

# Pentatonic Scale Studies

Second Edition (2003)

Edward Petersen

Roving Bovine Music



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Second Edition

Many thanks to Brian Seeger for his work in repairing and organizing the Pentatonic Scale Compendium and for his many other contributions to my music education.

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# Introduction

This book is intended to serve as a point of departure for the study of pentatonic scales. It looks like a method book and can be used as one, but it is better to think of it as a collection of potentially useful intervallic sequences\*<sup>1</sup> that are designed to be modified to suit the player's (your) purposes. I use the phrase "potentially useful" because they will be of little benefit until you have developed your own way of understanding them and using them in the creation of your music.

There are many pentatonic scales. The Pentatonic Scale Compendia found in section one list all three hundred thirty pentatonic scales\*<sup>2</sup> that contain the note "C." The best way to learn them is to **choose one** scale that appeals to you and spend a considerable amount of time and energy practicing and thinking of ways in which you can use it before exploring other scales. Become familiar with the intervallic patterns that characterize the scale. The exercises in Section 2.1 (Page 29) are studies in the movement of every note in a scale to every other note, throughout the range of your instrument. They are notated within the practical written range of the saxophone, but please decrease or increase the range to fit your instrument. If you have chosen a scale other than the one that is used in these exercises (which is number three hundred twenty six\*<sup>3</sup> in the Pentatonic Scale Compendium, often referred to as the "Major (326) or Minor (330) Pentatonic Scale"\*<sup>4</sup>), play the shapes found in the exercises, but replace the written notes with the notes of your chosen scale. Once you are familiar with the intervallic characteristics of the scale, it should be very easy to play in any key. Do this by using your musicianship and feeling, not your muscle memory or mathematical transposition skills. Every pattern in this book is based on "C." It is essential to play the scales and other shapes that interest you in **every** key. If I had wasted the paper necessary to notate these "transpositions," you and I, as users of this book, would not be well-served. It is much more beneficial for us to develop the ability to imagine and then play musical gestures at various pitch levels than it is to read notes that provide directions on the proper buttons to push.

In addition to developing familiarity with the melodic interaction of the notes in the scale, it is important to understand their relationship to various harmonic configurations. Some pentatonic scales contain so many contiguous small intervals that it is difficult to discern a strong relationship with most “mainstream” harmonies, but they may relate very clearly to certain contemporary “outside” or “cluster” harmonies. Many other pentatonics can be used to create music that relates very clearly to “mainstream” harmonies. For example, Pentatonic 326 is comprised of a major second, another major second, a minor third, another major second, and another minor third. Starting on “C,” that is the following notes: C, D, E, G, and A. Please consider these notes in the following harmonic contexts:

In relation to a:

- \* CMaj7 or C7 chord...this scale contains the root, ninth, third, fifth, thirteenth (sixth)
- \* D7(sus4)...seventh, root, ninth, (suspended) fourth, fifth
- \* E Phrygian (F/E)...minor thirteenth (minor sixth) or augmented fifth, seventh, root, (minor) third, eleventh
- \* F Maj7...fifth, thirteenth, seventh, ninth, third,
- \* F#7(+5 +9) or F#7(+5 -9) aka F#7alt...augmented eleventh, augmented fifth, seventh, minor ninth, augmented ninth
- \* Gmin7 or G7(sus4)...fourth, fifth, thirteenth, root, ninth
- \* Amin7 or A Phrygian...third, fourth, fifth, seventh
- \* BbMaj7 chord...ninth, third, augmented eleventh, thirteenth, seventh

All of the above examples demonstrate the use of these notes as components of the designated chords. The scale can be used very effectively in other ways, too. For example, in relation to an Abmin7 chord, this useful pentatonic contains all of the notes that are “outside” of the chord and the scale that is usually associated with it, the Ab Dorian scale. In other words, Pentatonic 326 contains all of the chromatic notes in relationship to this chord/scale sound! Familiarity with this very convenient way of organizing diatonic and chromatic elements can be very liberating for the improviser.

After you have found a scale/interval set that you like and become familiar with



its characteristics and possible harmonic applications, look at some of the other exercises in Section 2. You will find a vast number of melodic shapes that are constructed from a pentatonic scale (326). You can read these in the way that you would read the pages of a method book, but you can learn more and have more fun by doing the following:

- 1) Find one shape, or melodic gesture that appeals to you
- 2) Identify the intervallic characteristics
- 3) “Plug-in” the notes of your selected scale. In other words, replace the written notes with notes from the scale that you are practicing, while retaining the shape of the written phrase
- 4) Play your version of the shape in every key throughout the full range of your instrument
- 5) Explore rhythmic and metrical variations. If the phrase is in 2/4, experiment with techniques for playing it in 3/4 or 5/4 or??? This can be accomplished by adding or deleting notes or rests or by changing durations
- 6) Play your new variations in every key throughout the full range of your instrument
- 7) “Plug-in” other scales. Retain the shape of the gesture, but replace the notes with notes from other pentatonic, diatonic, diminished, augmented, or other scales/interval sets.
- 8) Play your new variations in every key throughout the full range of your instrument
- 9) Try to play your shape over a set of chord changes. Change the component scales and make the corresponding adjustments to your shape in response to the changes in the harmony (Please see example on page 126)
- 10) See how far you can bend the gesture until it becomes something else...if you like your new creation, forget about this book and continue to explore your new phrase! This type of practice develops the ability to think compositionally, while improving technique and aural skills. It will cultivate better understanding of the ways in which musical gestures can evolve and serve as the basis for the creation of new expressions. It improves our ability to fine-tune musical ideas so that they work properly (i.e. the way that we want them to work) in relation to the time and harmony. The ability to modify a musical gesture using different pitch and rhythmic parameters to fit the demands of the

music is one of the fundamental skills involved in the process of creating and developing meaningful jazz improvisations.

10) Repeat this process with another shape...

The layout of this book is as follows:

**Section One** is a comprehensive listing of all of the pentatonic scales that include the note "C". Please see note \*3 below for more information regarding the structure of the Pentatonic Scale Compendia. In this section, there is also a collection of my favorite pentatonics and suggestions as to ways in which they can relate to various harmonic configurations. I hope that you will experiment and find your own favorite scales and their harmonic applications. The way in which we choose to relate to the harmonic structure of the music as we improvise is an important component of our personal style and sound. Please do not believe anything that I have written regarding the relationship of scales to chords until your own ears tell you what sounds good! One of the things that we do not need is another book that tells us what scale to play on a chord. There are many different ways to use the pentatonics in this book.

**Section Two** is divided into five parts, all of which are based on Pentatonic 326. At the beginning of this section (and the next) there are listings of suggested related harmonies, but please try to identify your own chord-scale associations. As I mentioned above, Section 2.1 is a collection of studies in the movement of every note in a scale to every other note. Section 2.2 contains intervallic scale exercises. 2.3 is a comprehensive listing of four note melodic patterns. 2.4 is a comprehensive listing of three note melodic patterns. 2.5 is a collection of other pentatonic melodic gestures.

**Section Three** is identical to Section Two, except for the fact that a different pentatonic scale (305) is "plugged-in" in order to demonstrate the modular concept upon which this book is based.

All of the exercises in this book are intended to be highly malleable. It is not necessary or recommended to practice every pattern exactly as it appears. It is possible; maybe even desirable, to play through the entire book while **never** or

only rarely playing the written notes! Every note that you play could be “plugged-in” or something from a different key. You might decide that you would like to play anything other than that which is in the book. Just try to find things that sound good to you and explore them. Many of the exercises have no indicated meter or bar lines. Use these only as a source of intervals and practice them using rhythmic parameters of your own creation. I encourage you to do the same thing with the exercises that do have specific rhythms indicated.

Each exercise starts and ends with repeat signs. The reason for this is that there should not be any fixed starting or ending point. Practice the patterns starting and ending wherever you want, but play them throughout the full range of your instrument and try to “loop” the exercises at the high and low end of your range so that you do not stop simply because you have run out of notes. As I mentioned above, the exercises are notated within the range of the saxophone, but please play everything throughout your full range.

**Section Four** contains a few practice suggestions.

**Here are some notes:**

\*<sup>1</sup> I prefer to think of scales (or any melodic or harmonic configuration) as intervallic patterns that easily can be rearranged or moved to different keys. Once we embrace the concept of thinking of scales and other musical elements as patterns of intervals, playing them in different keys no longer seems like transposing-a technique that many of us consider to be difficult and tedious. When we become familiar with the intervallic characteristics of a musical element, we can play it in any key simply by playing that which we already know using different notes!

\*<sup>2</sup> There are actually sixty six unique pentatonic intervallic patterns. The pattern can start in five different locations; therefore the total number of pentatonics in any key is three hundred thirty ( $66 \times 5 = 330$ ). There are a total of three thousand nine hundred sixty pentatonic scales in all keys!

\*<sup>3</sup> This refers to the numbering system in the Pentatonic Scale Compendium. There are numbers below the staff lines of each scale. These numbers are used throughout this book to identify the scales. In addition to these numbers, the first scale on each line is identified by its pattern of intervals, designated as the number of half steps between each note, including the interval between the fifth note and the note one octave higher than the first. Each of the five scales on each line is comprised of the same pattern of intervals starting in different places in the sequence. In Compendium 1, these families of scales are notated in a traditional format that appears to be one “parent” scale and its four additional modes. In Compendium 2, each of the scales begins on the note “C.” Note that the first scales on each line are the same in both of the Compendia, but because of the different formats, the second through fifth scales on each line contain different pitches, but the patterns of intervals are the same.

\*<sup>4</sup> These are common, but very unhelpful ways of naming the scale that is constructed from two whole steps, a minor third, another whole step, and another minor third. Both the “Major Pentatonic” and “Minor Pentatonic” have the same intervallic resources. They are only different when the scale is spelled “C, D, E, G, A” as opposed to “A, C, D, E, G.” This is a significant difference on paper, but when we want to use these resources to shape a melodic or harmonic idea in our improvisation, any of the notes might be played at any time. They will not necessarily be configured in an orderly graduated arrangement of pitches as they are in traditional scales. We might play them as follows: E, G, G, A, G, E, G, D, A, D....or maybe C, A, E, D, C, D, E, C, A, E, C, D, D....the melodies that are sounded by playing these sequences of notes are different, but they are both wrought from the same tonal building blocks. The way we practice scales should help us to develop awareness of the ways in which we can use them. It should also help us to be able to play any of the notes **in or out** of the scale at any musical time from any musical place, not just from tonic on the downbeat to tonic on the downbeat! Traditional scale practice is a very effective way to develop muscle memory, which can be useful to a musician who strives to play a limited number of preset musical gestures with increasing precision, but it is not very helpful in developing proficiency in using scales as improvisational

resources. Improvisers benefit more from structured practicing that develops the ability to play things that they have never played before.

If you are confused after reading this introduction, that is good! Please proceed...

I hope that you enjoy this book.

Edward Petersen



# 1.1 Pentatonic Scale Compendium 1

All Three Hundred Thirty Pentatonic Scales Containing the Note "C"

Arranged as a "Parent" Scale with Modal Variations

Four Half Steps-11118

Musical notation for scales 1 through 5, categorized as Four Half Steps-11118. Each scale is shown on a single staff with a treble clef and a key signature of one flat (Bb). The scales are: 1 (C, D, Eb, F, G), 2 (C, D, E, F, G), 3 (C, D, E, F, Gb), 4 (C, D, E, F, G), and 5 (C, D, Eb, F, G).

Three Half Steps-11127

Musical notation for scales 6 through 10, categorized as Three Half Steps-11127. Each scale is shown on a single staff with a treble clef and a key signature of one flat (Bb). The scales are: 6 (C, D, Eb, F, G), 7 (C, D, E, F, G), 8 (C, D, E, F, Gb), 9 (C, D, E, F, G), and 10 (C, D, Eb, F, G).

11136

Musical notation for scales 11 through 15. Each scale is shown on a single staff with a treble clef and a key signature of one flat (Bb). The scales are: 11 (C, D, Eb, F, G), 12 (C, D, E, F, G), 13 (C, D, E, F, Gb), 14 (C, D, E, F, G), and 15 (C, D, Eb, F, G).

11145

Musical notation for scales 16 through 20. Each scale is shown on a single staff with a treble clef and a key signature of one flat (Bb). The scales are: 16 (C, D, Eb, F, G), 17 (C, D, E, F, G), 18 (C, D, E, F, Gb), 19 (C, D, E, F, G), and 20 (C, D, Eb, F, G).

11154

Musical notation for scales 21 through 25. Each scale is shown on a single staff with a treble clef and a key signature of one flat (Bb). The scales are: 21 (C, D, Eb, F, G), 22 (C, D, E, F, G), 23 (C, D, E, F, Gb), 24 (C, D, E, F, G), and 25 (C, D, Eb, F, G).

11163

Musical notation for scales 26 through 30. Each scale is shown on a single staff with a treble clef and a key signature of one flat (Bb). The scales are: 26 (C, D, Eb, F, G), 27 (C, D, E, F, G), 28 (C, D, E, F, Gb), 29 (C, D, E, F, G), and 30 (C, D, Eb, F, G).

11172

Musical notation for scales 31 through 35. Each scale is shown on a single staff with a treble clef and a key signature of one flat (Bb). The scales are: 31 (C, D, Eb, F, G), 32 (C, D, E, F, G), 33 (C, D, E, F, Gb), 34 (C, D, E, F, G), and 35 (C, D, Eb, F, G).

Three Non Contiguous Half Steps-11217

Musical notation for scales 36 through 40. Each scale is shown on a single staff with a treble clef and a key signature of one flat (Bb). The scales are: 36 (C, D, Eb, F, G), 37 (C, D, E, F, G), 38 (C, D, E, F, Gb), 39 (C, D, E, F, G), and 40 (C, D, Eb, F, G).

11316

Musical notation for scales 41 through 45. Each scale is shown on a single staff with a treble clef and a key signature of one flat (Bb). The scales are: 41 (C, D, Eb, F, G), 42 (C, D, E, F, G), 43 (C, D, E, F, Gb), 44 (C, D, E, F, G), and 45 (C, D, Eb, F, G).

11415

46 47 48 49 50

11514

51 52 53 54 55

11613

56 57 58 59 60

11712

61 62 63 64 65

Two Half Steps-11226

66 67 68 69 70

11235

71 72 73 74 75

11244

76 77 78 79 80

11253

81 82 83 84 85

11262

86 87 88 89 90



11325

91 92 93 94 95

11334

96 97 98 99 100

11343

101 102 103 104 105

11352

106 107 108 109 110

11424

111 112 113 114 115

11433

116 117 118 119 120

11442

121 122 123 124 125


11523

126 127 128 129 130

11532

131 132 133 134 135

11622



136 137 138 139 140

This musical staff shows exercise 11622, consisting of five measures of music. The notes are: 136 (F4, G4, A4, B4), 137 (B4, C5, D5, E5), 138 (E5, F5, G5, A5), 139 (A5, B5, C6, D6), and 140 (B5, C6, D6, E6).

Two Non Contiguous Half Steps-12126



141 142 143 144 145

This musical staff shows exercise 12126, consisting of five measures of music. The notes are: 141 (F4, G4, A4, B4), 142 (B4, C5, D5, E5), 143 (E5, F5, G5, A5), 144 (A5, B5, C6, D6), and 145 (B5, C6, D6, E6).

12135



146 147 148 149 150

This musical staff shows exercise 12135, consisting of five measures of music. The notes are: 146 (F4, G4, A4, B4), 147 (B4, C5, D5, E5), 148 (E5, F5, G5, A5), 149 (A5, B5, C6, D6), and 150 (B5, C6, D6, E6).

12144



151 152 153 154 155

This musical staff shows exercise 12144, consisting of five measures of music. The notes are: 151 (F4, G4, A4, B4), 152 (B4, C5, D5, E5), 153 (E5, F5, G5, A5), 154 (A5, B5, C6, D6), and 155 (B5, C6, D6, E6).

12153



156 157 158 159 160

This musical staff shows exercise 12153, consisting of five measures of music. The notes are: 156 (F4, G4, A4, B4), 157 (B4, C5, D5, E5), 158 (E5, F5, G5, A5), 159 (A5, B5, C6, D6), and 160 (B5, C6, D6, E6).

12162



161 162 163 164 165

This musical staff shows exercise 12162, consisting of five measures of music. The notes are: 161 (F4, G4, A4, B4), 162 (B4, C5, D5, E5), 163 (E5, F5, G5, A5), 164 (A5, B5, C6, D6), and 165 (B5, C6, D6, E6).

12216



166 167 168 169 170

This musical staff shows exercise 12216, consisting of five measures of music. The notes are: 166 (F4, G4, A4, B4), 167 (B4, C5, D5, E5), 168 (E5, F5, G5, A5), 169 (A5, B5, C6, D6), and 170 (B5, C6, D6, E6).

12315



171 172 173 174 175

This musical staff shows exercise 12315, consisting of five measures of music. The notes are: 171 (F4, G4, A4, B4), 172 (B4, C5, D5, E5), 173 (E5, F5, G5, A5), 174 (A5, B5, C6, D6), and 175 (B5, C6, D6, E6).

12414



176 177 178 179 180

This musical staff shows exercise 12414, consisting of five measures of music. The notes are: 176 (F4, G4, A4, B4), 177 (B4, C5, D5, E5), 178 (E5, F5, G5, A5), 179 (A5, B5, C6, D6), and 180 (B5, C6, D6, E6).

12513

181 182 183 184 185

13134

186 187 188 189 190

13143

191 192 193 194 195

13152

196 197 198 199 200

13215

201 202 203 204 205

13314

206 207 208 209 210

14142

211 212 213 214 215

One Half Step-12225

216 217 218 219 220

12234

221 222 223 224 225

12243



226 227 228 229 230

This musical staff contains five measures of music. The first measure is labeled 226, the second 227, the third 228, the fourth 229, and the fifth 230. The notation consists of eighth and sixteenth notes with stems pointing down.

12252



231 232 233 234 235

This musical staff contains five measures of music. The first measure is labeled 231, the second 232, the third 233, the fourth 234, and the fifth 235. The notation consists of eighth and sixteenth notes with stems pointing down.

12324



236 237 238 239 240

This musical staff contains five measures of music. The first measure is labeled 236, the second 237, the third 238, the fourth 239, and the fifth 240. The notation consists of eighth and sixteenth notes with stems pointing down.

12333



241 242 243 244 245

This musical staff contains five measures of music. The first measure is labeled 241, the second 242, the third 243, the fourth 244, and the fifth 245. The notation consists of eighth and sixteenth notes with stems pointing down.

12342



246 247 248 249 250

This musical staff contains five measures of music. The first measure is labeled 246, the second 247, the third 248, the fourth 249, and the fifth 250. The notation consists of eighth and sixteenth notes with stems pointing down.

12423



251 252 253 254 255

This musical staff contains five measures of music. The first measure is labeled 251, the second 252, the third 253, the fourth 254, and the fifth 255. The notation consists of eighth and sixteenth notes with stems pointing down.

12432



256 257 258 259 260

This musical staff contains five measures of music. The first measure is labeled 256, the second 257, the third 258, the fourth 259, and the fifth 260. The notation consists of eighth and sixteenth notes with stems pointing down.

12522



261 262 263 264 265

This musical staff contains five measures of music. The first measure is labeled 261, the second 262, the third 263, the fourth 264, and the fifth 265. The notation consists of eighth and sixteenth notes with stems pointing down.

13224



266 267 268 269 270

This musical staff contains five measures of music. The first measure is labeled 266, the second 267, the third 268, the fourth 269, and the fifth 270. The notation consists of eighth and sixteenth notes with stems pointing down.

13233

271 272 273 274 275

13242

276 277 278 279 280

13332

281 282 283 284 285

13323

286 287 288 289 290

13422

291 292 293 294 295

14223

296 297 298 299 300

14232

301 302 303 304 305

14322

306 307 308 309 310

15222

311 312 313 314 315

No Half Steps-22224

316 317 318 319 320

22233

321 322 323 324 325

22323

326 327 328 329 330

# 1.2 Pentatonic Scale Compendium 2

All Three Hundred Thirty Pentatonic Scales Starting on "C"

Four Half Steps-11118

1 2 3 4 5

Three Half Steps-11127

6 7 8 9 10

11136

11 12 13 14 15

11145

16 17 18 19 20

11154

21 22 23 24 25

11163

26 27 28 29 30

11172

31 32 33 34 35


Three Non Contiguous Half Steps-11217

36 37 38 39 40

11316

41 42 43 44 45

11415



46 47 48 49 50

This musical staff, labeled 11415, contains five measures of music. Each measure is numbered from 46 to 50. The notation consists of eighth and sixteenth notes with stems, and rests, all within a treble clef.

11514



51 52 53 54 55

This musical staff, labeled 11514, contains five measures of music. Each measure is numbered from 51 to 55. The notation consists of eighth and sixteenth notes with stems, and rests, all within a treble clef.


11613



56 57 58 59 60

This musical staff, labeled 11613, contains five measures of music. Each measure is numbered from 56 to 60. The notation consists of eighth and sixteenth notes with stems, and rests, all within a treble clef.


11712



61 62 63 64 65

This musical staff, labeled 11712, contains five measures of music. Each measure is numbered from 61 to 65. The notation consists of eighth and sixteenth notes with stems, and rests, all within a treble clef.

Two Half Steps-11226



66 67 68 69 70

This musical staff, labeled Two Half Steps-11226, contains five measures of music. Each measure is numbered from 66 to 70. The notation consists of eighth and sixteenth notes with stems, and rests, all within a treble clef.

11235



71 72 73 74 75

This musical staff, labeled 11235, contains five measures of music. Each measure is numbered from 71 to 75. The notation consists of eighth and sixteenth notes with stems, and rests, all within a treble clef.


11244



76 77 78 79 80

This musical staff, labeled 11244, contains five measures of music. Each measure is numbered from 76 to 80. The notation consists of eighth and sixteenth notes with stems, and rests, all within a treble clef.

11253



81 82 83 84 85

This musical staff, labeled 11253, contains five measures of music. Each measure is numbered from 81 to 85. The notation consists of eighth and sixteenth notes with stems, and rests, all within a treble clef.

11262



86 87 88 89 90

This musical staff, labeled 11262, contains five measures of music. Each measure is numbered from 86 to 90. The notation consists of eighth and sixteenth notes with stems, and rests, all within a treble clef.



11325



91 92 93 94 95

Detailed description: This musical staff, labeled 11325, contains five measures of music. Each measure is marked with a measure number from 91 to 95. The notation consists of eighth and sixteenth notes, with some beamed sixteenth notes. The key signature has one flat (Bb).

11334



96 97 98 99 100

Detailed description: This musical staff, labeled 11334, contains five measures of music. Each measure is marked with a measure number from 96 to 100. The notation consists of eighth and sixteenth notes, with some beamed sixteenth notes. The key signature has one flat (Bb).

11343



101 102 103 104 105

Detailed description: This musical staff, labeled 11343, contains five measures of music. Each measure is marked with a measure number from 101 to 105. The notation consists of eighth and sixteenth notes, with some beamed sixteenth notes. The key signature has one flat (Bb).


11352



106 107 108 109 110

Detailed description: This musical staff, labeled 11352, contains five measures of music. Each measure is marked with a measure number from 106 to 110. The notation consists of eighth and sixteenth notes, with some beamed sixteenth notes. The key signature has one flat (Bb).

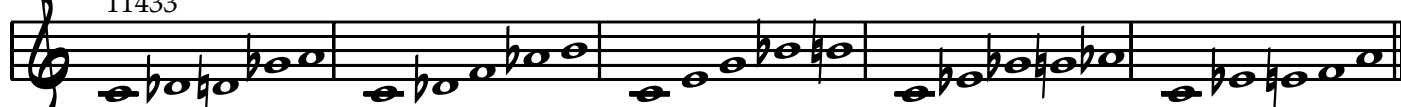
11424



111 112 113 114 115

Detailed description: This musical staff, labeled 11424, contains five measures of music. Each measure is marked with a measure number from 111 to 115. The notation consists of eighth and sixteenth notes, with some beamed sixteenth notes. The key signature has one flat (Bb).


11433



116 117 118 119 120

Detailed description: This musical staff, labeled 11433, contains five measures of music. Each measure is marked with a measure number from 116 to 120. The notation consists of eighth and sixteenth notes, with some beamed sixteenth notes. The key signature has one flat (Bb).


11442



121 122 123 124 125

Detailed description: This musical staff, labeled 11442, contains five measures of music. Each measure is marked with a measure number from 121 to 125. The notation consists of eighth and sixteenth notes, with some beamed sixteenth notes. The key signature has one flat (Bb).

11523



126 127 128 129 130

Detailed description: This musical staff, labeled 11523, contains five measures of music. Each measure is marked with a measure number from 126 to 130. The notation consists of eighth and sixteenth notes, with some beamed sixteenth notes. The key signature has one flat (Bb).

11532



131 132 133 134 135

Detailed description: This musical staff, labeled 11532, contains five measures of music. Each measure is marked with a measure number from 131 to 135. The notation consists of eighth and sixteenth notes, with some beamed sixteenth notes. The key signature has one flat (Bb).

11622



136

137

138

139

140

Two Non Contiguous Half Steps-12126



141

142

143

144

145

12135



146

147

148

149

150

12144



151

152

153

154

155

12153



156

157

158

159

160

12162



161

162

163

164

165

12216



166

167

168

169

170

12315



171

172

173

174

175

12414



176

177

178

179

180

12513

181 182 183 184 185

13134

186 187 188 189 190

13143

191 192 193 194 195

13152

196 197 198 199 200

13215

201 202 203 204 205

13314

206 207 208 209 210

14142

211 212 213 214 215

One Half Step-12225

216 217 218 219 220

12234

221 222 223 224 225


12243



226 227 228 229 230

This musical staff contains five measures of music. The first measure is labeled 226, the second 227, the third 228, the fourth 229, and the fifth 230. The notation consists of eighth and sixteenth notes with stems pointing down.

12252



231 232 233 234 235

This musical staff contains five measures of music. The first measure is labeled 231, the second 232, the third 233, the fourth 234, and the fifth 235. The notation consists of eighth and sixteenth notes with stems pointing down.

12324



236 237 238 239 240

This musical staff contains five measures of music. The first measure is labeled 236, the second 237, the third 238, the fourth 239, and the fifth 240. The notation consists of eighth and sixteenth notes with stems pointing down.

12333



241 242 243 244 245

This musical staff contains five measures of music. The first measure is labeled 241, the second 242, the third 243, the fourth 244, and the fifth 245. The notation consists of eighth and sixteenth notes with stems pointing down.

12342



246 247 248 249 250

This musical staff contains five measures of music. The first measure is labeled 246, the second 247, the third 248, the fourth 249, and the fifth 250. The notation consists of eighth and sixteenth notes with stems pointing down.

12423



251 252 253 254 255

This musical staff contains five measures of music. The first measure is labeled 251, the second 252, the third 253, the fourth 254, and the fifth 255. The notation consists of eighth and sixteenth notes with stems pointing down.


12432



256 257 258 259 260

This musical staff contains five measures of music. The first measure is labeled 256, the second 257, the third 258, the fourth 259, and the fifth 260. The notation consists of eighth and sixteenth notes with stems pointing down.

12522



261 262 263 264 265

This musical staff contains five measures of music. The first measure is labeled 261, the second 262, the third 263, the fourth 264, and the fifth 265. The notation consists of eighth and sixteenth notes with stems pointing down.

13224



266 267 268 269 270

This musical staff contains five measures of music. The first measure is labeled 266, the second 267, the third 268, the fourth 269, and the fifth 270. The notation consists of eighth and sixteenth notes with stems pointing down.

13233



271 272 273 274 275

This musical staff contains five measures of music. The first measure is labeled 271, the second 272, the third 273, the fourth 274, and the fifth 275. The sequence number 13233 is written above the first measure.

13242



276 277 278 279 280

This musical staff contains five measures of music. The first measure is labeled 276, the second 277, the third 278, the fourth 279, and the fifth 280. The sequence number 13242 is written above the first measure.

13332



281 282 283 284 285

This musical staff contains five measures of music. The first measure is labeled 281, the second 282, the third 283, the fourth 284, and the fifth 285. The sequence number 13332 is written above the first measure.

13323



286 287 288 289 290

This musical staff contains five measures of music. The first measure is labeled 286, the second 287, the third 288, the fourth 289, and the fifth 290. The sequence number 13323 is written above the first measure.


13422



291 292 293 294 295

This musical staff contains five measures of music. The first measure is labeled 291, the second 292, the third 293, the fourth 294, and the fifth 295. The sequence number 13422 is written above the first measure.

14223



296 297 298 299 300

This musical staff contains five measures of music. The first measure is labeled 296, the second 297, the third 298, the fourth 299, and the fifth 300. The sequence number 14223 is written above the first measure.


14232



301 302 303 304 305

This musical staff contains five measures of music. The first measure is labeled 301, the second 302, the third 303, the fourth 304, and the fifth 305. The sequence number 14232 is written above the first measure.

14322



306 307 308 309 310

This musical staff contains five measures of music. The first measure is labeled 306, the second 307, the third 308, the fourth 309, and the fifth 310. The sequence number 14322 is written above the first measure.

15222



311 312 313 314 315

This musical staff contains five measures of music. The first measure is labeled 311, the second 312, the third 313, the fourth 314, and the fifth 315. The sequence number 15222 is written above the first measure.

No Half Steps-22224

316 317 318 319 320

22233

321 322 323 324 325

22323

326 327 328 329 330

## 1.3 Selected Pentatonic Scales- Suggested Harmonic Applications

### **#141 C, Db, Eb, E, Gb (12126)**

...contains chord tones and other good sounding notes as related to the following chords:

F#/C, F#min/C, A/C, C7 (or Eb7, F#7, or A7) *with any or all of the following alterations/extensions: -9, +9, +11, 13, C# (or E, G, or Bb) diminished 7, C7(+5+9), EMaj7(+5), F#9(+11), Bbmin7(-5)...*

### **#151 C, Db, Eb, E, Ab (12144)**

...C7alt(+5 and any or all of the following: -9, +9, +11), Ab7(-13), AMaj7(+9), Db-6, EMaj7(+5), Gb9(+11), Bbmin7(-5)...

### **#176 C, Db, Eb, G, Ab (12414)**

...AbMaj7, Bbmin7, C Phrygian, DbMaj7(-5), Eb7, Eb7(sus4), Db/F, Db/G...

### **#181 C, Db, Eb, Ab, A (12513)**

...C7(+9) with both natural and flat 13, F#7 with both natural and flat 9, AMaj7(+9), Ab11(-9), Dbmin(Maj7 +5)/Eb...

### **#196 C, Db, E, F, Ab (13134)**

C7(sus4 -9 +5) add 10, DbMaj7(+9), also good for C Phrygian (with 3 and sus4)...

**#201 C, Db, E, Gb, G (13215)** is a subset of the same diminished scale as 141, 241, 271, 276, 281, 286 and has many similar chord associations.

F#/C, F#min/C, A/C, C7 (or Eb7, F#7, or A7) *with any or all of the following alterations/extensions: -9, +9, +11, 13, C# (or E, G, or Bb) diminished 7...*

### **#211 C, Db, F, Gb, Bb (14142)**

GbMaj7/C (C Locrian), Ebmin7, Gb/Bb, Ab7(sus4)...

**#226 C, Db, Eb, F, A (12243)**

Bbmin(Maj7), DbMaj7(+5), Eb7(+11), Gmin7(-5), A7alt, F/Gb...

**#236 C, Db, Eb, Gb, Ab (12324)**

Ebmin7, F Phrygian, GbMaj7, Gb7, Ab7(sus4)...

**#241 C, Db, Eb, Gb, A (12333)**

F#/C, F#min/C, A/C, C7 (or Eb7, F#7, or A7) *with any or all of the following alterations/extensions: -9, +9, +11, 13, C# (or E, G, or Bb) diminished 7...*

**#256 C, Db, Eb, G, Bb (12432)**

C Phrygian, DbMaj7(+11), Eb7, Db/F, A7 (+5 -9), Bbmin6...

**#261 C, Db, Eb, Ab, Bb (12522)**

Eb7(sus4), DbMaj7, Db/F, GbMaj7, Gb7, Bbmin7, C Phrygian, F Phrygian...

**#266 C, Db, E, Gb, Ab (13224)**

C7alt, Dbmin(Maj7), EMaj7(+5), Gb7, Bbmin7(-5)...

These four scales are subsets of the same diminished scale and have similar harmonic implications:

**#271 C, Db, E, Gb, A (13233)**

**#276 C, Db, E, Gb, Bb (13242)**

**#281 C, Db, E, G, Bb (13332)**

**#286 C, Db, E, G, A (13323)**

Bbmin(Maj7 +5)/C, DbMaj7(sus4 +5)/C, F#/C, F#min/C, A/C, C7 (or Eb7, F#7, or A7) *with any or all of the following alterations/extensions: -9, +9, +11, 13, C# (or E, G, or Bb) diminished 7...*

**#291 C, Db, E, Ab, Bb (13422)**

C7alt, Dbmin(Maj7), EMaj7(+5), Gb7, Bbmin7(-5)...

**#296 C, Db, F, G, A (14223)**

Bbmin(Maj7), DbMaj7(+5), Eb7, Gmin7(-5), A7alt...



**#301 C, Db, F, G, Bb (14232)**

C Phrygian, DbMaj7(-5), Eb7, Db/F, Gmin7(-5), A7alt...

**#306 C, Db, F, Ab, Bb (14322)**

C Phrygian, DbMaj7, Eb7(sus4), Db/F, Bbmin7...

**#311 C, Db, Gb, Ab, Bb (15222)**

C7alt, Ebmin7, F Phrygian, GbMaj7, Gb/C, Ab7 (sus4 add 10)...

**#316 C, D, E, Gb, Ab (22224)**

C7(+5), D7(+5), E7(+5), Gb7(+5), Ab7(+5), Bb7(+5)...

**#321 C, D, E, Gb, A (22233)**

CMaj7(-5), D7, Gbmin7(-5), Ab7alt...

**#326 C, D, E, G, A (22323)**

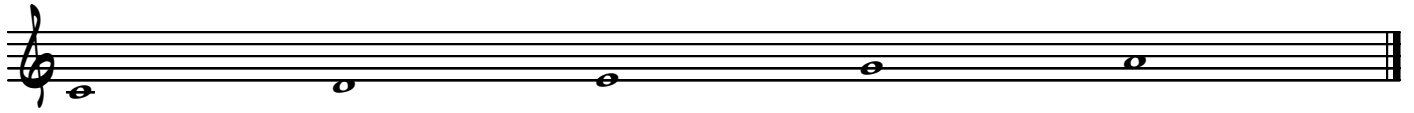
A-7, A Phrygian, CMaj7, C7, D7(sus4), E Phrygian, FMaj7, F#7alt, G7(sus4), Gmin7



# 2.1 Getting Familiar with the Intervals

## Pentatonic 326

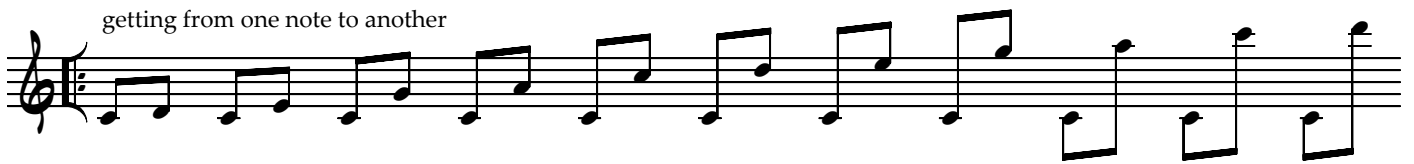
Suggested harmonic applications: C6, CMaj7, C7(13), Dm7, F/E, FMaj7, F#7alt(+5 and any or all of the following: -9, +9, +11), G7(sus4), Gm7, Am7, F/A, Bb69, BbMaj7...please search for your own applications!  
Please read the Introduction for suggestions regarding ways to practice these exercises.



play scale through full range



getting from one note to another



The image displays ten staves of musical notation, each beginning with a treble clef and a repeat sign. The notation consists of a series of notes and rests, primarily eighth and sixteenth notes, arranged in a rhythmic pattern. The notes are mostly quarter and eighth notes, with some sixteenth notes. The rests are also eighth and sixteenth notes. The overall structure is a sequence of notes and rests, with some variations in the rhythm and pitch across the staves. The notation is clean and professional, typical of a music manuscript.

This image displays a page of musical notation, consisting of ten staves of music. Each staff begins with a treble clef and a repeat sign. The notation is a sequence of eighth and sixteenth notes, creating a rhythmic pattern. The notes are arranged in a way that suggests a specific melodic line, with some staves showing more complex rhythmic groupings. The overall appearance is that of a technical exercise or a short piece of music.

## 2.2 Intervallic Scales

These exercises are similar to traditional "scales in thirds, fourths," etc. but they appear here in two, three, four, and five note configurations

skip one note-scale in thirds in groups of two

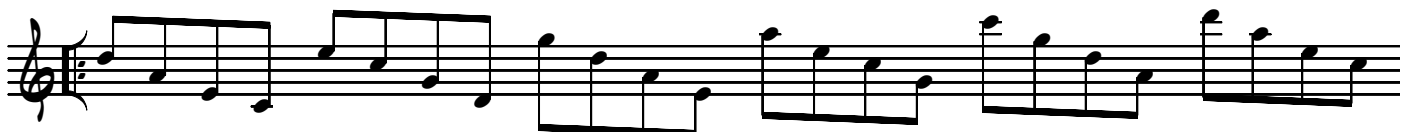
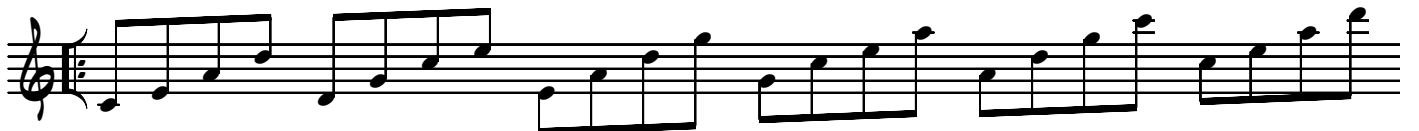


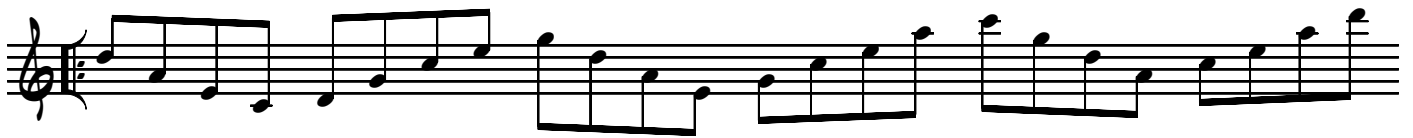
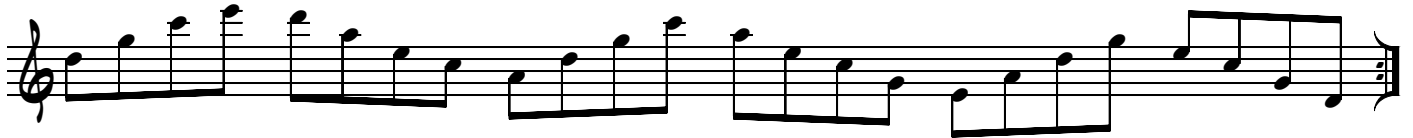
scale in thirds in groups of three



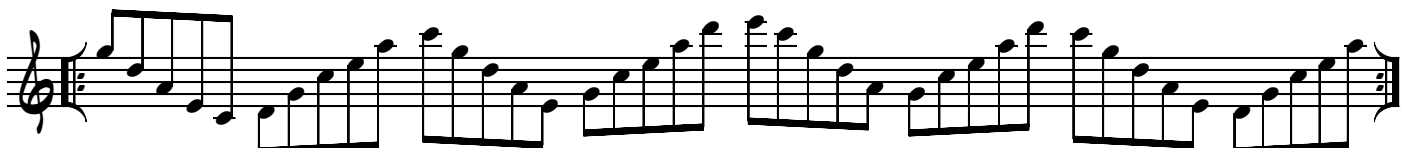


scale in thirds in groups of four





scale in thirds in groups of five



skip two-scale in thirds in groups of two



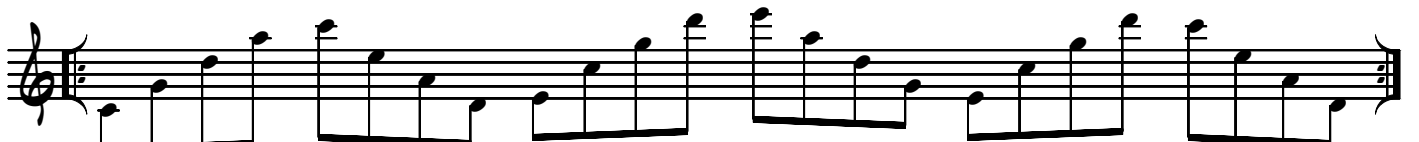
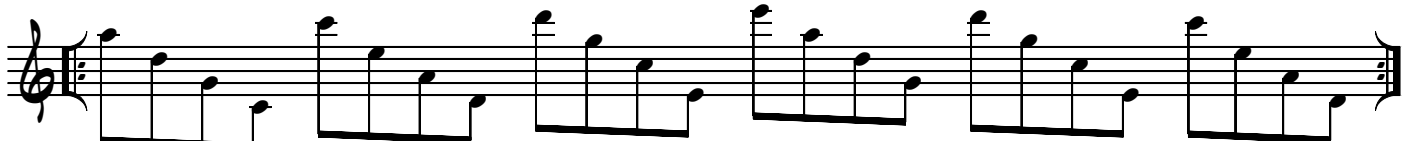




scale in fourths in groups of three



scale in fourths in groups of four



scale in fourths in groups of five

skip three-scale in fifths in groups of two

scale in fifths in groups of three

Musical staff 1: Treble clef, 2/4 time signature, eighth-note scale in groups of four.

Musical staff 2: Treble clef, 2/4 time signature, eighth-note scale in groups of four.

Musical staff 3: Treble clef, 2/4 time signature, eighth-note scale in groups of four.

scale in fifths in groups of four

Musical staff 4: Treble clef, 2/4 time signature, scale in fifths in groups of four.

Musical staff 5: Treble clef, 2/4 time signature, scale in fifths in groups of four.

Musical staff 6: Treble clef, 2/4 time signature, scale in fifths in groups of four.

Musical staff 7: Treble clef, 2/4 time signature, scale in fifths in groups of four.

scale in fifths in groups of 5

Musical staff 8: Treble clef, 2/4 time signature, scale in fifths in groups of 5.

Musical staff 9: Treble clef, 2/4 time signature, scale in fifths in groups of 5.

Musical staff 10: Treble clef, 2/4 time signature, scale in fifths in groups of 5.

## 2.3 Four Note Patterns





















2531



2534 same as 1423

2541



2543 same as 1432

3124



3125



3142







Musical staff 1: Treble clef, 11 measures of music.

3215

Musical staff 2: Treble clef, 11 measures of music.

Musical staff 3: Treble clef, 11 measures of music.

3241

Musical staff 4: Treble clef, 11 measures of music.

Musical staff 5: Treble clef, 11 measures of music.

3245 same as 2134  
3251

Musical staff 6: Treble clef, 11 measures of music.

Musical staff 7: Treble clef, 11 measures of music.

3254 same as 2143  
3412

Musical staff 8: Treble clef, 11 measures of music.

Musical staff 9: Treble clef, 11 measures of music.

3415

Musical staff 10: Treble clef, 11 measures of music.







3524 same as 2413



3541



3542 same as 2431



4123



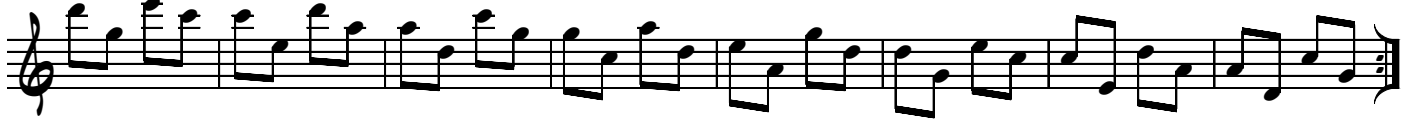
4125



4132



4135





4235 same as 3124



4251



4253 same as 3142



4312



4315



4321



4325 same as 3214



4351



4352 same as 3241

4512



4513



4521



4523 same as 3412

4531



4532 same as 3421

5123













## 2.4 Three Note Patterns

123



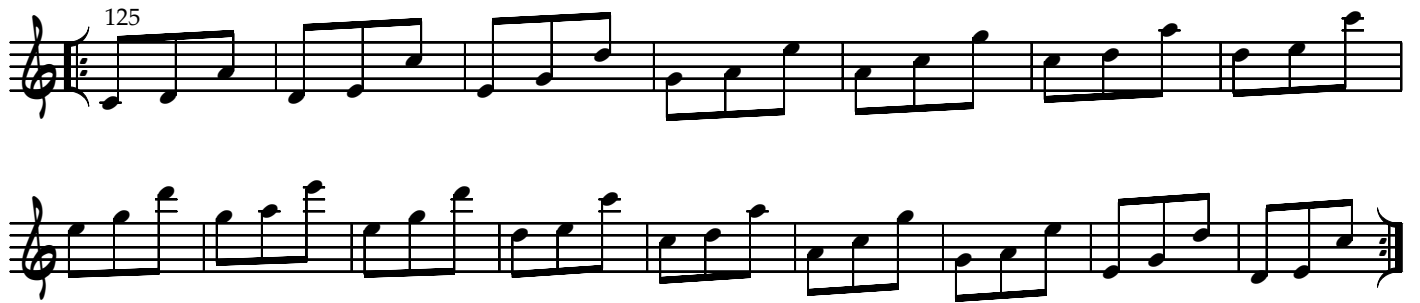
Exercise 123 consists of two measures of music. The first measure contains a sequence of eighth notes: C4, D4, E4, F4, G4, A4, B4, C5. The second measure contains a sequence of eighth notes: C5, B4, A4, G4, F4, E4, D4, C4. The piece concludes with a double bar line and repeat dots.

124



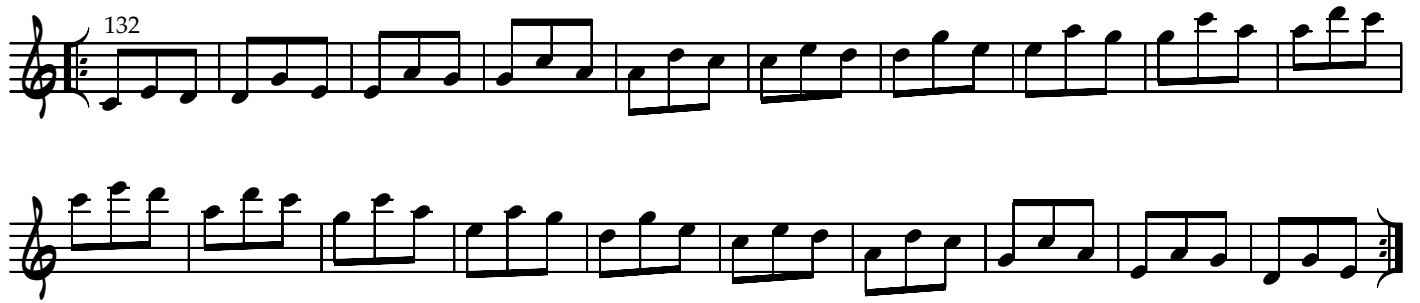
Exercise 124 consists of two measures of music. The first measure contains a sequence of eighth notes: C4, D4, E4, F4, G4, A4, B4, C5. The second measure contains a sequence of eighth notes: C5, B4, A4, G4, F4, E4, D4, C4. The piece concludes with a double bar line and repeat dots.

125



Exercise 125 consists of two measures of music. The first measure contains a sequence of eighth notes: C4, D4, E4, F4, G4, A4, B4, C5. The second measure contains a sequence of eighth notes: C5, B4, A4, G4, F4, E4, D4, C4. The piece concludes with a double bar line and repeat dots.

132



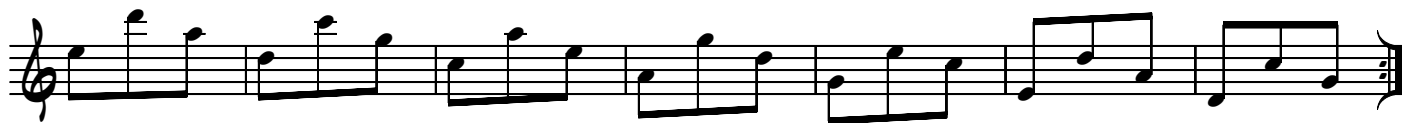
Exercise 132 consists of two measures of music. The first measure contains a sequence of eighth notes: C4, D4, E4, F4, G4, A4, B4, C5. The second measure contains a sequence of eighth notes: C5, B4, A4, G4, F4, E4, D4, C4. The piece concludes with a double bar line and repeat dots.

134



Exercise 134 consists of two measures of music. The first measure contains a sequence of eighth notes: C4, D4, E4, F4, G4, A4, B4, C5. The second measure contains a sequence of eighth notes: C5, B4, A4, G4, F4, E4, D4, C4. The piece concludes with a double bar line and repeat dots.







234 same as 123

235 same as 124



243 same as 132

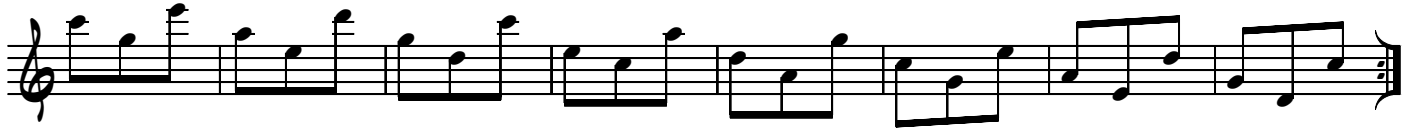
245 same as 134



253 same as 142

254 same as 143





324 same as 213

325 same as 214



342 same as 231

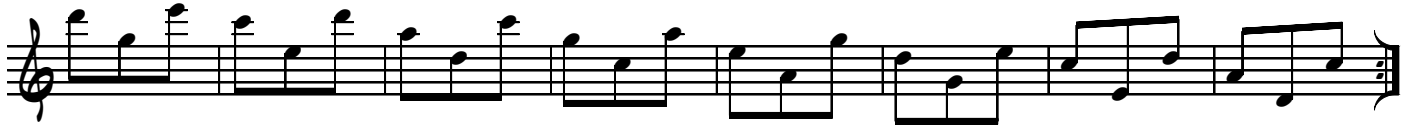
345 same as 234, 123



352 same as 241

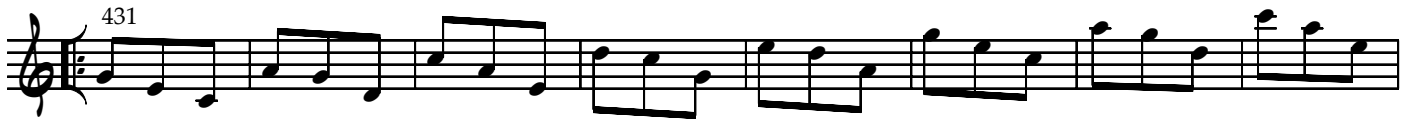
354 same as 243, 132





423 same as 312

425 same as 314



432 same as 321

435 same as 324, 213





452 same as 341

453 same as 342, 231



512



513



514

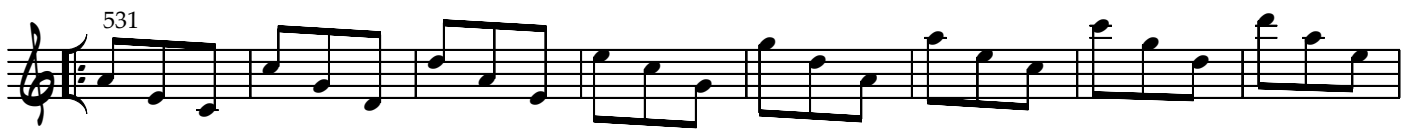


521



523 same as 412

524 same as 413



531



532 same as 421

534 same as 423, 312



541

542 same as 431

543 same as 432, 321





## 2.5 More Shapes

The image displays ten staves of musical notation, each containing a sequence of notes and rests. The notation is organized into pairs of staves, with the first staff of each pair using a treble clef and the second staff using a soprano clef. The time signatures vary across the staves: the first two staves are in 7/8 time, the next two are in 8/8 time, and the final two are in 6/8 time. The key signatures are also varied, including one sharp (F#) and one flat (Bb). The notes are primarily eighth and sixteenth notes, often beamed together in groups. The notation includes various musical symbols such as stems, beams, and clefs, and ends with double bar lines and repeat signs.









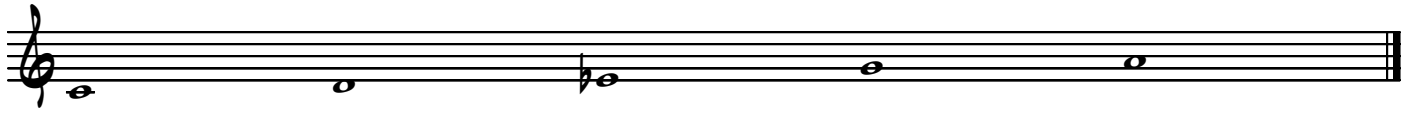


# 3.1 Getting Familiar with the Intervals

## Pentatonic 305

Suggested harmonic applications: Cmin6, min(Maj7), or min7, D Phrygian, Eb6 or Maj7(-5), F7, Amin7(-5), B7alt...  
...please search for your own applications!

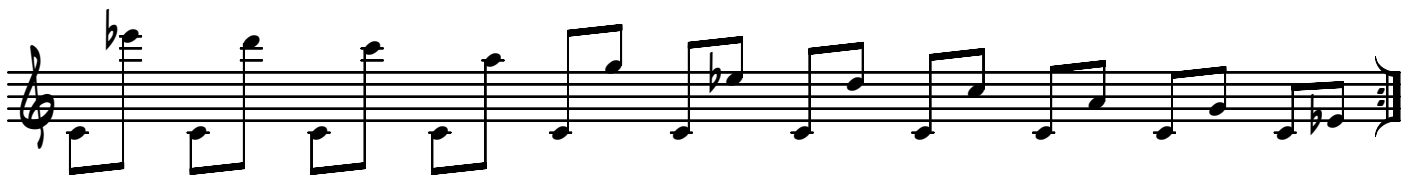
Please read the Introduction for suggestions regarding ways to practice these exercises.



play scale through full range



getting from one note to another



The image displays ten staves of musical notation, organized into five pairs. Each pair consists of a treble clef staff with a key signature of one flat (F major or D minor) and a common time signature. The first five pairs of staves are written in G major (one sharp, F#). The first staff of each pair contains eighth notes, while the second staff contains sixteenth notes. The last five pairs of staves are written in G minor (no sharps or flats). The first staff of each pair contains eighth notes, and the second staff contains sixteenth notes. The notation includes various rhythmic values, accidentals (sharps and flats), and repeat signs at the end of each line.



The image displays ten systems of musical notation, each consisting of two staves. The first nine systems are written in a treble clef with a key signature of one flat (B-flat). The notation includes various rhythmic values and accidentals. The tenth system consists of two staves with a treble clef and a key signature of two flats (B-flat and E-flat). The notation includes various rhythmic values and accidentals.

## 3.2 Intervallic Scales

These exercises are similar to traditional "scales in thirds, fourths," etc. but they appear here in two, three, four, and five note configurations

skip one note-scale in thirds in groups of two



Eight staves of musical notation in treble clef, each containing a scale in thirds with one note skipped. The scales are in various keys: C major, D major, E major, F major, G major, A major, B major, and C minor. Each staff shows a sequence of notes connected by stems, with accidentals indicating the specific key signature.

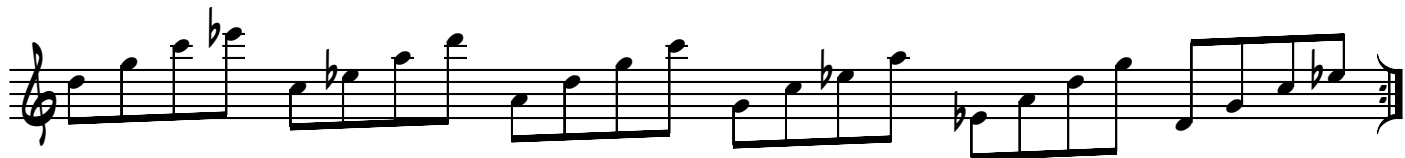
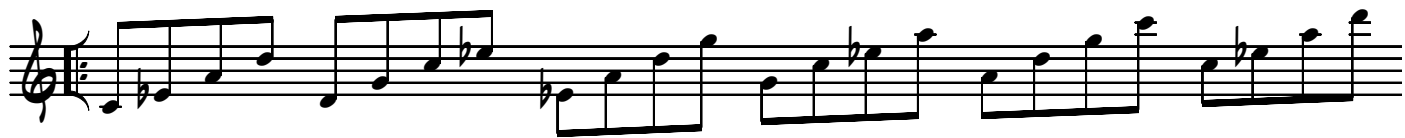
scale in thirds in groups of three

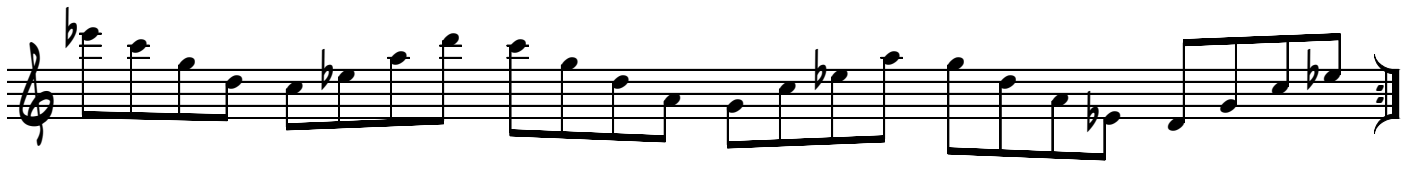
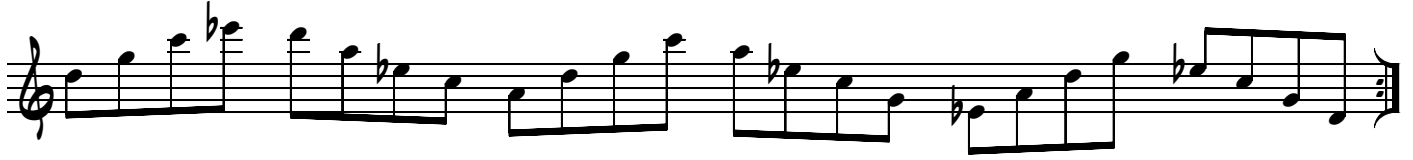
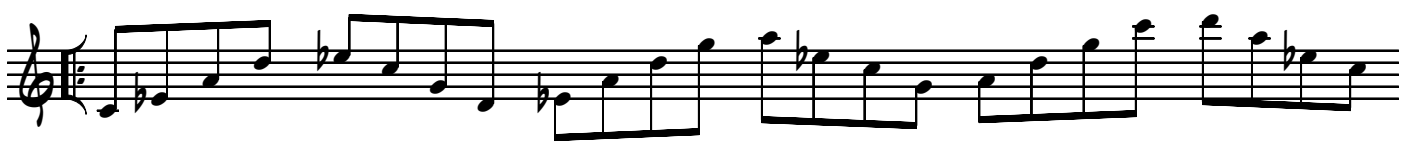


One staff of musical notation in treble clef, containing a scale in thirds with groups of three notes. The scale is in C major.

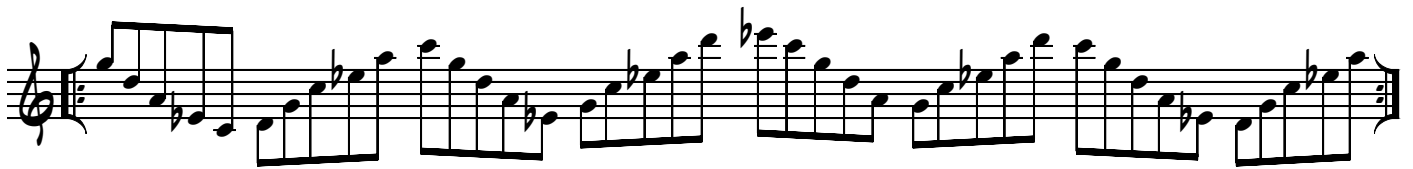
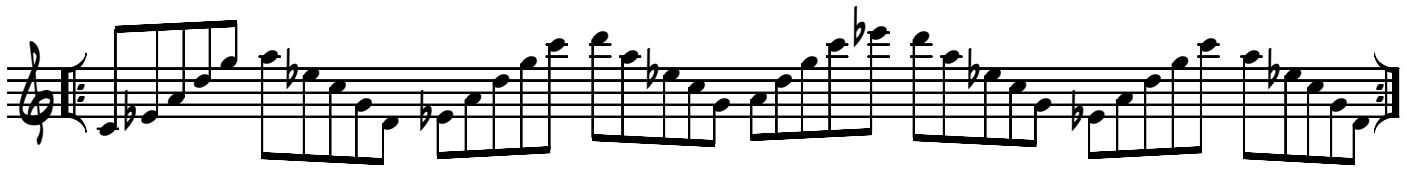


scale in thirds in groups of four





scale in thirds in groups of five



skip two-scale in fourths in groups of two

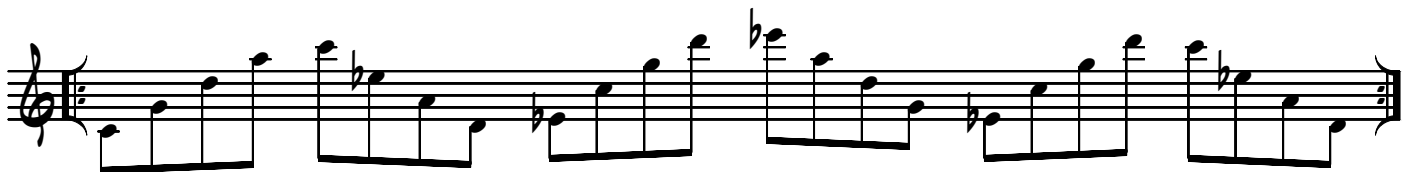
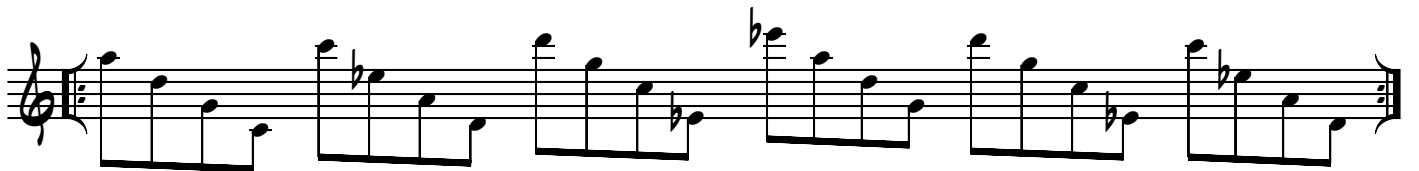
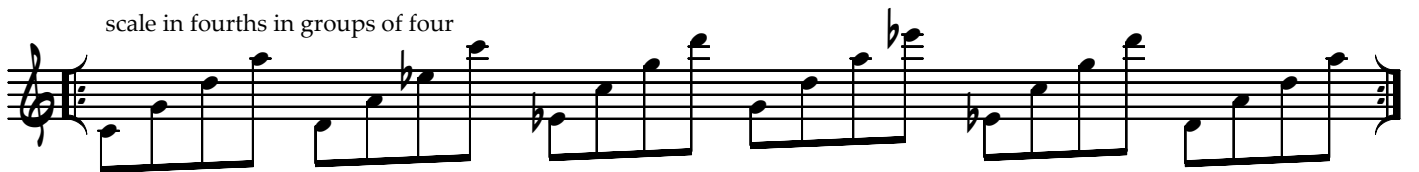




scale in fourths in groups of three



scale in fourths in groups of four



scale in fourths in groups of five

skip three-scale in fifths in groups of two

scale in fifths in groups of three

Three staves of musical notation showing a scale in fifths in groups of four. The notes are: C4-D4-E4-F4, G4-A4-B4-C5, D5-E5-F5-G5, A5-B5-C6, D6-E6-F6-G6, A6-B6-C7, D7-E7-F7-G7, A7-B7-C8.

scale in fifths in groups of four

Four staves of musical notation showing a scale in fifths in groups of five. The notes are: C4-D4-E4-F4-G4, A4-B4-C5-D5-E5, F5-G5-A5-B5-C6, D6-E6-F6-G6-A6, B6-C7-D7-E7-F7, G7-A7-B7-C8, D8-E8-F8-G8, A8-B8-C9.

scale in fifths in groups of 5

Three staves of musical notation showing a scale in fifths in groups of five. The notes are: C4-D4-E4-F4-G4, A4-B4-C5-D5-E5, F5-G5-A5-B5-C6, D6-E6-F6-G6-A6, B6-C7-D7-E7-F7, G7-A7-B7-C8, D8-E8-F8-G8, A8-B8-C9.

### 3.3 Four Note Patterns

1234

Musical notation for pattern 1234, first staff. The staff begins with a treble clef, a key signature of one flat (B-flat), and a common time signature. The melody consists of quarter notes: C4, D4, E4, F4, G4, A4, Bb4, C5, Bb4, A4, G4, F4, E4, D4, C4.

Musical notation for pattern 1234, second staff. The staff begins with a treble clef, a key signature of one flat (B-flat), and a common time signature. The melody consists of quarter notes: C4, D4, E4, F4, G4, A4, Bb4, C5, Bb4, A4, G4, F4, E4, D4, C4.

1235

Musical notation for pattern 1235, first staff. The staff begins with a treble clef, a key signature of one flat (B-flat), and a common time signature. The melody consists of quarter notes: C4, D4, E4, F4, G4, A4, Bb4, C5, Bb4, A4, G4, F4, E4, D4, C4.

Musical notation for pattern 1235, second staff. The staff begins with a treble clef, a key signature of one flat (B-flat), and a common time signature. The melody consists of quarter notes: C4, D4, E4, F4, G4, A4, Bb4, C5, Bb4, A4, G4, F4, E4, D4, C4.

1243

Musical notation for pattern 1243, first staff. The staff begins with a treble clef, a key signature of one flat (B-flat), and a common time signature. The melody consists of quarter notes: C4, D4, E4, F4, G4, A4, Bb4, C5, Bb4, A4, G4, F4, E4, D4, C4.

Musical notation for pattern 1243, second staff. The staff begins with a treble clef, a key signature of one flat (B-flat), and a common time signature. The melody consists of quarter notes: C4, D4, E4, F4, G4, A4, Bb4, C5, Bb4, A4, G4, F4, E4, D4, C4.

1245

Musical notation for pattern 1245, first staff. The staff begins with a treble clef, a key signature of one flat (B-flat), and a common time signature. The melody consists of quarter notes: C4, D4, E4, F4, G4, A4, Bb4, C5, Bb4, A4, G4, F4, E4, D4, C4.

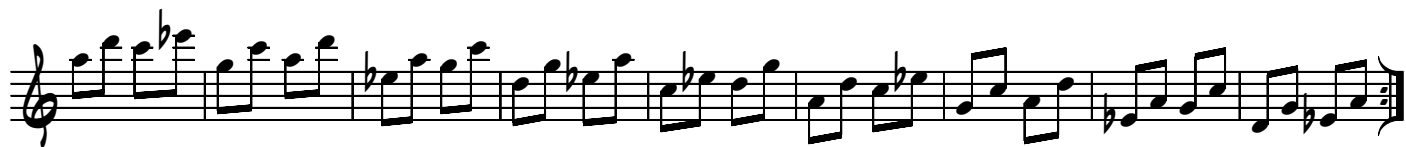
Musical notation for pattern 1245, second staff. The staff begins with a treble clef, a key signature of one flat (B-flat), and a common time signature. The melody consists of quarter notes: C4, D4, E4, F4, G4, A4, Bb4, C5, Bb4, A4, G4, F4, E4, D4, C4.

1253

Musical notation for pattern 1253, first staff. The staff begins with a treble clef, a key signature of one flat (B-flat), and a common time signature. The melody consists of quarter notes: C4, D4, E4, F4, G4, A4, Bb4, C5, Bb4, A4, G4, F4, E4, D4, C4.

Musical notation for pattern 1253, second staff. The staff begins with a treble clef, a key signature of one flat (B-flat), and a common time signature. The melody consists of quarter notes: C4, D4, E4, F4, G4, A4, Bb4, C5, Bb4, A4, G4, F4, E4, D4, C4.

















2435 same as 1324

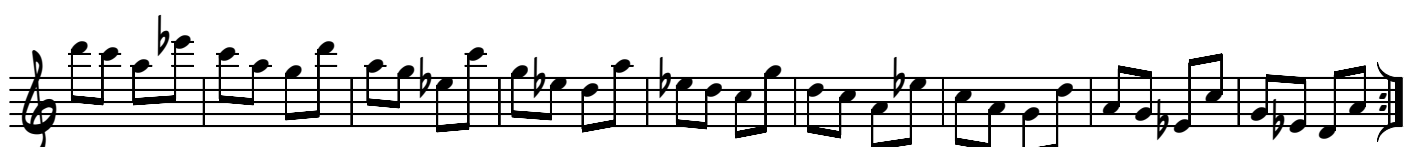
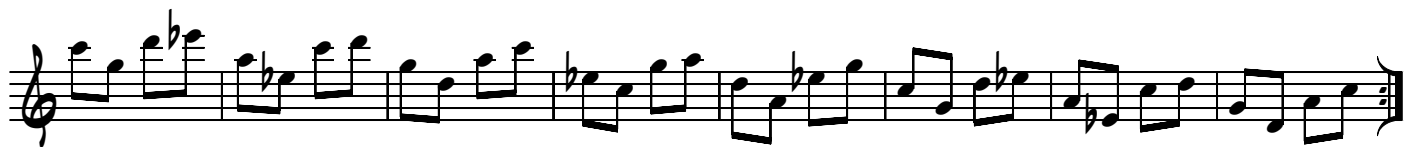


2453 same as 1342

















3524 same as 2413



3541



3542 same as 2431



4123



4125



4132



4135





4235 same as 3124



4251



4253 same as 3142

4312



4315



4321



4325 same as 3214

4351





4352 same as 3241

4512



4513



4521



4523 same as 3412

4531



4532 same as 3421

5123













5432 same as 4321

### 3.4 Three Note Patterns

123

The first system of exercise 123 consists of two staves. The top staff begins with a treble clef, a key signature of one flat (B-flat), and a common time signature. It contains a sequence of eighth notes: C4, D4, E4, F4, G4, A4, B4, C5, B4, A4, G4, F4, E4, D4, C4. The bottom staff continues with eighth notes: C4, B3, A3, G3, F3, E3, D3, C3, B2, A2, G2, F2, E2, D2, C2.

124

The first system of exercise 124 consists of two staves. The top staff begins with a treble clef, a key signature of one flat (B-flat), and a common time signature. It contains a sequence of eighth notes: C4, D4, E4, F4, G4, A4, B4, C5, B4, A4, G4, F4, E4, D4, C4. The bottom staff continues with eighth notes: C4, B3, A3, G3, F3, E3, D3, C3, B2, A2, G2, F2, E2, D2, C2.

125

The first system of exercise 125 consists of two staves. The top staff begins with a treble clef, a key signature of one flat (B-flat), and a common time signature. It contains a sequence of eighth notes: C4, D4, E4, F4, G4, A4, B4, C5, B4, A4, G4, F4, E4, D4, C4. The bottom staff continues with eighth notes: C4, B3, A3, G3, F3, E3, D3, C3, B2, A2, G2, F2, E2, D2, C2.

132

The first system of exercise 132 consists of two staves. The top staff begins with a treble clef, a key signature of one flat (B-flat), and a common time signature. It contains a sequence of eighth notes: C4, D4, E4, F4, G4, A4, B4, C5, B4, A4, G4, F4, E4, D4, C4. The bottom staff continues with eighth notes: C4, B3, A3, G3, F3, E3, D3, C3, B2, A2, G2, F2, E2, D2, C2.

134

The first system of exercise 134 consists of two staves. The top staff begins with a treble clef, a key signature of one flat (B-flat), and a common time signature. It contains a sequence of eighth notes: C4, D4, E4, F4, G4, A4, B4, C5, B4, A4, G4, F4, E4, D4, C4. The bottom staff continues with eighth notes: C4, B3, A3, G3, F3, E3, D3, C3, B2, A2, G2, F2, E2, D2, C2.







234 same as 123

235 same as 124



243 same as 132

245 same as 134

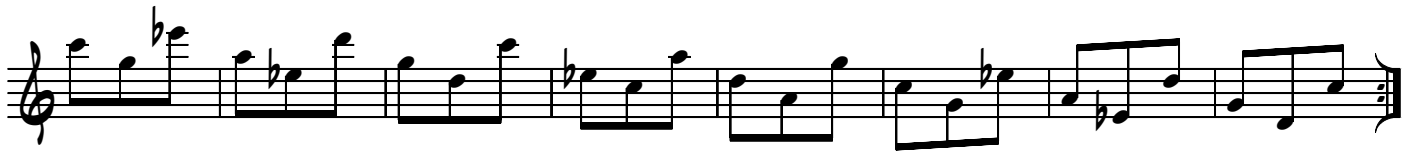


253 same as 142

254 same as 143







324 same as 213

325 same as 214



342 same as 231

345 same as 234, 123



352 same as 241

354 same as 243, 132





423 same as 312

425 same as 314



432 same as 321

435 same as 324, 213





452 same as 341

453 same as 342, 231



512



513



514



521



523 same as 412

524 same as 413



531



532 same as 421

534 same as 423, 312



541

542 same as 431

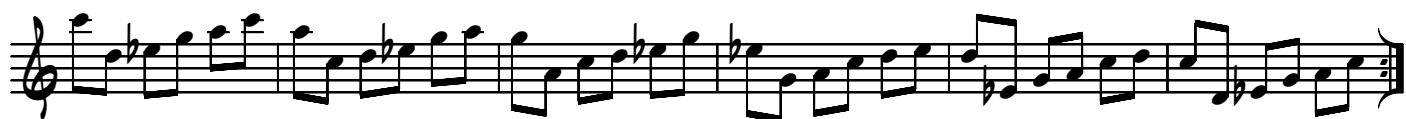
543 same as 432, 321



### 3.5 More Shapes

The image displays a musical score for ten staves, all in treble clef. The score is organized into three time signature sections: 2/4, 3/4, and 6/8. Each staff contains a single melodic line with various rhythmic values and accidentals (sharps, flats, and naturals). The notation includes stems, beams, and slurs, indicating the flow and phrasing of the music. The first two staves are in 2/4 time, the next four in 3/4, and the last four in 6/8. The music features a variety of rhythmic patterns and melodic lines, with some staves showing repeated rhythmic motifs.













## 4.1 Shape Morphing

The following exercises are examples of developing the shapes found in this book by using different pitch/interval sets. Some of these are exact modal transpositions, but most are slightly adjusted in order to retain the essential character of the shape.

Pentatonic 326

Two systems of musical notation for the Pentatonic 326 exercise. The first system consists of two staves: the top staff is in treble clef with a 2/4 time signature, starting with a repeat sign and containing a sequence of eighth notes (G4, A4, B4, C5, B4, A4, G4); the bottom staff is in bass clef and contains a sequence of eighth notes (G3, A3, B3, C4, B3, A3, G3). The second system consists of a single staff in treble clef containing a sequence of eighth notes (G4, A4, B4, C5, B4, A4, G4).

Pentatonic 304

Two systems of musical notation for the Pentatonic 304 exercise. The first system consists of two staves: the top staff is in treble clef with a 7/8 time signature and a key signature of one flat (Bb), starting with a repeat sign and containing a sequence of eighth notes (G4, Ab4, Bb4, C5, Bb4, Ab4, G4); the bottom staff is in bass clef and contains a sequence of eighth notes (G3, Ab3, Bb3, C4, Bb3, Ab3, G3). The second system consists of a single staff in treble clef containing a sequence of eighth notes (G4, Ab4, Bb4, C5, Bb4, Ab4, G4).

Major Scale

Two systems of musical notation for the Major Scale exercise. The first system consists of two staves: the top staff is in treble clef with a 7/8 time signature, starting with a repeat sign and containing a sequence of eighth notes (G4, A4, B4, C5, B4, A4, G4); the bottom staff is in bass clef and contains a sequence of eighth notes (G3, A3, B3, C4, B3, A3, G3). The second system consists of a single staff in treble clef containing a sequence of eighth notes (G4, A4, B4, C5, B4, A4, G4).



Melodic Minor Scale



Harmonic Minor Scale



Diminished Scale



The first four staves of music show a scale exercise in a key with two flats (B-flat major or D minor). The notes are: B-flat, C, D, E-flat, F, G, A-flat, B-flat, C, D, E-flat, F, G, A-flat, B-flat. The first three staves are ascending and descending eighth-note patterns. The fourth staff is a descending eighth-note pattern ending with a double bar line.

Augmented Scale

The next four staves of music show an augmented scale exercise in a key with one sharp (F# major or C# minor). The notes are: F#, G, A, B, C, D, E, F#, G, A, B, C, D, E, F#. The first staff starts with a repeat sign. The second and third staves are ascending and descending eighth-note patterns. The fourth staff is a descending eighth-note pattern ending with a double bar line.

chord shape-C7(sus4)

The final two staves of music show a chord shape exercise for C7(sus4). The notes are: C, F, G, C, F, G, C, F, G, C, F, G, C, F, G. The first staff starts with a repeat sign. The second staff is a descending eighth-note pattern ending with a double bar line.

chord shape-Cmin(Maj7 +5)

Two staves of musical notation for the Cmin(Maj7 +5) chord shape. The first staff shows the initial notes and a double bar line with repeat dots. The second staff continues the melodic line.

chord shape-CMaj7(sus4 +5)

Two staves of musical notation for the CMaj7(sus4 +5) chord shape. The first staff shows the initial notes and a double bar line with repeat dots. The second staff continues the melodic line.

chord shape-CMaj7(-5)

Two staves of musical notation for the CMaj7(-5) chord shape. The first staff shows the initial notes and a double bar line with repeat dots. The second staff continues the melodic line.

chord shape-CMaj7(+5)

Two staves of musical notation for the CMaj7(+5) chord shape. The first staff shows the initial notes and a double bar line with repeat dots. The second staff continues the melodic line.

## 4.2 “Intervallistics”

The next few pages contain exercises that explore the technique of using a simple thematic element, derived from a pentatonic pitch set, in the context of a harmonic setting that does not change. Some pentatonics do not have any half steps and therefore lack the implied tensions and resolutions that characterize diatonic and other scales. The lack of harmonic specificity in these scales, especially the ones that are comprised of three whole steps and two minor thirds (numbers 326-330 in the Compendium), make them excellent resources for the creation of harmonically vague melodies. An important technique in modern jazz is the use of pentatonic-derived melodic fragments at various levels of consonance and dissonance superimposed over static harmonic backgrounds. Sometimes these fragments are played within the basic chord-scale sound. When this occurs, it provides the consonance and release that is an important part of all music. At other times, they may be played at pitch levels that are slightly or extremely outside of the basic chord-scale sound. When this occurs, it provides the tension and dissonance that is also an important part of all music. There are brief explanations preceding the individual exercises.

# "Intervallistics"

C minor sound

"Parent" diatonic scale-C Dorian



One of many pentatonic reductions (330)

Theme



Playing the theme starting on C and F yields chord tones only



In this example, statements of the theme starting on D and G are played in addition to the fundamental statements starting on C and F. This adds color tones from the "parent" diatonic scale, C Dorian.



In the next two examples, the "inside" statements of the theme, starting on C, are surrounded with additional statements starting on B and Db and the other "inside" statements, starting on F, are surrounded with additional statements starting on Gb and E resulting in long delays in reaching points of consonance. This creates very complex changes in the harmony at the linear level, even though the fundamental harmony stays the same.





This exercise is comprised of statements of the theme on C, D, F, and G, used as areas of consonance preceded by relatively dissonant statements one half step away from each of these "goal" areas.

The next exercise uses the statement of the theme starting on C as a point of departure and return. It is a study in hearing and playing a thematic element at many different pitch levels while remaining mindful of the background harmony.

The image displays ten staves of musical notation in treble clef. The notation is complex, featuring a variety of note values, rests, and accidentals (sharps, flats, and naturals). The music is written in a single melodic line, with some staves showing chromaticism and complex intervals. The notation is arranged in a vertical column, with each staff containing a measure of music. The overall style is that of a musical score for a single instrument or voice.



## 4.3 Pentatonic Shapes Over Changes

The following exercise is an etude, based on the chord progression of All the Things You Are, which is constructed from one of the melodic gestures found earlier in this book. This melodic shape is “transposed” and slightly adjusted to reflect the intervallic structure of the different pentatonic scales that are used to put the idea into the desired relationship with the harmony. Practicing this way develops the ability to adjust improvised melodies to fit the harmony. Feel free to ignore this etude and just practice improvising this way. After a bit of this type of practice, it will feel very easy to play a solo when you are free to play anything!

One of the great benefits of this type of practice is that it helps increase awareness of the fact that many different scales can be applied to chords in order to create different feelings...for example, the sound of the dominant seventh chord in measure 3 (Eb7) is conveyed using a pentatonic pitch set that has two whole steps, two minor thirds, and another whole step (Eb, F, G, Bb, Db, {Eb} #321). This pentatonic includes the root, third, fifth, seventh, and ninth of the chord. The sound of the dominant seventh chord in measure six (G7) is conveyed with a pentatonic pitch set that has a minor third, whole step, half step, major third, and another whole step (B, D, E, F, A, {B} #301). This scale includes the third, fifth, seventh, ninth, and thirteenth. The sound of the dominant seventh chord in measure eleven is conveyed by a pentatonic that has a minor third, two whole steps, another minor third, and another half step (C#, E, F#, G#, B, {C#} #330). This scale emphasizes the colorful tension notes including the raised fifth, seventh, raised and lowered ninth, and the raised eleventh. All three of these chords are dominant seventh chords, but different characteristics can be emphasized by using different pitch sets to fine-tune melodic ideas.

Here is a measure-by-measure pentatonic analysis:

measure 1 and 2-#326, measure 3-#321, measure 4 and 5-#326,  
measure 6-#301, measure 7 and 8-#326, measure 9 through 17-#326,  
measure 18-#321, measure 19 through 21-#326, measure 22-#286,  
measure 23-#326, measure 24-#316, measure 25 and 26-#326,  
measure 27-#321, measure 28-#326, measure 29-#301, measure 30-#251,  
measure 31-#326, measure 32-#271, measure 34-#286,  
measure 35 and 36-#326

# Pentatonic Shapes Over Changes

The following table lists the chord changes for each measure shown in the image:

Measure	Chord
1	F <sup>♭</sup> MIN7
2	B <sup>♭</sup> MIN7
3	E <sup>♭</sup> 7
4	A <sup>♭</sup> MA7
5	D <sup>♭</sup> MA7
6	G7
7	CMA7
8	CMA7
9	C <sup>♭</sup> MIN7
10	FMIN7
11	B <sup>♭</sup> 7 <sup>♯9</sup> <sub>♯5</sub>
12	E <sup>♭</sup> MA7
13	A <sup>♭</sup> MA7
14	D7 <sup>♯9</sup> <sub>♯5</sub>
15	GMA7
16	GMA7
17	A <sup>♭</sup> MIN7
18	D7
19	GMA7
20	GMA7
21	F <sup>♯</sup> MIN7
22	B13(b9)
23	E <sup>♯</sup> MA7
24	C7 <sup>♯9</sup> <sub>♯5</sub>
25	FMIN7
26	B <sup>♭</sup> MIN7
27	E <sup>♭</sup> 7 <sup>♯9</sup> <sub>♯5</sub>
28	A <sup>♭</sup> MA7
29	D <sup>♭</sup> MA7
30	G <sup>♭</sup> 7(♯11)
31	C <sup>♭</sup> MIN7
32	B <sup>♭</sup> 7
33	B <sup>♭</sup> MIN7
34	E <sup>♭</sup> 7 <sup>♯9</sup>
35	A <sup>♭</sup> MA7
36	A <sup>♭</sup> MA7

## 4.4 Pent-Up Stella

On the following page, there is a composed solo based on the chord progression of “Stella by Starlight.” Every note in the solo is derived from a pentatonic scale. Here is a measure-by-measure analysis using the numbering system in the Compendia:

measure 1-#301, measure 2-#296, measures 3 and 4-#326,  
measure 5-#326, measure 6-#286, measure 7-#326, measure 8-#296,  
measure 9-#326, measure 10-#231, measure 11-#326, measure 12-#301,  
measure 13-#176, measure 14-#301 and #326, measure 15-#326,  
measure 16-#301, measures 17 and 18-#301, measures 19 and 20-#326,  
measures 21 and 22-#296, measure 23-#286, measure 24-#326,  
measure 25-#301, measure 26 through 29-#326, measure 30-#286,  
measure 31 and 32-#326

# Pent-Up Stella

Every Note Is Part of a Pentatonic Scale

Chord changes for measures 1-32:

- 1: Eø
- 2: A7<sup>#9#5</sup>
- 3: Cmin7
- 4: F7
- 5: Fmin7
- 6: Bb13(b9)
- 7: EbMaj7
- 8: Ab7
- 9: BbMaj7
- 10: Eø
- 11: A7<sup>#9#5</sup>
- 12: Dmin7
- 13: Bbmin7
- 14: Eb7
- 15: Fmaj7
- 16: Eø
- 17: A7<sup>#9#5</sup>
- 18: EbM7(#11)
- 19: D7<sup>#9#5</sup>
- 20: G7<sup>#9#5</sup>
- 21: Cmin7
- 22: Ab7(#11)
- 23: A/Bb
- 24: Eø
- 25: A7<sup>#9#5</sup>
- 26: Ebmin7
- 27: Ab7
- 28: Dmin7
- 29: G7
- 30: Dbmin7
- 31: Gb7
- 32: Cø





