

## **SEPTATHLON!**

The Septathlon is a technique exploration that guides a player through a series of exercises that prepare players for improvisations and understanding of a key or mode. Each element of scales or chords and arpeggios is learned and mastered in a graded fashion and will be described at each level.

Backstory: I came up with the Septathlon in the summer of 2020 as a means of really exploring technique and going through all the cool things that people do when improvising and composing. During the pandemic it seemed like a good game to keep me and my students engaged in a next level activity, and it has been excellent at providing a great palate of skills for improvisation. You can make up tons of games and improv starters with all the things you do, and there are many extensions and levels for each of the Seven Things!

So, while we have our scale books and theory books to reference one of the things that I have always enjoyed is making games of things, and I have been making scale games and improv games with my students, audiences, and improv groups for a long time. For me it is the part of what makes humans really enjoy the making of music: playing!

So here we are with a series of technical skill games that can allow people to grow, explore and play music while learning the foundations of music theory and harmony by playing and experiencing!

## **Septathlon: The Seven Things!**

This is where videos come in to play!

### **ONE! Scales and modes**

Scales and modes have been and are the basis of human musical systems. They have occurred organically in every culture over thousands of years, and we recognize and use them because they are foundationally part of our human evolution. Geometry also comes into play with this as the tones of scales and chords also exist mathematically and are also consistent with humans worldwide. What the different “degrees” of the scale do and how they exist energetically. What are the emotional content and expression of how we use scales?

I want to focus on a couple of things. Piano finger patterns for the Major and Minor scales in the circle of fifths. With the Major Scales there is only 1 form or pattern, so they are consistent. The Minor Scales are a bit more fun and interesting in that there are 3 forms or patterns and in Group 2 and 3 this makes the fingering change. We shall explore below!

Let's start with the Standard Fingering. I group the scales into 3 Groups according to their general fingering patterns. All scales are built on a pattern of 123 1234 depending on what finger you start on. In group 1 you start on the keynote with finger 1. In group 2 and 3 you start on either 2,3 or 4 and you can see the patterns unfold over multiple octaves. 5 is only used as a "cap" in Group 1 and not at all in Groups 2 or 3.

### **Group 1                    C, G, D, A, E**

#### **Major and Minor**

RH    123 1234 for each octave finishing with 5 at the top.

LH    54321 321 and continues 4321 321 for additional octaves.

This is the most standard fingering pattern.

### **Group 2                    B, F#, Db**

#### **Major**

The main idea here is that if you have a group of 2 black keys you use fingers 2 and 3. If you have a group of 3 black keys you use 2 3 and 4. Your thumb (1) goes on all white notes. Use this fingering for multiple octaves.

#### **Minor**

This is a bit tricky because the fingering can change with the different forms of the minor scales. We will go through them in order of Natural, Harmonic and Melodic Minor. B Minor is the most consistent but others will vary.

### **B Minor                    Natural, Harmonic and Melodic**

RH 123 1234 123 1234(5)

LH (4)321 4321 321 4321

**F# Minor                      Natural**

RH 234 123 1234 123 12

LH 4321 321 4321 321 4

**F# Minor                      Harmonic**

RH 34 123 1234 123 123

LH 4321 321 4321 321 4

**F# Minor                      Melodic** the RH fingering is different Ascending and Descending. – How Special!

RH Ascending                      23 1234 123 1234 1 3 Descending 321 321 4321 321 43

LH 4321 321 4321 321 4

**C# Minor                      Natural and Harmonic**

RH    34 123 1234 123 123

LH    321 4321 321 4321 3

**C# Minor                      Melodic** the RH fingering is different Ascending and Descending. – How Special!

RH Ascending                      23 1234 123 1234 13 Descending 321 321 4321 321 43

LH    321 4321 321 4321 3

**Group 3                      Ab, Eb, Bb, F**

**Major**

RH Two good rules: the 4<sup>th</sup> finger goes on Bb in every key, and the thumb (1) goes on C and F.

So the fingering is:

F major RH 1234 123 (and so on up the keyboard)

Bb major RH 4 123 1234 (and so on up the keyboard)

Eb major RH 3 1234 123 (and so on up the keyboard)

Ab major RH 34 123 123 ( and so on up the keyboard)

LH For Ab, Eb and Bb you begin on 3 and cross to your 4<sup>th</sup> finger on the fourth note. LH for F is the same as Group 1

**Minor** The Minor scales in Group 3 are also a bit spicy as some of them vary with the different forms. While I created the groups because of similar fingering patterns, the Group 3 Minor Scales are quite different!

F Minor RH AND LH are the same as the F Major fingerings.

Bb Minor RH 4 123 1234 123 1234 (which is the same as Bb Major)

LH 21 321 4321 321 432 (which is the same as Group 3 fingerings like Db Major, the relative of Bb Minor)

Eb Minor RH 3 1234 123 1234 123 Which is the same as its relative Gb Major.

LH 21 4321 321 4321 32 Which is the same as its relative Gb Major.

Ab/G# Minor RH 34 123 1234 123 123 Which is the same as its relative B Major.

Natural LH 321 321 4321 321 43 Which is the same as its relative B Major.

Harmonic LH 321 4321 321 4321 3 Which is the same as Ab Major!

Melodic Ascending LH 321 4321 321 4321 3 Descending 34 123 1234 123 1 23

Which wins the prize as the coolest scale with the Harmonic pattern on the Ascent and the Natural pattern on the Descent!

## TWO! BLOCKED CHORDS

**Blocked Chords** in root position – play them at the same time. Use “snappy” rhythms! Play all over the keyboard. Blocked chords are also used as a rhythmic foundation for many genres of music.

The Root Position Chord is built with notes 1 3 5 in a scale. If a note is sharp or flat in the scale, it is sharp or flat in the chord.

### Multiple Octave Blocked Chords

## THREE! BROKEN CHORDS

**Broken Chords** in root position play the notes one at a time going either up or down.

**Multiple Octave Broken Chords** – You can play them all the way up and down the keyboard in a cascading arpeggio effect.

## FOUR! INVERSIONS

Chords are made up of 3 notes which can be arranged in different ways, which are called inversions. Inversions of chords change the color, quality and movement between chords and are an important way of using chords and creating more vibrant harmonies.

In piano music we generally use 3 and 4 note chord inversions and here we can describe the Standard Fingering for each. Unlike Scales there is no division into Groups. All major and minor chords follow this simple fingering, which you are also free to ignore!

### 3 Note Chord Standard Fingerings

RH    Root Position 1 3 5 First Inversion 1 2 5    Second Inversion 1 3 5

LH    Root Position 5 3 1 First Inversion 5 3 1    Second Inversion 5 2 1

**4 Note Chord Standard Fingerings**            The 4<sup>th</sup> and 3<sup>rd</sup> fingers can be interchanged depending on a person’s hand size. Smaller hands may prefer the 3<sup>rd</sup> finger, larger hands the 4<sup>th</sup> finger.

RH    Root Position 1 2 3 5            First Inversion 1 2 4 5            Second Inversion 1 2 4 5

LH Root Position 5 4(3) 2 1 First Inversion 5 4 2 1 Second Inversion 5 3 2 1

**7<sup>th</sup> chord inversions** Now there are 3 inversions, and again, the 3 and 4 are up to personal preference!

RH Root 1 2 3 5 First Inv. 1 2 4 5 Second Inv. 1 2 3 5 Third Inv. 1 2 4 5

LH Root 5 3 2 1 First Inv. 5 4 2 1 Second Inv. 5 3 2 1 Third Inv. 5 4 2 1

## **FIVE! ARPEGGIOS**

Here I am going to go back to our 3 Groups as they are pretty consistent in how they play out, however the 3<sup>rd</sup> and 4<sup>th</sup> fingers are still dependent on a person's hand size and personal preference.

**Group 1** C G D A E major AND minor

RH 1 2 3 1 2 3 etc top note is 5

LH bottom note is 5 then 4 2 1 or 3 2 1

(In the LH I prefer 4 2 1 for everything except D A E major where I prefer 3 2 1. The starting note is still 5)

**Group 2** B, F#, Db This is more complicated!

B major and minor

RH 1 2 3 with 5 on top note

LH Major 3 2 1 Minor 4 2 1

F# Major and Minor

RH Major 1 2 3 Minor 4 1 2 (Thumb goes on the white note)

LH Major 3 2 1 Minor 2 1 4 (Thumb goes on the white note)

Db Major and Minor

RH Major and minor 4 1 2 ( Thumb goes on white note)

LH Major and Minor 2 1 4 (Thumb goes on the white note)

**Group 3** Ab, Eb, Bb, F More complications!

Ab Major and Minor

RH 4 1 2 (Thumb on white note)

LH 2 1 4 (Thumb on white note)

Eb Major

RH 4 1 2 (Thumb on white note)

LH 2 1 4 (Thumb on white note)

Eb Minor (All Black Notes)

RH 1 2 3 (Top note 5)

LH (Bottom note 5 ) 4 2 1

Bb Major

RH 4 1 2

LH 2 1 4

Bb Minor

RH 2 3 1 (Thumb on white note)

LH 3 2 1 (Thumb on white note)

F Major and Minor

The same as Group 1 C Major and Minor

## **SIX! 5 FINGER EXERCISE IN 3RDS**

This is a great exercise for developing strength and dexterity. I usually begin with the 3rds in a simple 5 note position in all keys. Later on the scales will be much easier in 3rds if you have a good foundation.

Play 2 notes together in this exercise!

I like to go back and forth with 1-3 and 2-4 four times, then 3-5 and 4-2 four times. Then two times through all 1-3 2-4 3-5 2-4 1-3

RH 3 4          5 4

1 2      3 2

LH 5 & 3, 4 & 2, 3 & 1

## **SEVEN! CHORD PROGRESSIONS AND IMPROVISATIONS**

**Chord Progressions**

Chord progressions are a series of harmonies that provide an underlying framework for many musical forms. Most song forms use chord progressions as their base.

There are well known formulas that provide satisfying songs. Many are so popular that they are literally in thousands upon thousands of songs. Here we will outline how progressions are made and what some of the most common “proven winners” are. Let’s start with chords on a Key.

## Major Keys

In any major key we start with a scale of 7 notes (8 with the top note). 1 2 3 4 5 6 7 (8)

We can build a chord on any of these notes. Each chord in a key is either Major, Minor or Diminished.

1	major
2	minor
3	minor
4	major
5	major
6	minor
7	diminished
8	(same as 1)

**Quality of Chords** the numbers indicate the number of notes (black and White) between the notes of the chord.

Major	3 + 2
Minor	2 + 3
Diminished	2 + 2
Augmented	3 + 3

## Common chord progressions in a Major Key

For the progressions shown here we are using 4 beats per measure. If there are two numbers in a measure that means that there are 2 beats for each of those chords.

Common Song Form            1 | 6 | 4 | 5 |

Variation                        1 | 6 | 4 | 1 5 |

“Pop Song Heaven”            1 | 5 | 6 | 4 | and a variation 6 | 4 | 1 | 5 |

Moving Roots with 1 6 4 5

Traditional Song                1 | 4 | 1 | 5 | 1 | 4 | 5 | 1 |

Extension 1                      4 | 1 | 5 | 1 | 4 | 1 | 2 | 5 | uses the 4 chord to begin and introduces the 2 chord.

Extension 2                      1 | 4 | 2 | 5 | 3 | 6 | 4 | 5 | here the 2 and 3 chords are made major.

M    M

Pachelbel Canon                1 | 5 | 6 | 3 | 4 | 1 | 4 | 5 |

Piano Man variation    1 | 5 | 6 | 3 | 4 | 1 | 2M | 5 | uses the Major 2 chord in place of the 4 chord at the end of the progression as in Piano Man by Billy Joel.

“Sunrise”                        1 | 4/1 | 5/1 | 4/1 |        4x

4 | 5/4 | 3 | 6 | 2 | 5 | 1 | 1 |    4 | 5/4 | 3 | 6 | 2 3 | 4 | 5 | 5 |

## Minor Keys

In any minor key we start with a scale of 7 notes ( 8 with the top note ). 1 2 3 4 5 6 7 8

But in a minor key there are 3 forms of the scale: Natural, Harmonic and Melodic. This makes for a rich and sometimes confusing situation as to what chords to use, but it also is a spicy way to play in a minor key!

Examples in A minor

Natural Minor        A B C D E F G A        The same as C major.

Harmonic Minor        A B C D E F G# A        This makes the 5 chord major.

Melodic Minor        A B C D E F# G# A        A G F E D C B A

The ascent and descent are different in the Melodic Minor!

Natural Minor

We can build a chord on any of these notes. Each chord in a key is either Major, Minor, Diminished or Augmented.

Natural Minor

- |   |            |
|---|------------|
| 1 | minor      |
| 2 | diminished |
| 3 | major      |
| 4 | minor      |
| 5 | minor      |
| 6 | major      |
| 7 | major      |

Harmonic Minor raises the 7th note of the scale so as to make the 5 chord major.

Melodic Minor also usually makes the 5 chord major, but the variety is in the melody as it is different going up and down.

Common chord progressions in a Minor Key

Common Song Form            1 | 6 | 4 | 5 | using the harmonic minor. ( Can be used with Blues )

Renaissance on! This has been a proven winner chord progression for 500 plus years. It is also a staple of Spanish Flamenco music and American Blues.

1 | 7 | 6 | 5 | using both natural and harmonic minor, the 7 chord is major using the natural minor. The 5 chord is major using the harmonic minor. The melody switches back and forth.

Variation 1                    1 | 6 | 7 | 5 |

Traditional Song            1 | 4 | 1 | 5 | 1 | 4 | 5 | 1 | with variations TBD

Extension 1                 4 | 1 | 5 | 1 | 4 | 1 | 2 | 5 |

Zig Zag in the minor

Chord progression for a minor key

1 | 4 | 7 | 3 | 6 | 2 | 5 | 1 |

Cm | Fm | Bb | Eb | Ab | Ddim | G | Cm |

## 7<sup>th</sup> Chords

Common chord progressions that use 7<sup>th</sup> chords

“Zig Zag”                    4 | 7 | 3 | 6 | 2 | 5 | 1 | 1 |

This is a good progression in all major keys, and doing this can lead you around the circle of fifths.

Start with a root position 4 chord. Move the top two notes down to the next notes in the key: you now are in a second inversion 7 chord. Move the bottom two notes down to the next notes in the key: you are in a root position 3 chord. Move the top two and you are in a 6 chord. Move the

bottom two and you are in a 2 chord. Move the top two and you are in a 5 chord. Move the bottom two and you are in a 1 chord. You are now in the 4 chord of the next key in the Circle of Fifths!

Get Down

Cm | Cm/B | Cm/ Bb | Cm/A | Cm/Ab | Fm7 | G7 | G7b9 |

12 Bar Blues typically a 4 beat

C7 | C7 | C7 | C7 | F7 | F7 | C7 | C7 | G7 | F7 | C7 | G turn around |

Extensions and variations

C7 | Eb7 | F7 | G7 |

Ab7 | F7 | G7 | C7 |

You can make your own variations from these as these are some basic Blues forms.