sup>7</sup>* 10 11 *C#m<sup>7</sup>* 12

13 *F#m<sup>7</sup>* 14 15 *Bm<sup>7</sup>* 16 17 *Em<sup>7</sup>* 18 19 *A<sup>7</sup>m* 20 21 *Dm<sup>7</sup>* 22 23 *Gm<sup>7</sup>* 24

# Lydian Mode

1

2

# Lydian Mode

**3**

**C $\Delta$**  **F $\Delta$**

**B $\flat$  $\Delta$**  **E $\flat$  $\Delta$**

**A $\flat$  $\Delta$**  **D $\flat$  $\Delta$**

**F $\sharp$  $\Delta$**  **B $\Delta$**

**E $\Delta$**  **A $\Delta$**

**D $\Delta$**  **G $\Delta$**

**4**

**C $\Delta$**  **F $\Delta$**

**B $\flat$  $\Delta$**  **E $\flat$  $\Delta$**

**A $\flat$  $\Delta$**  **D $\flat$  $\Delta$**

**F $\sharp$  $\Delta$**  **B $\Delta$**

**E $\Delta$**  **A $\Delta$**

**D $\Delta$**  **G $\Delta$**

# Lydian Mode

5

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

6

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

## Mixolydian Mode

1

2

# Mixolydian Mode

3

1 C7 2 3 F7 4

5 Bb7 6 7 Eb7 8

9 Ab7 10 11 Db7 12

13 F#7 14 15 B7 16

17 E7 18 19 A7 20

21 D7 22 23 G7 24

4

1 C7 2 3 F7 4

5 Bb7 6 7 Eb7 8

9 Ab7 10 11 Db7 12

13 F#7 14 15 B7 16

17 E7 18 19 A7 20

21 D7 22 23 G7 24

## Mixolydian Mode

5

6

Chord progression for exercise 5 (and 6):

- Measures 1-4: C7
- Measures 5-8: B $\flat$ 7
- Measures 9-12: A $\flat$ 7
- Measures 13-16: F $\sharp$ 7
- Measures 17-20: E7
- Measures 21-24: D7
- Measures 25-28: F7
- Measures 29-32: E $\flat$ 7
- Measures 33-36: C $\sharp$ 7
- Measures 37-40: B7
- Measures 41-44: A7
- Measures 45-48: G7



# Aeolian Mode

The image displays two exercises, labeled 1 and 2, for the Aeolian mode. Each exercise consists of six staves of music, numbered 1 through 24. The music is written in 4/4 time and features a series of eighth-note patterns. Handwritten chord progressions are provided above the notes for each measure. Exercise 1 uses the following chords: Cm7, Fm7, Bbm7, Ebm7, Abm7, C#m7, F#m7, Bm7, Em7, Am7, Dm7, and Gm7. Exercise 2 uses the same sequence of chords. The notes are primarily eighth notes, with some measures containing beamed eighth notes or quarter notes. The key signature for both exercises is three flats (Bb, Eb, Ab).

## Aeolian Mode

3

Chord symbols for Exercise 3:

- Staff 1: Cm7, Fm7
- Staff 2: Bbm7, Ebm7
- Staff 3: Abm7, C#m7
- Staff 4: F#m7, Bm7
- Staff 5: Em7, Am7
- Staff 6: Dm7, Gm7

4

Chord symbols for Exercise 4:

- Staff 1: Cm7, Fm7
- Staff 2: Bbm7, Ebm7
- Staff 3: Abm7, C#m7
- Staff 4: F#m7, Bm7
- Staff 5: Em7, Am7
- Staff 6: Dm7, Gm7

# Aeolian Mode

5

1 Cm7 Fm7  
2 Bbm7 Ebm7  
3 Abm7 C#m7  
4 F#m7 Bm7  
5 Em7 Am7  
6 Dm7 Gm7

6

1 Cm7 Fm7  
2 Bbm7 Ebm7  
3 Abm7 C#m7  
4 F#m7 Bm7  
5 Em7 Am7  
6 Dm7 Gm7

Detailed description: The image contains two musical exercises, labeled 5 and 6. Each exercise consists of 24 measures of music in 4/4 time, presented in a single staff. The notes are written in a treble clef. Exercise 5 starts with a C minor 7 chord (Cm7) and follows a descending scale: C-Bb-Ab-Gb-F#m7-Eb-Dm7-C#m7-Bm7-Am7-Gm7. Exercise 6 starts with a C minor 7 chord (Cm7) and follows a descending scale: C-Bb-Ab-Gb-F#m7-Eb-Dm7-C#m7-Bm7-Am7-Gm7. The chord changes are indicated by handwritten text above the staff at the beginning of each measure.

## Locrian Mode

1

2

# Locrian Mode

3

4

## Locrian Mode

5

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

6

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

Chord changes for exercise 5: C, F, Bb, D#, G#, C#, F#, B, E, A, D, G.

Chord changes for exercise 6: C, F, Bb, D#, G#, C#, F#, B, E, A, D, G.

# Harmonic Minor

1

2

The image displays two musical exercises, labeled 1 and 2, for the Harmonic Minor scale. Each exercise consists of 24 measures, organized into six staves of four measures each. The exercises are written in 4/4 time and feature a sequence of chords: Cm<sup>Δ</sup>, Fm<sup>Δ</sup>, Bbm<sup>Δ</sup>, Ebm<sup>Δ</sup>, Abm<sup>Δ</sup>, C#m<sup>Δ</sup>, F#m<sup>Δ</sup>, Bm<sup>Δ</sup>, Em<sup>Δ</sup>, Am<sup>Δ</sup>, Dm<sup>Δ</sup>, and Gm<sup>Δ</sup>. The notes in the staves are written in a way that suggests a specific fingering or articulation for the trumpet, with some notes marked with a sharp sign (#) to indicate the natural form of the scale. Exercise 1 shows the scale in a more traditional ascending and descending pattern, while exercise 2 shows a more complex, possibly chromatic or intervallic, approach to the same scale.

## Harmonic Minor

3

4

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24



# Harmonic Minor

5

1 2 3 4

5 6 7 8

9 10 11 12

13 14 15 16

17 18 19 20

21 22 23 24

6

1 2 3 4

5 6 7 8

9 10 11 12

13 14 15 16

17 18 19 20

21 22 23 24

Dominant  $b9/b13$ 

1

2

Chord symbols for Exercise 1 (Row 1): C7 $b9$ , F7 $b9$ , B $b7b9$ , E $b7b9$ , A $b7b9$ , C $\sharp7b9$ , F $\sharp7b9$ , B7 $b9$ , E7 $b9$ , A7 $b9$ , D7 $b9$ , G7 $b9$

Chord symbols for Exercise 2 (Row 1): C7 $b9$ , F7 $b9$ , B $b7b9$ , E $b7b9$ , A $b7b9$ , C $\sharp7b9$ , F $\sharp7b9$ , B7 $b9$ , E7 $b9$ , A7 $b9$ , D7 $b9$ , G7 $b9$

# Dominant b9/b13

**3** C7b9 F7b9

Bb7b9 Eb7b9

G#7b9 C#7b9

F#7b9 B7b9

E7b9 A7b9

D7b9 G7b9

**4** C7b9 F7b9

Bb7b9 Eb7b9

G#7b9 C#7b9

F#7b9 B7b9

E7b9 A7b9

D7b9 G7b9

Dominant  $\flat 9/\flat 13$ 

5

1  $C7\flat 9$  2  $C7\flat 9$  3  $F7\flat 9$  4  $F7\flat 9$

5  $B\flat 7\flat 9$  6  $B\flat 7\flat 9$  7  $E\flat 7\flat 9$  8  $E\flat 7\flat 9$

9  $G\sharp 7\flat 9$  10  $G\sharp 7\flat 9$  11  $C\sharp 7\flat 9$  12  $C\sharp 7\flat 9$

13  $F\sharp 7\flat 9$  14  $F\sharp 7\flat 9$  15  $B7\flat 9$  16  $B7\flat 9$

17  $E7\flat 9$  18  $E7\flat 9$  19  $A7\flat 9$  20  $A7\flat 9$

21  $D7\flat 9$  22  $D7\flat 9$  23  $G7\flat 9$  24  $G7\flat 9$

6

1  $C7\flat 9$  2  $C7\flat 9$  3  $F7\flat 9$  4  $F7\flat 9$

5  $B\flat 7\flat 9$  6  $B\flat 7\flat 9$  7  $E\flat 7\flat 9$  8  $E\flat 7\flat 9$

9  $G\sharp 7\flat 9$  10  $G\sharp 7\flat 9$  11  $C\sharp 7\flat 9$  12  $C\sharp 7\flat 9$

13  $F\sharp 7\flat 9$  14  $F\sharp 7\flat 9$  15  $B7\flat 9$  16  $B7\flat 9$

17  $E7\flat 9$  18  $E7\flat 9$  19  $A7\flat 9$  20  $A7\flat 9$

21  $D7\flat 9$  22  $D7\flat 9$  23  $G7\flat 9$  24  $G7\flat 9$

**1**

Exercise 1 consists of two systems of six staves each. The first system (measures 1-12) starts with a C minor triad (Cm) and moves through F minor (Fm), Bb minor (Bbm), Eb minor (Ebm), Ab minor (Abm), and Db minor (Dbm). The second system (measures 13-24) starts with an F# minor triad (F#m) and moves through B minor (Bm), E minor (Em), A minor (Am), D minor (Dm), and G minor (Gm). Each measure contains a specific melodic pattern for the minor scale, and the chord changes are indicated by symbols above the staff.

**2**

Exercise 2 follows the same structure as exercise 1, with two systems of six staves each. The first system (measures 1-12) starts with a C minor triad (Cm) and moves through F minor (Fm), Bb minor (Bbm), Eb minor (Ebm), Ab minor (Abm), and Db minor (Dbm). The second system (measures 13-24) starts with an F# minor triad (F#m) and moves through B minor (Bm), E minor (Em), A minor (Am), D minor (Dm), and G minor (Gm). Each measure contains a specific melodic pattern for the minor scale, and the chord changes are indicated by symbols above the staff.

# Ascending Melodic Minor

**3**

Exercise 3 is an ascending melodic minor scale study in 4/4 time, consisting of 24 measures. The scale is divided into two 12-measure phrases. The first phrase starts on C4 and ascends to C5, while the second phrase starts on F4 and ascends to F5. The notes in the first phrase are C, D, E, F, G, A, B, A, G, F, E, D, C. The notes in the second phrase are F, G, A, B, C, D, E, D, C, B, A, G, F. The chords for each measure are: 1. Cm<sup>Δ</sup>, 2. Fm<sup>Δ</sup>, 3. Bbm<sup>Δ</sup>, 4. Ebm<sup>Δ</sup>, 5. Abm<sup>Δ</sup>, 6. Dbm<sup>Δ</sup>, 7. F#m<sup>Δ</sup>, 8. Bm<sup>Δ</sup>, 9. Em<sup>Δ</sup>, 10. Am<sup>Δ</sup>, 11. Dm<sup>Δ</sup>, 12. Gm<sup>Δ</sup>, 13. Cm<sup>Δ</sup>, 14. Fm<sup>Δ</sup>, 15. Bbm<sup>Δ</sup>, 16. Ebm<sup>Δ</sup>, 17. Abm<sup>Δ</sup>, 18. Dbm<sup>Δ</sup>, 19. F#m<sup>Δ</sup>, 20. Bm<sup>Δ</sup>, 21. Em<sup>Δ</sup>, 22. Am<sup>Δ</sup>, 23. Dm<sup>Δ</sup>, 24. Gm<sup>Δ</sup>.

**4**

Exercise 4 is an ascending melodic minor scale study in 4/4 time, consisting of 24 measures. The scale is divided into two 12-measure phrases. The first phrase starts on C4 and ascends to C5, while the second phrase starts on F4 and ascends to F5. The notes in the first phrase are C, D, E, F, G, A, B, A, G, F, E, D, C. The notes in the second phrase are F, G, A, B, C, D, E, D, C, B, A, G, F. The chords for each measure are: 1. Cm<sup>Δ</sup>, 2. Fm<sup>Δ</sup>, 3. Bbm<sup>Δ</sup>, 4. Ebm<sup>Δ</sup>, 5. Abm<sup>Δ</sup>, 6. Dbm<sup>Δ</sup>, 7. F#m<sup>Δ</sup>, 8. Bm<sup>Δ</sup>, 9. Em<sup>Δ</sup>, 10. Am<sup>Δ</sup>, 11. Dm<sup>Δ</sup>, 12. Gm<sup>Δ</sup>, 13. Cm<sup>Δ</sup>, 14. Fm<sup>Δ</sup>, 15. Bbm<sup>Δ</sup>, 16. Ebm<sup>Δ</sup>, 17. Abm<sup>Δ</sup>, 18. Dbm<sup>Δ</sup>, 19. F#m<sup>Δ</sup>, 20. Bm<sup>Δ</sup>, 21. Em<sup>Δ</sup>, 22. Am<sup>Δ</sup>, 23. Dm<sup>Δ</sup>, 24. Gm<sup>Δ</sup>.

**5**

**6**

## Dorian Flat 2

1

2

Chord symbols for Exercise 1:

- Measures 1-4: Cm7, Fm7
- Measures 5-8: Bbm7, Ebm7
- Measures 9-12: G#m7, C#m7
- Measures 13-16: F#m7, Bm7
- Measures 17-20: Em7, Am7
- Measures 21-24: Dm7, Gm7

Chord symbols for Exercise 2:

- Measures 1-4: Cm7, Fm7
- Measures 5-8: Bbm7, Ebm7
- Measures 9-12: G#m7, C#m7
- Measures 13-16: F#m7, Bm7
- Measures 17-20: Em7, Am7
- Measures 21-24: Dm7, Gm7



# Dorian Flat 2

3

Exercise 3 consists of 24 measures of music in 4/4 time, starting with a key signature of one flat (Bb). The notes are: 1. Bb, 2. Ab, 3. Gb, 4. Fb, 5. Eb, 6. D, 7. C, 8. Bb, 9. Ab, 10. Gb, 11. Fb, 12. Eb, 13. D, 14. C, 15. Bb, 16. Ab, 17. Gb, 18. Fb, 19. Eb, 20. D, 21. C, 22. Bb, 23. Ab, 24. Gb. The exercise is divided into two systems of 12 measures each. The first system contains measures 1-12, and the second system contains measures 13-24. Chord symbols are written above the staff for every second measure: Cm7 (1), Fm7 (3), Bbm7 (5), Ebm7 (7), G#m7 (9), C#m7 (11), F#m7 (13), Bm7 (15), Em7 (17), Am7 (19), Dm7 (21), and Gm7 (23).

4

Exercise 4 is identical to exercise 3, consisting of 24 measures of music in 4/4 time, starting with a key signature of one flat (Bb). The notes are: 1. Bb, 2. Ab, 3. Gb, 4. Fb, 5. Eb, 6. D, 7. C, 8. Bb, 9. Ab, 10. Gb, 11. Fb, 12. Eb, 13. D, 14. C, 15. Bb, 16. Ab, 17. Gb, 18. Fb, 19. Eb, 20. D, 21. C, 22. Bb, 23. Ab, 24. Gb. The exercise is divided into two systems of 12 measures each. The first system contains measures 1-12, and the second system contains measures 13-24. Chord symbols are written above the staff for every second measure: Cm7 (1), Fm7 (3), Bbm7 (5), Ebm7 (7), G#m7 (9), C#m7 (11), F#m7 (13), Bm7 (15), Em7 (17), Am7 (19), Dm7 (21), and Gm7 (23).

## Dorian Flat 2

5

1  $Cm^7$  2 3  $Fm^7$  4

5  $Bbm^7$  6 7  $Ebm^7$  8

9  $G\#m^7$  10 11  $C\#m^7$  12

13  $F\#m^7$  14 15  $Bm^7$  16

17  $Em^7$  18 19  $A\#m^7$  20

21  $Dm^7$  22 23  $Gm^7$  24

6

1  $Cm^7$  2 3  $Fm^7$  4

5  $Bbm^7$  6 7  $Ebm^7$  8

9  $G\#m^7$  10 11  $C\#m^7$  12

13  $F\#m^7$  14 15  $Bm^7$  16

17  $Em^7$  18 19  $A\#m^7$  20

21  $Dm^7$  22 23  $Gm^7$  24

# Lydian Augmented

1

2

The image displays two musical exercises, labeled 1 and 2, for the Lydian Augmented scale. Each exercise consists of 24 measures, organized into six staves of four measures each. The key signature is one sharp (F#), and the time signature is 4/4. The notes in the scales are: C, D, E, F#, G, A, B, C. Above each staff, the corresponding triads for the notes are indicated: CΔ#5, FΔ#5, BbΔ#5, EbΔ#5, AbΔ#5, DbΔ#5, GbΔ#5, CbΔ#5, EΔ#5, AΔ#5, DΔ#5, GΔ#5. The exercises are written in treble clef with a 4/4 time signature. Exercise 1 starts with a C4 and ends with a C5. Exercise 2 starts with a C4 and ends with a C5. The notes are written in a sequence that covers the entire scale in both directions, with some measures containing multiple notes.

## Lydian Augmented

3

$C\Delta\#5$   $F\Delta\#5$

$Bb\Delta\#5$   $Eb\Delta\#5$

$Ab\Delta\#5$   $Db\Delta\#5$

$Gb\Delta\#5$   $Cb\Delta\#5$

$E\Delta\#5$   $A\Delta\#5$

$D\Delta\#5$   $G\Delta\#5$

4

$C\Delta\#5$   $F\Delta\#5$

$Bb\Delta\#5$   $Eb\Delta\#5$

$Ab\Delta\#5$   $Db\Delta\#5$

$Gb\Delta\#5$   $Cb\Delta\#5$

$E\Delta\#5$   $A\Delta\#5$

$D\Delta\#5$   $G\Delta\#5$

# Lydian Augmented

5

1  $C\Delta\#5$  2 3  $F\Delta\#5$  4

5  $Bb\Delta\#5$  6 7  $Eb\Delta\#5$  8

9  $Ab\Delta\#5$  10 11  $Db\Delta\#5$  12

13  $Gb\Delta\#5$  14 15  $Cb\Delta\#5$  16

17  $E\Delta\#5$  18 19  $A\Delta\#5$  20

21  $D\Delta\#5$  22 23  $G\Delta\#5$  24

6

1  $C\Delta\#5$  2 3  $F\Delta\#5$  4

5  $Bb\Delta\#5$  6 7  $Eb\Delta\#5$  8

9  $Ab\Delta\#5$  10 11  $Db\Delta\#5$  12

13  $Gb\Delta\#5$  14 15  $Cb\Delta\#5$  16

17  $E\Delta\#5$  18 19  $A\Delta\#5$  20

21  $D\Delta\#5$  22 23  $G\Delta\#5$  24

Detailed description: The image shows two musical exercises, labeled 5 and 6, for the Lydian Augmented scale. Each exercise consists of 24 measures, divided into two rows of 12 measures each. The notes are written in a treble clef with a 4/4 time signature. Above each measure, the corresponding triad is indicated with a sharp sign and a delta symbol (e.g., CΔ#5). Exercise 5 starts with CΔ#5 and ends with GΔ#5. Exercise 6 starts with CΔ#5 and ends with GΔ#5. The notes in each measure are: 1: C, D, E, F#; 2: D, E, F#, G; 3: E, F#, G, A; 4: F#, G, A, B; 5: G, A, B, C; 6: A, B, C, D; 7: B, C, D, E; 8: C, D, E, F#; 9: D, E, F#, G; 10: E, F#, G, A; 11: F#, G, A, B; 12: G, A, B, C; 13: A, B, C, D; 14: B, C, D, E; 15: C, D, E, F#; 16: D, E, F#, G; 17: E, F#, G, A; 18: F#, G, A, B; 19: G, A, B, C; 20: A, B, C, D; 21: B, C, D, E; 22: C, D, E, F#; 23: D, E, F#, G; 24: E, F#, G, A.

## Lydian Dominant

1

2

Chord symbols for Exercise 1:

- 1: C7#11
- 2: F7#11
- 3: B $\flat$ 7#11
- 4: E $\flat$ 7#11
- 5: A $\flat$ 7#11
- 6: D $\flat$ 7#11
- 7: F#7#11
- 8: B7#11
- 9: E7#11
- 10: A7#11
- 11: D7#11
- 12: G7#11
- 13: F#7#11
- 14: B7#11
- 15: E7#11
- 16: A7#11
- 17: D7#11
- 18: G7#11
- 19: C7#11
- 20: F7#11
- 21: B $\flat$ 7#11
- 22: E $\flat$ 7#11
- 23: A $\flat$ 7#11
- 24: D $\flat$ 7#11

Chord symbols for Exercise 2:

- 1: C7#11
- 2: F7#11
- 3: B $\flat$ 7#11
- 4: E $\flat$ 7#11
- 5: A $\flat$ 7#11
- 6: D $\flat$ 7#11
- 7: F#7#11
- 8: B7#11
- 9: E7#11
- 10: A7#11
- 11: D7#11
- 12: G7#11
- 13: F#7#11
- 14: B7#11
- 15: E7#11
- 16: A7#11
- 17: D7#11
- 18: G7#11
- 19: C7#11
- 20: F7#11
- 21: B $\flat$ 7#11
- 22: E $\flat$ 7#11
- 23: A $\flat$ 7#11
- 24: D $\flat$ 7#11

# Lydian Dominant

**3**

1 2 3 4

5 6 7 8

9 10 11 12

13 14 15 16

17 18 19 20

21 22 23 24

**4**

1 2 3 4

5 6 7 8

9 10 11 12

13 14 15 16

17 18 19 20

21 22 23 24

## Lydian Dominant

5

6





## Mixolydian Flat 6

3

C7b13

F7b13

Bb7b13

Eb7b13

Ab7b13

C#7b13

F#7b13

B7b13

E7b13

A7b13

D7b13

G7b13

4

C7b13

F7b13

Bb7b13

Eb7b13

Ab7b13

C#7b13

F#7b13

B7b13

E7b13

A7b13

D7b13

G7b13

# Mixolydian Flat 6

5

Exercise 5 consists of 24 measures of music in 4/4 time, divided into two systems of 12 measures each. The notes are: 1: C4, B3, Bb3, A3, G3, F3, E3, D3; 2: D3, E3, F3, G3, A3, Bb3, B3, C4; 3: C4, B3, Bb3, A3, G3, F3, E3, D3; 4: D3, E3, F3, G3, A3, Bb3, B3, C4; 5: Bb3, B3, C4, Bb3, B3, C4, Bb3, B3; 6: C4, Bb3, B3, C4, Bb3, B3, C4, Bb3; 7: Bb3, B3, C4, Bb3, B3, C4, Bb3, B3; 8: C4, Bb3, B3, C4, Bb3, B3, C4, Bb3; 9: Bb3, B3, C4, Bb3, B3, C4, Bb3, B3; 10: C4, Bb3, B3, C4, Bb3, B3, C4, Bb3; 11: C#4, B#3, Bb3, A#3, G#3, F#3, E#3, D#3; 12: D#3, E#3, F#3, G#3, A#3, B#3, Bb3, C#4; 13: C#4, B#3, Bb3, A#3, G#3, F#3, E#3, D#3; 14: D#3, E#3, F#3, G#3, A#3, B#3, Bb3, C#4; 15: C#4, B#3, Bb3, A#3, G#3, F#3, E#3, D#3; 16: D#3, E#3, F#3, G#3, A#3, B#3, Bb3, C#4; 17: E#3, F#3, G#3, A#3, B#3, Bb3, C#4, B#3; 18: F#3, G#3, A#3, B#3, Bb3, C#4, B#3, E#3; 19: E#3, F#3, G#3, A#3, B#3, Bb3, C#4, B#3; 20: F#3, G#3, A#3, B#3, Bb3, C#4, B#3, E#3; 21: D3, E3, F3, G3, A3, Bb3, B3, C4; 22: E3, F3, G3, A3, Bb3, B3, C4, D4; 23: D3, E3, F3, G3, A3, Bb3, B3, C4; 24: E3, F3, G3, A3, Bb3, B3, C4, D4.

6

Exercise 6 consists of 24 measures of music in 4/4 time, divided into two systems of 12 measures each. The notes are: 1: C4, B3, Bb3, A3, G3, F3, E3, D3; 2: D3, E3, F3, G3, A3, Bb3, B3, C4; 3: C4, B3, Bb3, A3, G3, F3, E3, D3; 4: D3, E3, F3, G3, A3, Bb3, B3, C4; 5: Bb3, B3, C4, Bb3, B3, C4, Bb3, B3; 6: C4, Bb3, B3, C4, Bb3, B3, C4, Bb3; 7: Bb3, B3, C4, Bb3, B3, C4, Bb3, B3; 8: C4, Bb3, B3, C4, Bb3, B3, C4, Bb3; 9: Bb3, B3, C4, Bb3, B3, C4, Bb3, B3; 10: C4, Bb3, B3, C4, Bb3, B3, C4, Bb3; 11: C#4, B#3, Bb3, A#3, G#3, F#3, E#3, D#3; 12: D#3, E#3, F#3, G#3, A#3, B#3, Bb3, C#4; 13: C#4, B#3, Bb3, A#3, G#3, F#3, E#3, D#3; 14: D#3, E#3, F#3, G#3, A#3, B#3, Bb3, C#4; 15: C#4, B#3, Bb3, A#3, G#3, F#3, E#3, D#3; 16: D#3, E#3, F#3, G#3, A#3, B#3, Bb3, C#4; 17: E#3, F#3, G#3, A#3, B#3, Bb3, C#4, B#3; 18: F#3, G#3, A#3, B#3, Bb3, C#4, B#3, E#3; 19: E#3, F#3, G#3, A#3, B#3, Bb3, C#4, B#3; 20: F#3, G#3, A#3, B#3, Bb3, C#4, B#3, E#3; 21: D3, E3, F3, G3, A3, Bb3, B3, C4; 22: E3, F3, G3, A3, Bb3, B3, C4, D4; 23: D3, E3, F3, G3, A3, Bb3, B3, C4; 24: E3, F3, G3, A3, Bb3, B3, C4, D4.

# Locrian Sharp 2

**1**

**2**

# Locrian Sharp 2

**3**

**4**

## Locrian Sharp 2

5

$C\phi$   $F\phi$

$Bb\phi$   $D\#\phi$

$G\#\phi$   $C\#\phi$

$F\#\phi$   $B\phi$

$E\phi$   $A\phi$

$D\phi$   $G\phi$

6

$C\phi$   $F\phi$

$Bb\phi$   $D\#\phi$

$G\#\phi$   $C\#\phi$

$F\#\phi$   $B\phi$

$E\phi$   $A\phi$

$D\phi$   $G\phi$

1

2

## Super Locrian (Dim. Whole Tone)

3

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

4

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24



# Super Locrian (Dim. Whole Tone)

5

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

6

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

# Whole/Half Diminished

*Named after the step construction of the scale as played from bottom to the top*

**1**

**2**

The image displays two musical exercises, labeled 3 and 4, each consisting of 12 measures. Exercise 3 is in 4/4 time and features a sequence of chords: C07, F07, Bb07, Eb07, Ab07, Db07, F#07, B07, E07, A07, D07, and G07. Exercise 4 is also in 4/4 time and features the same sequence of chords. The notes are written in treble clef with a key signature of one flat (Bb). The scale is played in an 'upside-down' fashion, starting from the bottom and moving to the top.

# Whole/Half Diminished

*Named after the step construction of the scale as played from bottom to the top*

**5**

1 **C07** 2 3 **F07** 4

5 **B $\flat$ 07** 6 7 **E $\flat$ 07** 8

9 **A $\flat$ 07** 10 11 **D $\flat$ 07** 12

13 **F $\sharp$ 07** 14 15 **B07** 16

17 **E07** 18 19 **A07** 20

21 **D07** 22 23 **G07** 24

**6**

1 **C07** 2 3 **F07** 4

5 **B $\flat$ 07** 6 7 **E $\flat$ 07** 8

9 **A $\flat$ 07** 10 11 **D $\flat$ 07** 12

13 **F $\sharp$ 07** 14 15 **B07** 16

17 **E07** 18 19 **A07** 20

21 **D07** 22 23 **G07** 24

The image displays two exercises, labeled 1 and 2, for the Half/Whole Diminished scale. Each exercise consists of six staves of music, with chord changes indicated above the notes. Exercise 1 is in 8/8 time and spans measures 1 to 12. Exercise 2 is in 4/4 time and spans measures 1 to 24. The chords for both exercises are: C<sup>o</sup>7, B<sup>b</sup>o<sup>7</sup>, A<sup>b</sup>o<sup>7</sup>, F<sup>#</sup>o<sup>7</sup>, Eo<sup>7</sup>, Do<sup>7</sup>, Fo<sup>7</sup>, E<sup>b</sup>o<sup>7</sup>, D<sup>b</sup>o<sup>7</sup>, Bo<sup>7</sup>, Ao<sup>7</sup>, and Go<sup>7</sup>.

## Half/Whole Diminished

Named after the step construction of the scale as played from bottom to the top

**3** *C*07 *F*07

*B*b07 *E*b07

*A*b07 *D*b07

*F*#07 *B*07

*E*07 *A*07

*D*07 *G*07

**4** *C*07 *F*07

*B*b07 *E*b07

*A*b07 *D*b07

*F*#07 *B*07

*E*07 *A*07

*D*07 *G*07

Exercise 5: 24 measures, chords: C07, F07, Bb07, Eb07, Ab07, Db07, F#07, B07, E07, A07, D07, G07.

Exercise 6: 24 measures, chords: C07, F07, Bb07, Eb07, Ab07, Db07, F#07, B07, E07, A07, D07, G07. Includes triplet markings.

## Whole Tone

1

2

Chord symbols for Exercise 1 and Exercise 2:

- Measures 1, 13, 21: C7+
- Measures 3, 15, 23: F7+
- Measures 5, 17: Bb7+
- Measures 7, 19: Eb7+
- Measures 9, 21: Ab7+
- Measures 11, 23: Db7+
- Measures 13, 15: F#7+
- Measures 15, 17: B7+
- Measures 17, 19: E7+
- Measures 19, 21: A7+
- Measures 21, 23: D7+
- Measures 23, 24: G7+



# Whole Tone

The image displays two musical exercises, labeled 3 and 4, in 4/4 time. Each exercise consists of 24 measures, with chord changes indicated above the staff. Exercise 3 starts with a C7+ chord and ends with a G7+ chord. Exercise 4 starts with a C7+ chord and ends with a G7+ chord. The notes in the exercises are primarily eighth and quarter notes, often beamed together in pairs.

**Exercise 3:**

- Measures 1-4: C7+
- Measures 5-8: Bb7+
- Measures 9-12: Ab7+
- Measures 13-16: F#7+
- Measures 17-20: E7+
- Measures 21-24: D7+

**Exercise 4:**

- Measures 1-4: C7+
- Measures 5-8: Bb7+
- Measures 9-12: Ab7+
- Measures 13-16: F#7+
- Measures 17-20: E7+
- Measures 21-24: D7+

## Whole Tone

5

6

Chord progressions for exercise 5: C7+, F7+, Bb7+, Eb7+, Ab7+, Db7+, F#7+, B7+, E7+, A7+, D7+, G7+.

Chord progressions for exercise 6: C7+, F7+, Bb7+, Eb7+, Ab7+, Db7+, F#7+, B7+, E7+, A7+, D7+, G7+.

# Major Pentatonic

The image displays two parts of a musical exercise, labeled 1 and 2. Each part consists of 24 measures, with measures 1 through 12 on the first line and measures 13 through 24 on the second line. Each measure is accompanied by a chord symbol above it. The notes in the staves are written in a way that suggests a specific fingering or articulation, with some notes being beamed together or having stems pointing in a particular direction. The chords are: C, F, Bb, Eb, Ab, Db, F#, B, E, A, D, G. The key signature for the first part is one flat (Bb), and for the second part, it is one sharp (F#).

## Major Pentatonic

**3**

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

**4**

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

# Major Pentatonic

5

6

## The "Blues" Scale

1

2

# The "Blues" Scale

The image displays two musical exercises, labeled 3 and 4, for the Blues Scale. Each exercise is presented in a 4/4 time signature and consists of five staves of music. Exercise 3 starts with a C7 chord and ends with a G7 chord. Exercise 4 starts with a C7 chord and ends with a G7 chord. The chords used in both exercises are: C7, Bb7, Ab7, F#7, E7, D7, F7, Eb7, Db7, B7, and G7. The melodic lines are written in a style that suggests improvisation, with various rhythmic patterns and accidentals.

## The "Blues" Scale

5

6

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