

TECHNICAL REGIME FOR PIANISTS

Introduction

The Goal of Piano Technique

The goal of piano technique is to be able to play any piece of music at the level of the pianist's ability.

The Benefits of Practicing Piano Technique

- **It develops the ability to control the fingers and to use each finger independently.** Teachers of keyboarding (typewriting) are aware that piano students have an advantage over others because of this finger independence. Most humans use their fingers only as a unit to grasp objects. Research has shown that using the fingers individually wakes up brain cells that are otherwise never stimulated. Furthermore, once awakened, they stay that way. We tell our students that every time they practice the piano, they are growing smarter at everything else they do. They are developing co-ordination, memory, reflexes and sensitivity.
- **It strengthens the muscles of the hands, wrists and forearms.** With proper attention to appropriate use of the various muscle groups, injury is avoided and endurance increased. It is possible to play continuously for long stretches of time without fatigue or strain.
- **It equalizes the strength of the fingers.** The smaller fifth finger and the fourth finger (attached to the tendon of the third) can be trained to work nearly as well as the stronger thumb, second and third fingers. This shows up most clearly in fast scale passages.
- **It trains the mind to see patterns in each octave on the keyboard and develops the ability to visualize the pattern in each successive octave slightly in advance of playing it.**
- **It trains the ear to listen for the quality and dynamic level of the sound created by each individual finger.**
- **It enhances brain development.** By practicing patterns repeatedly, the electro-chemical connections created by a dendrite (a hairy projection on the surface of a brain cell) with a dendrite on another brain cell are strengthened. These

connections become pathways that permit a person to replay the pattern with increasing fluency, smoothness and recall. The responses are then triggered sub-consciously, which is why pianists can play long complicated pieces of music, with literally thousands of individual key strikes, at extremely fast speed, completely accurately, and by memory. They can even do this with a heightened sense of musical flow and sensitivity that elevates the performance far above a mere display of dexterity.

- **It facilitates sight-reading.** Louis Kentner said, “In some odd way, even sight-reading becomes easier by quick and secure placement of the hand and the instantaneous use of the right fingering - things that are possible if memory produces immediately what has been stored there from years of practicing scales.”
- **It creates feelings of satisfaction, competence and growing mastery.**

Concerns of Teachers

All teachers have the same concerns:

- Where to start?
- How to introduce a child to a technical regime?
- What to begin with and how to proceed so that the student develops technical facility and at the same time develops an understanding of how and why music is put together the way it is?
- How to explain the progression of scales, how they are constructed, how the minors are related to the majors, and the difference between harmonic and melodic minors?”

To answer these questions, we provide step-by-step procedures on how to introduce every skill, coupled with appropriate exercises.

There are other exercises that we did not include. Teachers may add them while still following our regime.

What the *Technical Regime for Pianists* Is

The *Technical Regime for Pianists*®, based on the conservatory/traditional model, is a unique system for developing technique that, unlike any other, gives the complete story:

- what to teach and when (step-by-step procedures from the beginning to concert level)
- how to teach it.
- the construction of the elements (scales, chords, arpeggios and octaves) of Western music.

- how to develop technical facility, using the *Flexible Wrist Exercises*®

Every step has been organized with the final goal in mind. While the steps are logical, the regime is flexible, and we encourage teachers to adjust the order of presentation for each student.

It is motivating to know that speed and power are possible for every pianist and that there is a clear path to follow. Independent learners can easily follow the instructions; teachers are assisted by having flexible guidelines and assured that their students are not at risk for injury. When teachers are themselves motivated and understand the process their enthusiasm is transmitted to the students. Parents are more inclined to help when they can see the logical and positive progress of their children's ability. Pianists who have already sustained injury can use this method to promote healing.

We are pleased to share our development and extension of *flexible wrist* technique that has its roots in the teachings of Liszt, Leschetizsky and the great Russian pianists. We all stand on the shoulders of those who preceded us and we especially want to acknowledge Glen Geary and Menahem Pressler as two of the most recent exemplars of this teaching. The skill of maintaining a flexible wrist while playing has never been incorporated as an essential component of piano playing from the outset. We introduce the *Flexible Wrist Exercises: Basic Concept* in the first few lessons.

There is enough material for years of study and enough variety, interest and challenge to last a lifetime; each of the steps will contribute to a solid technical grounding.

Sincerely, Valery and Carole
July 2006

How to Use the Regime

- Start at the beginning and follow each Level and Unit in order. The amount assigned at each lesson is at the discretion of the teacher. We recommend teaching the scale and triads of the same letter name before proceeding to the next scale. For example, if the student is playing A-major scale, teach A-major triad before proceeding to E-major scale.
- The length of time spent on each Unit will depend on the student's ability and practice habits.
- Use the Circle of 5ths for the order of presentation (see Level 1, P.101). One exception is in Level 1 where teaching only a few keys of *Walking and Skipping* is enough for some students (see Level 1, P.100). For the others, teach one scale per lesson, beginning with C major and moving clockwise around the circle to the next key.

Level 1

Unit 1: *Walking and Skipping*

Walking and Skipping is a five finger exercise that continues the process of learning how to control the fingers, begun on P 28. *Walking* is based on the first five notes of a major or minor scale pattern, ascending and descending. The *Skipping* portion ascends and descends by the interval of the third, skipping fingers 2 and 4. The exercise concludes with playing the tonic triad in root position.

Figure 28: *Walking and Skipping*



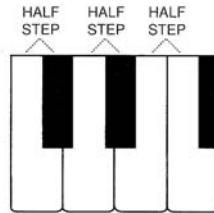
Exercise 1. *Walking and Skipping in C major*

1. Beginning on middle C with the Right Hand (RH), play *Walking* up and down (1 2 3 4 5 4 3 2 1).
2. Play RH *Skipping* up and down (1 3 5 3 1). Roll the wrist on the final thumb note (1), as taught in the *Flexible Wrist: Basic Concept* (P. 29)
3. Play the triad in the RH (fingers 1 3 5 play simultaneously). The student may have to lift fingers 2 and 4 out of the way consciously.
4. Beginning on bass C, the Left Hand (LH) plays *Walking and Skipping* in the same way (5 4 3 2 1 2 3 4 5 3 1 3 5; 5 3 1). Roll the wrist on the final fifth finger note, as in the RH.
5. When playing *Walking and Skipping* Hands Separately (HS) and rolling the wrist is comfortable, play *Walking and Skipping* Hands Together (HT).

Unit 2: Half and Whole Steps and *Walking and Skipping* in C minor

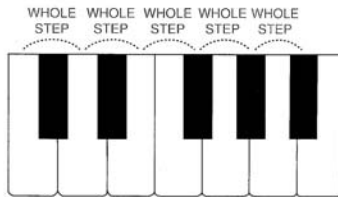
- **Half Steps Defined:** Adjacent keys (white or black) are said to be separated by a half step (Alfred Prep Course, Level D, P.26 below)

HALF STEPS • NO KEY BETWEEN



- **Whole Steps Defined:** Two keys with a key between them are said to be separated by a whole step. (Alfred Prep Course, Level D, P.30 below).

WHOLE STEPS • ONE KEY BETWEEN



Exercise 2. Play a game of identifying half and whole steps

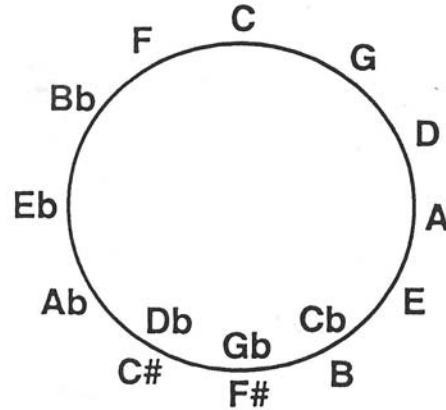
Exercise 3. *Walking and Skipping* in C minor

This is the same as C major except that the 3rd finger plays a half step lower (in C major, 3rd finger plays E, in C minor, 3rd finger plays E flat).

Unit 3: The Circle of 5ths and *Walking and Skipping* in G major and G minor

Figure 30: Circle of 5ths

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Level 1



The Circle of 5ths shows that major scales proceed in a logical fashion, starting with C. Each subsequent scale is a perfect 5th above the previous one (a perfect 5th consists of five notes separated as whole step, whole step, half step, whole step). A quick way to find the next scale is to look at the top note of the triad at the ending of *Walking and Skipping*. That note names the new scale.

Exercise 4. Finding each new key in the Circle of 5ths

Follow the pattern outlined above to find the first note of every major scale, returning once again to the starting place of C.

Exercise 5. *Walking and Skipping* in G major and G minor

1. Find the next scale in the Circle of 5ths (G major) by using either the Circle of 5ths or the top note of the C major triad and play *Walking and Skipping*.
2. Play G minor immediately following G major, using the knowledge of half steps and whole steps (G minor is created on the keyboard by playing the 3rd finger which has been on B on Bb, a half step lower).

Unit 4: *Walking and Skipping* in all Major and Minor Keys

Exercise 6. *Walking and Skipping* in all major and minor keys

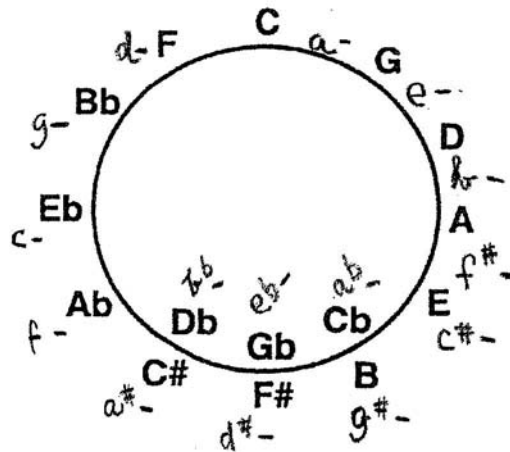
Walking and Skipping is a preliminary exercise not only to introduce students to legato playing but also to acquaint them with all the major and minor keys.

1. Continue to add one major at a time around the Circle of 5ths to arrive once more at C major.

2. Follow each major key immediately with the *Walking and Skipping* exercise in the **tonic** minor (which begins on the same letter name, for example, C major, C minor; G major, G minor; D major, D minor) instead of the **relative** minor (which uses the same key signature as the major scale, for example, C major, A minor; G major, E minor; D major, B minor).

If preferred, the student may play Walking and Skipping only in C major, G major, D major, and F major plus their relative minors.

Figure 31: Circle of 5ths Showing Relative Minor Keys



Unit 5: Tetrachords

Understanding and playing scales is fundamental to being able to play the piano. Tetrachords are simple building blocks that can be combined to create a major scale on any key. A major scale is the eight-note sequence produced when a tetrachord is played followed by another tetrachord a whole step above.

- **Tetrachords Defined**

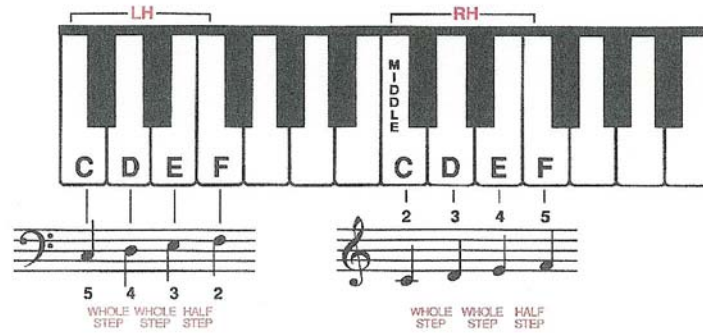
A tetrachord consists of four notes separated with a whole step, whole step, half step (Alfred Prep Course, Level D, P.36 below).

Figure 32: Tetrachords

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A TETRACHORD is a series of FOUR NOTES having a pattern of

WHOLE STEP, WHOLE STEP, HALF STEP

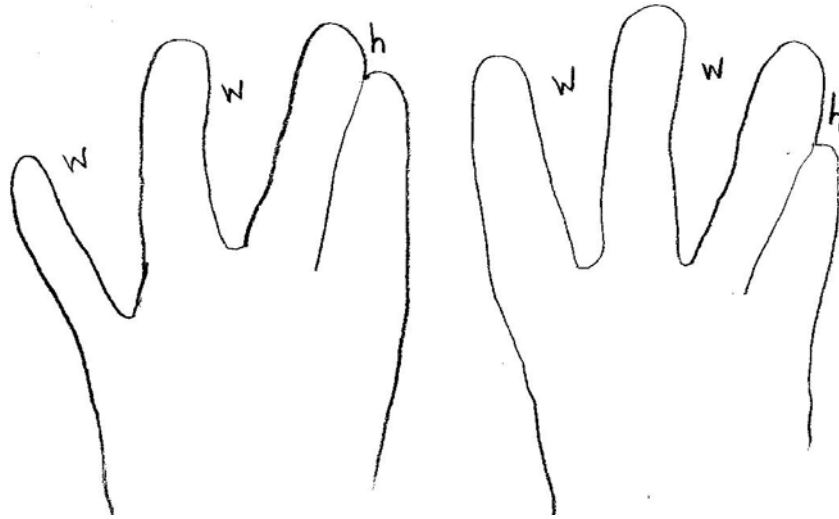


The notes of a TETRACHORD are always in ALPHABETICAL order,
and must have this pattern: WHOLE STEP, WHOLE STEP, HALF STEP.

- **Hands in Tetrachord position**
 1. To show how a scale is created with tetrachords, take a page of a notebook and place the student's fingers in the tetrachord position as shown in the following illustration. Use a pencil to trace the outline of the fingers.
 2. Draw in the letters "w" for whole step and "h" for half step in the appropriate places. From the sketch, it is possible to see that both tetrachords have the same separations of whole step, whole step, half step.
 3. Place either hand on top of the other to see that the spaces match and therefore that each hand plays an identical tetrachord pattern.

Figure 33: Hands in Tetrachord Position

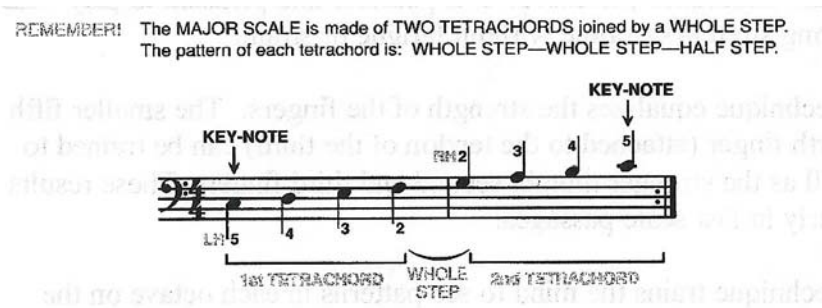
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Exercise 7. Use Tetrachords to create C major scale

1. Place the LH 5th finger on C and form and hold the LH tetrachord position.
2. Place the RH 2nd finger one whole step above the LH 2nd finger key to form the RH tetrachord.
3. Play the LH tetrachord followed by the RH tetrachord to produce the C major scale.
4. Play the C major scale in Tetrachords on every other C possible.

Figure 34: The C Major Scale in Tetrachords



Exercise 8. Use Tetrachords to create all the remaining major scales using the Circle of 5ths

1. Create the next scale (G major) by first placing the hands in the C major tetrachord position (position of the last scale learned).

2. Disengage the LH and have it replace the keys held by the RH tetrachord.
3. Use the RH to form a new RH tetrachord a whole step above (the new tetrachord will use F sharp).
4. Repeat this procedure, starting from the position of the last scale learned, to discover all of the remaining scales in the Circle of 5ths.

Exercise 9. Use Tetrachords to create a major scale from any note on the keyboard

Place the LH 5th finger on any key at random and, using two tetrachords separated by a whole step, create the major scale that begins on that note.

Unit 6: Major Scales

The following is the way we explain the concept of a major scale to the students: a scale is an important item in music, and is a musically pleasing way of proceeding up and down the notes in octaves. In C major scale, any C is called the tonic note. Count the number of black and white keys that must be added to get from the lower to the upper note of the octave (there are always twelve before a key repeats). A scale spans an octave but uses only eight keys (the beginning tonic key plus seven more to get to the upper tonic key). Each letter name (sometimes with a sharp, flat or natural sign added) of the musical alphabet must be used in order, beginning and ending with the letter that names the scale. This is called “spelling” the scale.

Exercise 10. “Spell” C major scale:

1. In the notebook, draw 8 short lines (leave space above and below the lines for additional entries)

2. Write the letter names of the C major scale above the lines, beginning and ending with C, as shown below.

C D E F G A B C

- **The Rule of the Fourth Finger: The fourth finger plays only one note in an octave.**

This rule is useful when learning to play scales in the most efficient way, and to train the fingers to play repeating octaves of any scale quickly and automatically. To clarify this rule:

1. There are eight notes in a one-octave pattern of a scale but humans have only 5 fingers on a hand. To play a one-handed scale some fingers must be used more than once. It makes sense to use the three strongest ones (1, 2 and 3).
2. Begin with the LH 5th finger on bass C and play C D E F G. Now there are no fingers left, so we need to reuse three fingers to finish the scale (A B C). 3rd finger crosses over 1 (thumb) so that it can play, followed by 2 and 1.

Exercise 11. To reinforce the fingering strategy for playing scales

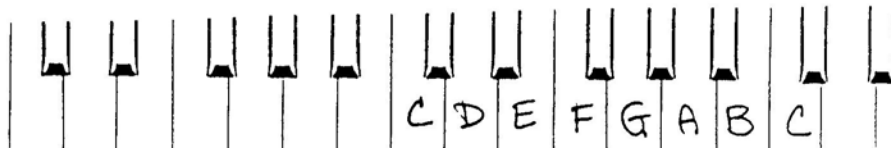
1. On the scale drawn in the notebook write RH above, and LH under, the beginning C.
2. Write the number 4 above B and the number 4 under the D.



Exercise 12. Writing the Scale on Keyboard Paper

Write one octave of letter names of the C major scale on a picture of a keyboard.

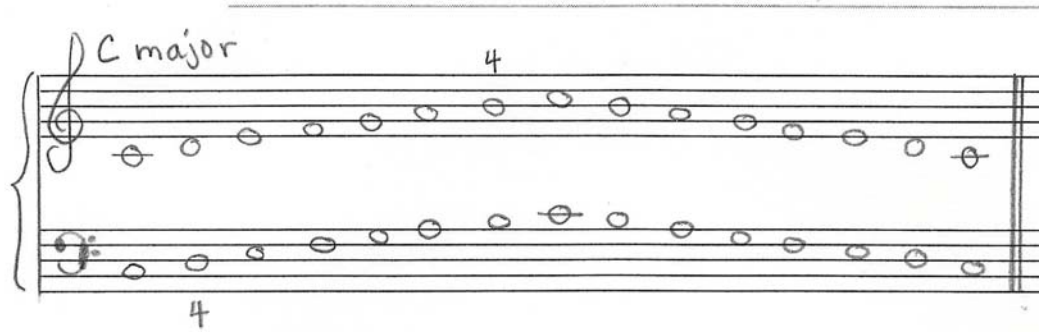
Figure 35: C Major Scale Letter Names



Exercise 13. Writing the Scale on Manuscript Paper

1. Write one octave of the scale ascending and descending on manuscript paper, using both treble and bass clefs
2. Write 4 above RH and 4 below LH fourth finger notes.

Figure 36: C Major Scale Written on Manuscript Paper



Exercise 14. Play C major scale, counting out loud, HS

Figure 37: C Major Scale Fingering and Counting



1. Play the scale LH *descending*, using the fingering (1 2 3 + 1 2 3 4 5), noting where 1 passes under the 3rd finger, or *ascending*, using the fingering as shown in the example above. Count out loud (How to Play in Time with the MM, P. 42).
2. Play the scale RH ascending and descending, counting out loud.

Remember the fourth finger is played only once.

3. Play the C major scale, counting out loud in groups of 4, using the MM, when the student is comfortable with this.

Unit 7. The Pattern for Playing Major Scales, One Octave in Quarter Notes, followed by Two Octaves in Eighth notes, Hands Separately

This scale pattern is two octaves in length and the application of the Fourth Finger Rule is crucial. Remember, **the fourth finger plays only once in each octave** (the fifth finger is played only once to end the scale, no matter how many octaves, so we do not include it in this rule). There are times when a finger crossing is required and a choice has to be made: is the crossing finger going to be 3 or 4? The decision is clear if the students know in advance which note the fourth finger plays in the scale. For example, in C major scale as taught above, the RH fourth finger note is B. In RH, when descending, after thumb plays F, E must be played with 3rd finger since fourth finger may play only B. Similarly, when RH ascends in C major, C D and E are played by fingers 1 2 and 3. The F that follows now must be played with thumb since fourth finger may play only B.

Discover how well the Fourth Finger Rule works by playing the C major scale up and down for three or four octaves. When ascending in the RH, stop on the third finger to decide whether or not the fourth finger may play the next key.

Exercise 15. C major scale, one octave in quarter notes, followed by two octaves in eighth notes

1. Play C major scale, RH, followed by LH, counting out loud in groups of 4, using the pattern below.
2. If comfortable playing with the MM, practice this scale pattern with the MM, counting out loud.

Note that the quarter note pattern finishes on beat 3. Count beat 4, holding the last note, before starting to play 1 *and* 2 *and*, etc (1 + 2 +, etc). Some teachers have the students count a full pattern of 1 + 2 + 3 + 4 + before beginning to play the eighth note pattern. This extra counting may be useful until the student is totally secure with the counting pattern, then it may be dispensed with and the eighth note pattern played as soon as the quarter note pattern is finished.

Figure 38: C Major Scale, One Octave in Quarter Notes, followed by Two Octaves in Eighth Notes



Unit 8. C Major Triad and Inversions

Figure 39: Root Position Triad and Inversions



1. The mnemonic for recognizing root position, first and second inversion triads.
 - a. A root position triad is either a line sandwich or a space sandwich (Some teachers like to call the root position triad a snowman.) Root position has already been learned on P. 100. Using several beginner books, find and identify examples of music which have root position triads.

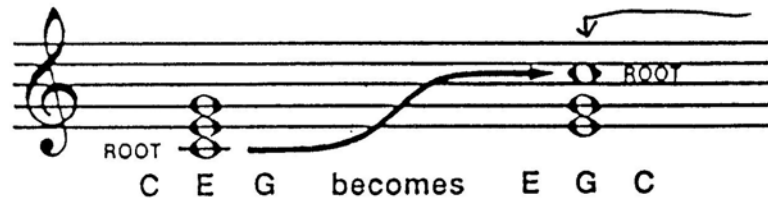
Figure 40: Root Position Triad



- b. **First inversion.** Any root position triad may be inverted by moving the root note to the top. The mnemonic: **The first inversion triad looks like one balloon is trying to escape from two others . Therefore, 1 balloon = 1st inversion triad.**¹
Using simple music books, find examples of first inversion triads for the student to identify by recognizing the characteristic shape.

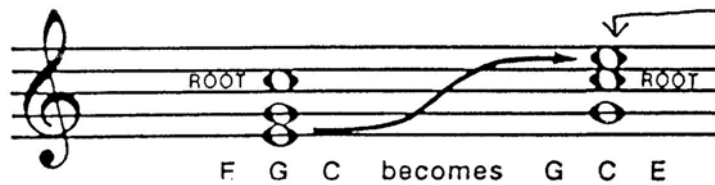
¹ We are indebted to Sam Carew for this image.

Figure 41: Changing Root Position Triad to First Inversion



- c. **Second inversion.** The 1st inversion triad becomes the 2nd inversion by moving the bottom note of the 1st inversion triad so that it becomes the top note of the 2nd inversion. The mnemonic: **The 2nd inversion triad looks like two balloons are escaping. Therefore, 2 balloons = 2nd inversion.** Using simple music books, find and identify examples of 2nd inversion triads by recognizing its characteristic shape.

Figure 42: Changing First Inversion Triad to Second Inversion



Exercise 16. C Major Triad and Inversions, Broken then Solid, One Octave, HS

Figure 43: C major triad and inversion, broken and solid



1. Play C major triad and inversions, broken then solid, one octave ascending and descending, HS.
2. “Creep” from one position to the next, that is, hold down the notes of the triad, replacing the two notes in common with the new position by substituting the

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fingers. This gives both a visual and tactile sense of where the fingers are and where they need to go.

Level 2

Unit 1: The Next Scale in the Circle of 5th plus its Triad and Inversions, as well as all scales to F sharp major

In Level 1, students learned how to play C major scale plus its triad and inversions.

Exercise 1. The next scale plus its triad and inversions

1. Discover the next scale in the Circle of 5ths is by playing the first 5 notes of the C major scale. The 5th note names the new scale (G).
2. Play the new scale using the keys of the previous one (C major). When the 7th note is played it will violate the sound expected from a major scale. The ear will demand to alter the 7th note. Students familiar with playing scales using tetrachords will immediately understand that a half step must precede the tonic key. In this case, F must be raised (sharped) to become F sharp in the key of G major.
3. Continue with exercises using the G major scale, following the order of C major scale presentation (see pp.106-108).
4. Play G major triad and inversions in the same manner as C major triad (pp.110-111).
5. Proceed through the Circle of 5ths and all major keys to F sharp major.
 - a. Each new scale adds a sharp proceeding through the Circle of 5ths.
 - b. Each key in the Circle moves up a 5th and each sharp that is added is a 5th higher than the previous sharp.
 - c. Each new added sharp is the letter name *before* the scale name. For example, in G major scale, F sharp is required. Then in D major, F sharp *and* C sharp are required.
6. Use the same fingering pattern as C major until B major.
 - a. The LH must begin with finger 4 on B. The B is actually a thumb key, but beginning with the fourth finger eliminates an unnecessary finger crossing.
 - b. F sharp major uses a new rule for fingering (see P.114).

- **Key Signatures**

Key signatures save having to write an accidental sign (sharps, flats and naturals) every time an altered note appears in a piece of music in a key other than C major. For example, F will always be sharped in G major scale. The key signature appears after the clef sign (treble or bass for pianists) and before the time signature.

There is a convention for the look of the key signatures: each sharp must be placed in the same position on the clef in a defined order. The Order of Sharps follows below and the Order of Flats on P. 116

- **The Order of Sharps (FCGDAEB)**

To remember the **Order of Sharps** (FCGDAEB), use the mnemonic: “**F**at **C**ats **G**o **D**own **A**lleys **E**ating **B**onkers”

Exercise 2. Determine the scale name from the sharp key signature.

1. Say part of the “sharps” sentence. For example, the key signature that has three sharps uses F sharp, C sharp and G sharp.
2. Point to each sharp in turn, saying (in the example above), “Fat Cats Go” (stop). The name of the scale must be A major because A comes after G on the piano keyboard.

Unit 2: The Rule of Fingering for all Scales

1. **The Rule of Fingering for all Scales: The thumb never plays on black keys; the RH thumb always plays the first white key ascending; the LH thumb always plays the first white key descending.**

With this rule in mind, it is possible to work out the correct fingering for any scale (major, harmonic or melodic minor. Melodic minor scales are introduced in Level 3).

Exercise 3. F sharp major scale

1. RH ascending begins with finger 2 (then 3 and 4). The first white key in the scale is B and is played by the thumb.

2. LH descending begins with finger 4 on F sharp. The first white key is E sharp and is played by the thumb.
3. Follow the order for the exercises for playing C major scale in Level 1 (P.106-108).

The students have now learned C, G, D, A, E, B, and F sharp major scales plus their corresponding triads and inversions.

Unit 3. C Sharp Major Scale and Enharmonic Change

With the practice of “spelling” each scale and writing it in the workbook, the students have already discovered that every note in C sharp major is sharped and are aware that, on the keyboard, a sharp is the next higher note and a flat is the next lower note.

Exercise 4: C sharp major scale becomes D flat major scale

1. Write out C sharp major: C# D# E# F# G# A# B# C#
2. Underneath and exactly below, write: D E F G A B C D
3. Play C#, give C# a flat name and write the flat sign on the letters below. Notice that C# and D flat are the same key on the piano (this is called **enharmonic change**). Proceed with each note and discover that D flat major scale has five flats, adding the flat symbol after the appropriate letters. The changed scale will look like this:

Db Eb F Gb Ab Bb C Db

There is a useful analogy to illustrate enharmonic change: enharmonics in music are like homonyms in language. They **sound** the same but look different on paper.

In language: “I” or “eye”

In music: D# = Eb

There are three pairs of enharmonic major scales:

- (1) B major (5 sharps) and C flat major (7 flats)
- (2) F sharp major (6 sharps) and G flat major (6 flats)
- (3) C sharp major (7 sharps) and D flat major (5 flats)
4. Play D flat major scale, following the procedures as for C major scale (P. 106-108).

Unit 4. The Order of Flats

Instead of adding a new flat in the next scale in the Circle of 5ths, one flat is subtracted each time (When a flat is “raised”, it becomes a natural or, in other words, is eliminated. For example, A flat becomes A and does not require an accidental sign in the scale).

- **The Order of Flats (BEADGCF)**

Use the mnemonic B E A D (the word bead) Go Catch Fish to remember the order of flats. This is the reverse order of sharps.

Exercise 5. The remaining flat scales and their triads and inversions

1. Teach the remaining flat scales, using the procedures for C major scale (P.106-108)
2. Teach each corresponding triad and inversions with the flat scale of the same name.

Unit 5. Minor Scales

There is an effective mnemonic that helps in remembering how to find the relative minor for each major scale: people who are related to each other tend to look alike. Related scales look alike, too. They have the same key signature and use almost all the same notes.

The relative natural minor scale uses the same notes as its relative major. It differs only by beginning on the 6th note of the scale.

- **The Relative Natural Minor Scale.**

The relative natural minor scale is found on staff paper or at the keyboard by first identifying the 6th note of the major scale, then writing or playing the notes of the major scale beginning from that note.

Once the concept of the 6th note is comfortable, use the “quickie” solution: Go down a minor 3rd (skip 2 piano keys) from the tonic note.

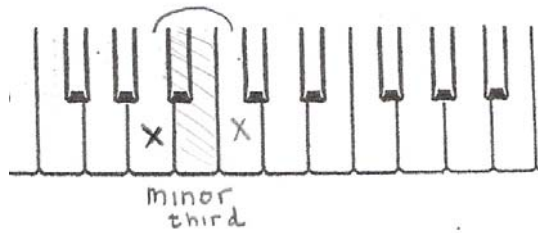


Figure 44: C major scale and A natural minor scale



Exercise 6: Practice finding several natural minor scales, beginning from their relative majors.

- **The Harmonic Minor Scale**

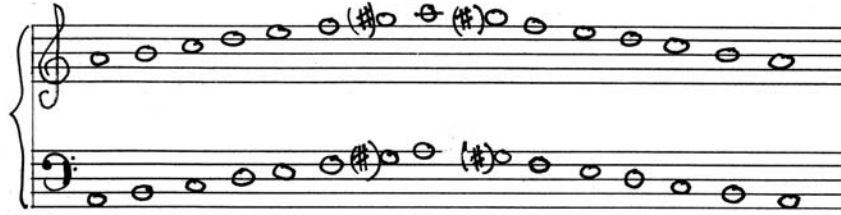
The formation of the harmonic minor scale occurs when the 7th degree (note) of the natural minor scale is raised one half step. For example, the 7th degree of A harmonic minor is G#. This G# is an **alteration** (therefore shown in parentheses) and is not displayed in the key signature (the relative major of A minor is C major which does not have any sharps or flats in its key signature).

Exercise 7. Derive the harmonic minor scale from the natural minor scale.

1. “Spell” A harmonic minor:

A B C D E F G(♯) A

2. Write A harmonic minor



3. Play A harmonic minor, using the procedures for C major scale (P 106-108).

Exercise 8: Derive the next harmonic minor scale (E) in the Circle of 5ths

1. Begin by using the same strategy as finding the relative minor from the C major scale:
 - a. C major is the relative major of A minor
 - b. To find the next major scale play the first 5 notes of C major scale to discover that G is the new starting note. Then either count up to the 6th note of G major scale (E) or down, skipping 2 piano keys, to E, to find the new relative minor.
 - c. Using G major key signature, play E F♯ G A B C D - hear and note the need for altering the 7th note (D). Raise the D to D♯. Complete the scale by playing the final note, E.
2. “Spell” E harmonic minor by writing the letter names of the notes in the notebook, including writing the number 4 above and below the appropriate notes for the RH and LH fourth finger notes.

| | | | | | | |
|-----------|---|----------|---|---|---|----------|
| RH | | | | | | 4 |
| | E | F♯ | G | A | B | C D(♯) E |
| LH | | 4 | | | | |

3. Write E harmonic minor on manuscript paper, placing the accidentals in front of F and D. Enclose the altered note in parentheses to reinforce the knowledge that D sharp is not in the key signature.

Figure 45: E harmonic minor scale



Exercise 9: Play Harmonic Minor Scales

1. Play the RH of A harmonic minor scale, one octave ascending and descending.
2. When comfortable remembering the fourth finger note and playing the scale, count out loud and to play the scale 1 octave in the quarter note pattern and 2 octaves in the eighth note pattern, as with the major scales. Use the MM when playing the scale and counting out loud is secure.
3. Follow the same procedure for the LH.

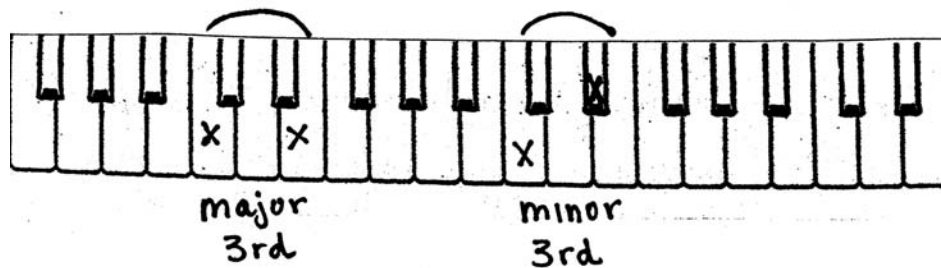
Have the students learn one harmonic minor scale at a time in this way, following the Circle of 5ths.

Unit 6. Minor Triads and Inversions

The difference between a major triad and its tonic minor triad (the triad of the same letter name, for example, A major and A minor) is that the major triad consists of the root, a *major third* and a perfect fifth while the minor triad consists of a root, a *minor third* and a perfect fifth.

Exercise 10. Create major and minor thirds

1. To create a major third, skip three notes above the root note (see below).
2. To create a minor third, skip two notes above the root note (see below).



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3. Play the minor triads (notes 1, 3 and 5 of the minor scale) and inversions at the same time and in the same key as the harmonic minor scale.

Both major and minor triads and inversions have the same shape and fingerings for root position, 1st inversion and 2nd inversion in all keys. See P. 114 for a reminder of the fingerings.

For most students, one scale plus triads and inversions per week is a reasonable assignment.

Level 3

Unit 1: The Partial Counting Chart (See P. 41 for the complete chart and use only up to 16th notes)

Exercise 1: Tap and count the Partial Counting Chart daily, first without and then with the MM.

Unit 2. Major Scales in a Four-octave Pattern, HS, Counting Out Loud

Many students will have played the scales in the quarter-note and eighth-note pattern, counting out loud, HS.

Exercise 2: Cycle through all the major scales again, adding three octaves in triplets and four octaves in 16th notes. Note that at the top of each rhythmic pattern, the beat number is always 4. This is useful information for playing the pattern starting from the top.

Exercise 3: Practice all major scales in the four-octave pattern, counting out loud, with the MM. This practice enhances the ability to maintain a steady pulse while changing rhythms between duple or triple time.

Figure 46: The Major Scale Four-octave Pattern

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The Major Scale Four Octave Pattern

1 2 3 4 1 2 3 4 1 2 3 4

1 2 3 4 1 + 2 + 3 + 4 + 1 + 2 + 3 + 4 +

1 + 2 + 3 + 4 + 1 + 2 + 3 + 4 + 1 ta ta 2 ta ta 3 ta ta 4 ta ta

1 ta ta 2 ta ta 3 ta ta 4 ta ta 1 ta ta 2 ta ta 3 ta ta 4 ta ta 1 ta ta 2 ta ta 3 ta ta 4 ta ta

1 ta + ta 2 ta + ta 3 ta + ta 4 ta + ta 1 ta + ta 2 ta + ta 3 ta + ta 4 ta + ta

1 ta + ta 2 ta + ta 3 ta + ta 4 ta + ta 1 ta + ta 2 ta + ta 3 ta + ta 4 ta + ta

- **Using the Four-octave Pattern**

1. Play and practice each scale in the Circle of 5ths (see P. 101), HS, until it feels comfortable. Start at a slow enough tempo so that the sixteenth note pattern is played perfectly.
2. Follow each scale in four-octave pattern with its triads and inversions as in Unit 3 below.

Unit 3. Major Triads, Solid and Broken, One Octave, with a Perfect Cadence (V- I), HT

See Level 2, Unit 6 (P.119) for triads and inversions. The new challenge is to interlace the broken version continuously, play the broken and solid triads and inversions Hands Together, and add a Perfect Cadence to finish.

The Perfect Cadence uses the major triad created on the fifth note of each scale followed by the triad on the tonic note of the scale. For example, in C major, the fifth note is G. Construct a major triad (P. 110) on G. Play a G chord, followed by a C chord to create a Perfect Cadence, ensuring that the common note stays in the same position in the chords.

Figure 47: Major Triads, Solid and Broken



Exercise 4: The major broken and solid triad patterns, HT.

1. Play each major broken and solid triad pattern, proceeding through the Circle of 5ths
2. We recommend using the Metronome and to counting out loud when playing these patterns.

Unit 4: Harmonic Minor Scales, in a Four-octave Pattern, HS

Students have already learned how to derive and play harmonic minor scales in Level 2, Unit 5, P.117.

Exercise 5: Harmonic minor scales in the four-octave pattern, HS, counting out loud, with the Metronome, proceeding through the Circle of 5ths.

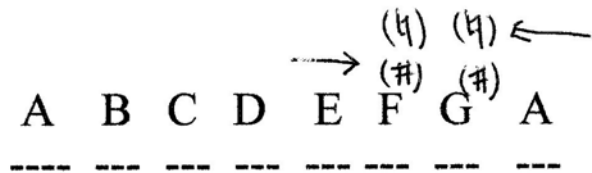
Unit 5: Minor Triads, Solid and Broken, One Octave Ascending and Descending, HT

Exercise 6: Play the minor triads and inversions in tandem with each harmonic minor scale, using the pattern of the major triads and inversions (P. 110)

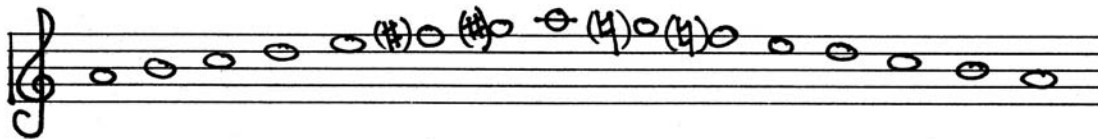
Unit 6. Melodic Minor Scales

Melodic minor scales have a different ascending pattern from the descending pattern. On the way up, the sixth and seventh notes are raised and on the way down, both the sixth and seventh notes are returned to their natural position. In a few melodic minor scales, this causes changes in fingering to accommodate the different ascending and descending keys. Refer to published notated melodic minor scales for fingerings. For example, in F# melodic minor, the Right Hand fourth finger plays D# ascending and G# descending.

1. “Spell” each scale by writing the letter names of each note, noting the fourth finger note and writing 4 above for the RH and 4 below for the LH (see P. 107). Write in all the accidentals present in each key signature. Use arrows to indicate ascending or descending direction.



2. Write A melodic minor (and each one as it is taught) on manuscript paper. The altered notes that create the melodic scale are enclosed in parentheses to emphasize the fact that they are not in the key signature. For example, in A melodic minor, the 6th and 7th degrees of the scale (F and G) are raised ascending to become F# and G# and lowered descending to return to F and G.



- **Mnemonic for the difference between harmonic and melodic minor scales**

The letter **h** (for harmonic) has one arch, therefore only one altered note (the raised 7th).

The letter **m** (for melodic) has two arches, therefore there are two altered notes (the raised 6th and 7th). [One student suggested that **melodic** is “the mixed-up” one]

Exercise 8: The Melodic Minor Scales, in a Four-octave Pattern, HS then HT, Counting Out Loud,

1. After A melodic minor is comfortable, follow the order of the Circle of 5ths and play the remaining scales.
2. Play each scale in the Four-octave Pattern used for major and harmonic minor scales (P. 122).
3. When comfortable playing the scales HS, play them HT.

Unit 7. Relaxation Techniques

The *Flexible Wrist Exercises: Basic Concept* was introduced in Level 1, Unit 4 (P. 102). Locking the wrist into a rigid position sets up a condition for strain and injury; rolling the wrist forward prevents that. For success and enjoyment in playing the piano, it is essential that the hands, wrists, elbows, arms and shoulders stay as relaxed and free as possible. The *Flexible Wrist Exercises* provide not only the understanding and tools to keep muscles free of injury but also to develop extraordinary facility to play quickly and easily. If some degree of strain or injury is already present, doing these exercises will permit playing in a new way that will not aggravate their condition and furthermore will give the injured muscles an opportunity to heal.

Playing the piano requires the use of muscles. When muscles are used they require oxygenated blood. Continuing to use the muscles without allowing them to relax and recover, causes lactic acid (the result of oxygen-deprived blood) to accumulate. It is the combined buildup of lactic acid and continued demand on the muscles that causes injury. Pianists become so involved with playing the piano, thinking about what notes come next and/or projecting emotion or physically getting to new positions quickly, that they sometimes block awareness of warning signals from their body. Over time, by continuous incorrect use of muscles, injuries such as carpal tunnel syndrome, tendinitis in the wrist

and elbows, and bursitis in the shoulders, develop. The areas which are the most susceptible to stress and injury are:

1. **The bridge of the hand.** Tension is usually caused by fingering choices that cause the fingers to hyper-extend. The stretch or widest space should occur between the thumb and index fingers. Spreading between 2, 3, 4, and 5 stresses the hand and sets up tension in the wrist.
2. **The wrist.** Tension is caused by using the fingers like hammers and aggravated at fast tempi. This may be the single greatest triggering cause of injury in pianists.
3. **The elbow.** Tension is caused by using muscles in the forearm and upper arm in an attempt to assist in developing speed and power.
4. **The shoulders.** In an attempt to assist and then compensate for other muscles, the muscles in the shoulders become tense and often cause the shoulders to hike up towards the ears.

Is it possible to avoid this buildup of tension or mitigate its effects if it does occur? Practicing the *Flexible Wrist Exercises* inculcates awareness of when tension is building and how to play easily and without strain. When playing the piano, if there is tension or pain, STOP! Do the **Relaxation Exercise** (P. 132) and then continue. The benefit of the *Flexible Wrist Exercises* occurs when these simple exercises are integrated into body awareness.

- **The *Flexible Wrist Exercises***

Exercise 9: The *Flexible Wrist Exercises*

The *Flexible Wrist Exercises* consist of a preliminary exercise plus four steps and illustrate how to play the piano without using finger strength or power. It utilizes the wonderful hinge that is the wrist to provide impetus for the fingers to move.

Preliminary exercise:

1. Rest the hands on the knees.
2. With the Left Hand, using thumb and third finger, pick up the Right wrist. The RH and arm remain completely inert.
3. Let go of the R wrist, permitting the R arm to fall freely back onto the knee.

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4. Do this, alternating hands, until the arms are dropping freely and are not trying to assist the hand that is doing the lifting.

Step 1:

Note: The steps are shown for the Right Hand only. The Left Hand will “mirror” the RH and begin with finger 1. The arrows indicate the motion of the wrist. The down arrow means to drop the wrist, the up arrow means that the wrist rises.



1. Position the RH over the keys (thumb over treble C). The wrist should be high (as it is in the Ghost exercise on P. 30) and all the fingers are relaxed.
2. Let the wrist drop to its natural resting position. As the wrist drops, thumb plays C.
3. With the thumb holding C, position 2nd finger in a curved position, touching the surface of the key, yet not depressing it.
4. Gradually raise the wrist (you may use the 2nd finger of the LH under the wrist to do the lifting so that the experience of complete relaxation is felt in the RH). Eventually the weight of the hand and arm *transfers* to the 2nd finger and the key goes down. Sometimes, because the transfer of the weight is so gradual, the key will not sound as it is being depressed, which is acceptable. The 2nd finger is now holding down the key (D) and the wrist is in a high position.
5. Place the 3rd finger just over the key (E) and allow the wrist to drop freely.
6. Position the 4th finger over F, raise the wrist and permit the weight to transfer from finger 3 to finger 4. An effective way to experience the weight transfer is for the student to try it on his own forearm. Feel the difference between the transfer of weight and that of striking the key by using the finger like a hammer.
7. Position finger 5 over G, and, while still holding 4 on F, drop the wrist and play 5 on G.
8. Reverse the order and descend through the fingers back to thumb.

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9. Play the exercise again, a little more quickly. Listen carefully to hear the difference between the wrist-induced playing and the hammer-finger strike. Pianists need many different touches and each is valuable in different contexts.
10. The LH does the same steps, beginning with the thumb, so that the LH fingers are mirroring the RH fingers. Begin either on middle C and move down, or begin on the G below middle C. The LH process may feel quicker because the body has already learned how the exercise feels and sounds.

The remaining steps are variations of the feeling of releasing and dropping the wrist, using the rising wrist to provide the impetus for the finger to depress the key.

Step 2

Step 2:



1. Position the RH over middle C, with fingers 1, 2, 3, 4 and 5 over C, D, E, F and G. Begin as in Step 1: the wrist is in the high position. Drop the wrist and play C with thumb.
2. Position fingers 2, 3 and 4 over D, E and F. The fingers are curved and rest lightly on the keys. Gradually, as the wrist rises, depress D, E and F, one at a time, feeling the weight transfer from 2 to 3 to 4 and drop the wrist by playing finger 5 on G.
3. Reverse direction by positioning fingers 4, 3 and 2 over the keys F, E and D. Now the wrist rises and the weight transfers from 4 to 3 to 2 and the wrist drops on thumb, playing C.
4. There is a STOP after thumb plays, then 2, 3 and 4 play in a group, 5 plays and then there is a STOP.
5. When playing the exercise putting in the STOPS feels comfortable, eliminate the STOPS. The movement of the wrist rising and dropping becomes continuous and smooth. Say out loud, "down, up-up-up down", etc, when practicing this exercise.
6. Use the first Hanon exercise so that the pattern moves up the keyboard instead of repeating the same notes.

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Hanon Exercise No. 1



7. Repeat the above steps with the LH, listening to hear the difference in the sound between weight-induced depression or finger strikes of the keys.

Step 3:



1. Position the RH over the keys as in the previous steps. Begin as in Step 1, with RH thumb positioned over treble C, wrist high. Drop the wrist and play C.
2. Position fingers 2, 3, 4 and 5 over D, E, F and G. Gradually, as the wrist rises continuously, play 2 3 4 5 4 3 2 (notice how high the wrist is now) and drop the wrist when the thumb plays.
3. Notice that:
 - a. The wrist must not become too high too soon
 - b. The fingers are not striking any keys, just depressing the keys by the action of the weight transferring from one finger to another.
4. There is a STOP after the thumb. When all of the parts of this exercise feel integrated, take out the STOP.
5. For variety, use the first Hanon exercise (See example above)
6. Repeat the same steps with the LH.

Step 4:

Use the same wrist motion as Step 3, that is, the wrist begins to rise at the beginning of the measure (after the thumb has dropped) and continues to rise until you reach the first note (played by the thumb) of the next measure, whereupon the wrist drops to its lowest natural position to begin the process again.

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Repeat each measure 4 times.

The musical score consists of three systems, each with two staves (treble and bass clef).
 System 1 (C major):
 - Measure 1: RH (C4, D4, E4, F4, G4), LH (G3, F3, E3, D3, C3). Fingering: 1 2 3 4 5 3 4 2 1.
 - Measure 2: RH (G4, F#4, E4, D4, C4), LH (F3, E3, D3, C3, B2).
 - Measure 3: RH (F#4, E4, D4, C4, B3), LH (E3, D3, C3, B2, A2).
 System 2 (C minor):
 - Measure 1: RH (C4, D4, E4, F4, G4), LH (G3, F3, E3, D3, C3). Fingering: 1 2 3 4 5 3 4 2 1.
 - Measure 2: RH (G4, F#4, E4, D4, C4), LH (F3, E3, D3, C3, B2).
 - Measure 3: RH (F#4, E4, D4, C4, B3), LH (E3, D3, C3, B2, A2).
 System 3 (D flat major):
 - Measure 1: RH (C4, D4, E4, F4, G4), LH (G3, F3, E3, D3, C3). Fingering: 1 2 3 4 5 3 4 2 1.
 - Measure 2: RH (G4, F#4, E4, D4, C4), LH (F3, E3, D3, C3, B2).
 - Measure 3: RH (F#4, E4, D4, C4, B3), LH (E3, D3, C3, B2, A2).
 The exercise concludes with 'etc.' at the end of the third system.

1. When performing this exercise HT, notice how neatly the hands mirror each other. This utilizes the most natural co-ordination of the hands.
2. The fingering pattern in each hand is 1 2 3 4 5 3 4 2 1. The skipping pattern on the descent makes the pattern more interesting and slightly more challenging.
3. Each measure is repeated four times and there are three patterns on each starting note of the RH:
 - a. C major five note pattern (Measure 1).
 - b. C minor five note pattern (Measure 2).
 - c. C (which now becomes the leading note [VII] of the next scale ascending chromatically) followed by the first four notes (I, II, III and IV) of that scale (in this beginning pattern on C, the next scale is D flat major). For those who are familiar with solfege, the notes are *ti, do, ra, me, fa* of D flat major. Note that the LH begins a half step lower, on G flat in the first pattern (measure 3).
4. The next sequence, written in D flat major, is followed by C sharp minor for ease of reading. The third measure of that sequence (measure 6) is C sharp plus the

first four notes of D major scale.

5. Continue to play the pattern of three measure sequences on each note ascending chromatically until the RH reaches the next C on the keyboard.

This completes the entire set of the *Flexible Wrist Exercises*. After the first three steps feel comfortable, they may be dropped and the technical practice started at Step 4.

- **Relaxing the Body**

We know that the Flexible Wrist Exercises will not cause injury when correctly understood and applied. Whenever muscles are exercised, even if used perfectly correctly, the blood serving the muscles becomes depleted of oxygen and a buildup of lactic acid occurs. This condition creates fatigue and if continued too long without an interval of relaxation causes strain and ultimately injury.

In any activity that is new, the mind and body have no frame of reference for how that activity “should” feel. One would think that the activity would feel good or not feel good, yet if there is no comparison available for the mind to process, it is impossible to tell. Pianists using muscles in a body that is being held in a particular position must learn through practice what is best and when to stop.

The combination of no prior reference, and eagerness or lack of awareness often causes the learner to work harder than necessary and to continue for too long.

Endurance, the ability to work progressively longer and do more with greater ease, is built up one practice session at a time. Endurance is best achieved by small efforts followed by complete relaxation. As the muscles become accustomed to being worked up to but not beyond fatigue, they become stronger and stronger. The length of time they can be used without stress or injury increases.

One successful marathoner said “My husband and I have never had injuries when we train. We structure our schedule so that we increase our distance by very little each week and we *never* permit ourselves to go beyond our prescribed goal”. This is the voice of experience. She and her husband knew how much they could afford to do without injury and they had the discipline to respect that boundary. They also knew that healing an injury is more challenging and time-consuming than taking a little more time and preventing one!

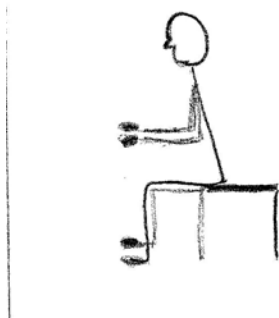
If the boundaries are unknown, trial and error are the only means of discovering them. The biggest key is to try to stay aware of how the body feels. As soon as it gives off fatigue signals, STOP, use the Relaxation Exercise and then either take a short break, resume the exercise, or do a different activity at the keyboard.

For pianists who want to develop endurance, for example, in connecting the scales with turnarounds (Unit 8, P. 132): Play the patterns until the muscles feel slightly tired, STOP, do the Relaxation Exercise, then pick up the pattern exactly at the stopping point. Stop as often as necessary and try to complete the full pattern at each session. There may be many stops at first, yet the entire pattern will eventually be played without a pause. Two developments have occurred: the muscles have become stronger and the looseness of the fingers, wrist, elbow and shoulder has been sustained.

- **The Relaxation Exercise**

Relaxing the Body

In good posture



Totally relaxed



Remove the hands from the piano keys. Drop the arms so that they are hanging freely towards the floor. Curl the spine and permit the head to roll forward completely. Gently shake out the hands. Permit them to hang for a moment, and shake the hands gently again. When the arms feel completely relaxed, roll back up into a comfortable seated position. Imagine straightening the spine one vertebra at a time, beginning with the lowest one in the back. Allow all the vertebrae of the spine to straighten before attempting to lift the head. Finally, slowly bring the head into its normal position.

This exercise is helpful when tension is felt in any situation.

Unit 8. Scales with Turnarounds

It is time to apply the freedom of the flexible wrist to scales. The pattern follows the Circle of 5ths in **reverse** order (C major, a minor, F major, d minor, B flat major, etc); counter-clockwise, in other words. In order to have a continuous flow of a scale pattern, the “turnaround” creates a connection first between the major scale and its relative minor, then between the minor scale and the next major scale. The turnaround consists of the first four notes of the next scale in the pattern (or *fa, me, re, do* for those familiar with Solfege).

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Note that when a major scale is connecting to its relative minor, the interval between the tonic (first) note of the scale and the first note of the turnaround is a whole step. When a minor scale is connecting to the next major scale, the interval between the tonic note and the first note of the turnaround is a half step.

The Turnaround Pattern

The image displays four pairs of musical staves, each showing a major scale and its relative minor scale connected by a turnaround pattern. Fingerings are indicated by numbers 1-5 above or below notes.

- Pair 1:** C major (RH: 1 2 3 1, LH: 5 4 3 2 1) and A minor (RH: 4 3 2, LH: 5 2 3 4). Turnaround: C4 to A4 (whole step).
- Pair 2:** F major (RH: 1 2 3 4 1, LH: 5 4 3 2 1) and D minor (RH: 4 3 2, LH: 5 2 3 4). Turnaround: F4 to D4 (whole step).
- Pair 3:** B flat major (RH: 2 1 2 3 1, LH: 3 2 1 4 3 2 1) and G minor (RH: 4 3 2 1, LH: 3 2 3 4 5). Turnaround: Bb4 to G4 (half step).
- Pair 4:** G minor (RH: 3 2 1, LH: 2 1 2 3) and F flat major (RH: 4 3 2 1, LH: 3 2 3 4 5). Turnaround: Gb4 to Fb4 (half step).

* adding one octave for adjustment

Exercise 10: Major and Minor Harmonic Scales with Turnarounds, One Octave, HS

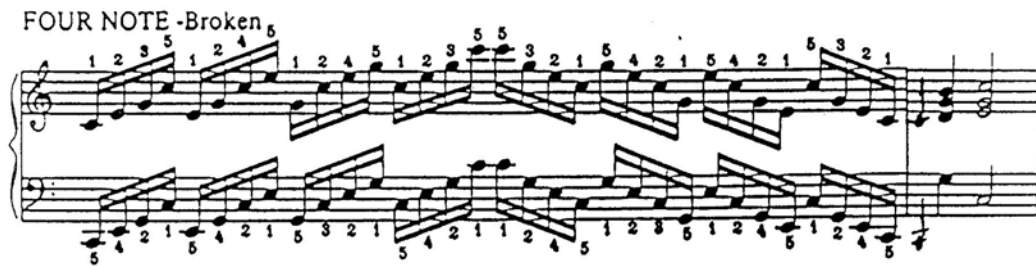
1. To begin, play only one or two pairs of major and minor scales at a time.
2. Subsequently, add one or more pairs until the entire set of scales with turnarounds is played at every technical practice session.
3. When it is possible to play the entire pattern through, HS, at a comfortable tempo, the flexible wrist can be added: play the scale ascending and descending with an easy finger action. The wrist drops on the thumb note immediately preceding the turnaround (drop on thumb note), raise the wrist as you play the next three notes (up, up, up) and drop the wrist on the next thumb note which is the first note of

the next scale. The only notes actively using the flexible wrist action are those of the turnaround.

Unit 9. Major Interlaced (Broken) Four-note Chords, Two Octaves Ascending and Descending, HS, with a Perfect Cadence

Four-note chords are triads and inversions with the upper tonic note added. They are made up of the tonic (I), mediant (III), dominant (V) and tonic (I). They may be major or minor. Interlacing four-note chords means to play the root position and inversions one note after another without stopping. Play each chord pattern two octaves ascending and descending and end with a Perfect Cadence (V I). The example below shows only one octave.

Figure 48: Four Note Interlaced Chords



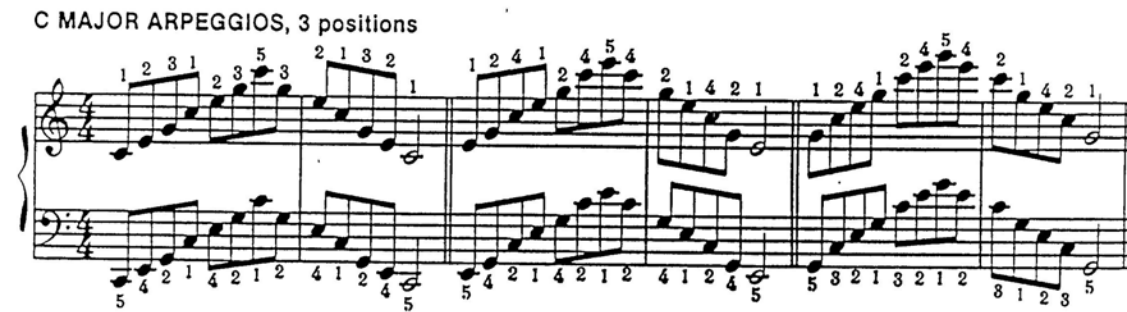
Exercise 11: Major broken four-note chords interlaced, ascending and descending, two octaves, HS

1. Play one or more patterns in each technical practice session, following the Circle of 5ths (P. 101).
2. Use the flexible wrist exercise to drop the wrist on the first note of each four-note group. Say out loud, "Down, up,up,up".
3. Complete each pattern with a Perfect Cadence (V I).

Unit 10: Major Arpeggios and Inversions, Two Octaves Ascending and Descending, HS

Arpeggios use the notes of the root position and inversions of a triad. They are strung together in a continuous sequence as opposed to interlacing, as in broken chords. See below.

Figure 49: C Major arpeggios



- **The Rule of Fingering for Arpeggios:**
 1. **The thumb never plays on black keys (except for F sharp major and D sharp minor which consist only of black keys).**
 2. **The thumb plays the first white key ascending in the RH and the first white key descending in the LH.**

Exercise 12: Major arpeggios and inversions, ascending and descending, HS, two octaves

1. Play one or more major arpeggios, root position and inversions, two octaves HS, using the pattern above, at each technical practice session.
2. Follow the order of the Circle of 5ths (P. 101).

Unit 11. The Chromatic Scale

The chromatic scale is the pattern that uses every key consecutively, either ascending or descending. Most pianists love to play it. It sounds impressive, is fun to hear and simple to play.

- **The Fingering Pattern for the Chromatic Scale:** learn only the fingering that

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uses 3 on every black key (see below).

1. Identify the sequences of fingers 1, 2 and 3.
2. In RH ascending the sequences begin on E and B.
3. In the LH descending, they begin on C and F.

Exercise 13: The Chromatic Scale, Two Octaves Ascending and Descending, HS

1. Before playing the chromatic scale, make a circle with thumb and third finger. Keep the image of the circle in mind when playing the chromatic scale; it will be a reminder to keep the third finger rounded instead of allowing it to lie flat on the key.
2. Begin by playing the scale from C as shown in the example
3. Play the scale beginning from any note on the keyboard. The scale fingering does not begin with finger 1 on keys other than C but uses the finger that is shown that is shown for that key in the example.

The image displays musical notation for Exercise 13, which involves playing the chromatic scale over two octaves, ascending and descending, in both hands (HS). The notation is presented in two systems. The first system shows the scales starting on C4, and the second system shows them starting on C5. Each system includes an ascending scale and a descending scale. Fingerings are indicated by numbers 1, 2, and 3 above or below the notes. The scales are written for both right and left hands, with the right hand on the upper staff and the left hand on the lower staff. The notation includes dynamic markings 'p' (piano) and 'f' (forte) at the beginning of each scale.

Level 4

Unit 1: Tapping the Rhythms of the Partial Counting Chart with the Metronome while Counting Out Loud

Exercise 1. Tap the rhythms of the Partial Counting Chart with the MM (see Level 3, Unit 1, P.121) while counting out loud. (The Complete Counting Chart is on P.41)

1. Chart the increasing speed of the MM to notice increasing mastery.
2. Begin at a tempo which permits the entire exercise to be rhythmically accurate and comfortable.

Unit 2: Major and Harmonic Minor Scales Connected with Turnarounds, Two Octaves, HS

Exercise 2. Play the major and harmonic minor scales connected with turnarounds learned in Level 3, Unit 8, P. 132

1. Feel the fingers moving lightly and freely over the keys, dropping the wrist at the turnaround.
2. This exercise is a splendid warm-up, especially when combined with Step 4 of the Flexible Wrist exercises (P. 30).

Unit 3: Major Scales, Four Octaves Ascending and Descending in 16th Notes, HT

The students have learned all the major scales in the four octave pattern, HS, counting out loud with the MM in Level 3, Unit 2, P.121.

Exercise 3. Play one or more of the major scales each day in four octaves only, ascending and descending in 16th notes, with the MM, HT.

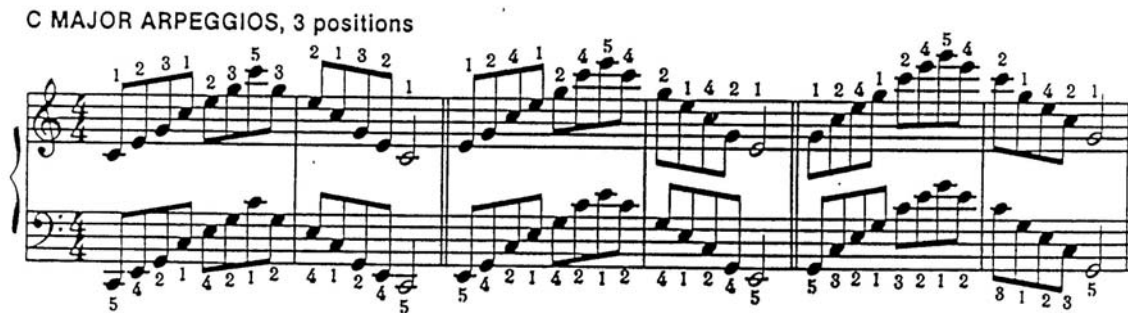
Exercise 4. Play one or more of the major scales each day in the Two Octave

Formula Pattern.

Unit 5: Major Arpeggios, Root Position and Inversions, Two Octaves Ascending and Descending, HT

The students learned all the major arpeggios HS in Level 3 (P.135).

Exercise 5. Play one or more of the major arpeggios each day, root position and inversions, ascending and descending, two octaves, HT, using the Circle of 5ths for the order of learning (P.121)



Unit 6: Harmonic Minor Scales, Four Octaves Ascending and Descending in 16th Notes, HT

Harmonic minor scales may feel familiar to the students now, as they have been playing them HS since Level 2, Unit 5, P.117.

Exercise 6. Play one or more harmonic minor scale each day HT in 16th notes, with the MM, using the Circle of 5ths for the order of learning (P.101).

Unit 7: Harmonic Minor Scales in the Two Octave Formula Pattern Plus Perfect (V-I) Cadence

Exercise 7. Play one or more harmonic minor scale each day in the Two Octave Formula Pattern, ending with a Perfect Cadence.

1. Use the MM some of the time to assist rhythmic development and to notice growing mastery.
2. See Unit 4, P. 138 for the pattern.
3. Use the Circle of 5ths for the order of learning (P. 101)

Unit 8: Minor Interlaced (Broken) Four-Note Chords, Two Octaves Ascending and Descending, HS

Students who are comfortable playing the major interlaced chords HS, (Level 3, P. 134) may add the minor interlaced chords HT immediately.

Exercise 8. Play one or more major and minor interlaced four-note chords each day, using the Circle of 5ths for the order of learning.

Unit 9: Chromatic Scale, Four Octaves Ascending and Descending, HT

Exercise 9. Play a chromatic scale (learned HS in Level 3, Unit 11, P. 135) each day, two octaves ascending and descending, HT. For variety, begin on a different note each time.

Figure 52: The Chromatic Scale, Ascending and Descending, Two Octaves

A musical score for the song "The Rose Tree". It consists of two systems of staves. The first system has a treble staff with a melody and a bass staff with a piano accompaniment. The second system continues both parts. Fingerings are indicated by numbers 1-3 above notes. The key signature has one sharp (F#) and the time signature is 3/8. The melody includes some chromaticism, such as F# to G and G# to A. The piano part features a steady eighth-note accompaniment pattern.

1. The diminished 7th chord is formed on the leading note (7th degree) of the minor scale and is created by three minor thirds ascending from the root note. For example, in the key of C minor, the chord begins on B natural, followed by D (a minor 3rd), then F (a minor 3rd above D), finished by A flat (a minor 3rd above F).
2. Diminished 7th chords have four notes and consist of root position plus three inversions in contrast to major and minor chords which consist of three notes and have root position plus two inversions.

- **How to play Diminished Seventh Chords “Creeping” then Interlaced (Broken) and Solid, Two Octaves Ascending and Descending, HS**

- Exercise 10.** Play the diminished 7th chords, created on the leading note of each minor scale, “creeping”, ascending and descending, one octave, HS.

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2. When the chords feel comfortable HS, play them HT.

Exercise 11. Play one set of diminished chords, two octaves, ascending and descending, interlaced then solid, HS or HT, with each harmonic minor scale practiced.

Figure 53: Diminished Seventh Chord



Unit 11: Minor Arpeggios, Root Position and Inversions, Two Octaves Ascending and Descending, HS

Exercise 12. Play one or more of the minor arpeggios each day, root position and inversions, two octaves ascending and descending, HS.

1. For a reminder of the Rule of Fingering for all arpeggios see Level 3, Unit 10, P. 135.
2. See Level 3, Unit 3 (P.122) for the example of an arpeggio and inversions.
3. Use the Circle of 5ths for the order of learning (P. 101).

Unit 12: Melodic Minor Scales Four Octaves Ascending and Descending, in 16th Notes, HT

Exercise 13. Play the melodic minor scales, ascending and descending four octaves only, in 16th notes, HT.

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1. For a reminder of the construction of the melodic scales see Level 3, Unit 6, P.124.
2. Use the Circle of 5ths for the order of learning (P. 101).

Level 5

Unit 1: Create an Internal Metronome by Tapping the Rhythms of the Partial Counting Chart and Counting Out Loud with the MM

(See P. 41 for the Complete Counting Chart)

Exercise 1. Tap the rhythms of the Partial Counting Chart and count out loud with the MM (Level 3, Unit 1, p. 121). The Complete Counting Chart is found on P.41).

- 1. It is this practice that creates the body awareness of a steady pulse.**
- 2. Gradually increase the MM speed while continuing to tap the exercise accurately.**

Unit 2: Fast Scales with Turnarounds, HS

1. The scales in the example are shown in a one-octave pattern (Level 3, Unit 8, P. 132).
2. The pattern starts in C major and ends when the key of C major begins again.

Exercise 2. Play the entire pattern of major and harmonic minor scales with turnarounds, four octaves ascending and descending, HS.

1. Play the scales as *softly* and *quickly* as possible, keeping the wrist flexible.
2. At each turnaround, drop the wrist to release any tension.
3. Stop playing every time the muscles in the arm, wrist and fingers feel exhausted. Let the arm hang from the shoulder and gently shake it until the muscles feel refreshed. (Several stops and starts are common at first as endurance builds and body awareness grows.)
4. Relocate to the same note an octave or two higher when the hand is too far down the keyboard to complete the patterns.

5. This exercise builds speed and endurance. As the speed increases, the wrist drops become smaller and less obvious yet it remains released and flexible.
6. Eventually, the scales are played rapidly from beginning to end with no stops and no fatigue in the arms, wrists and fingers.

Unit 3: Major scales, Four Octave Formula Pattern with I-IV-V7-I Cadence

Figure 54. Four Octave Formula Pattern Scale in C Major

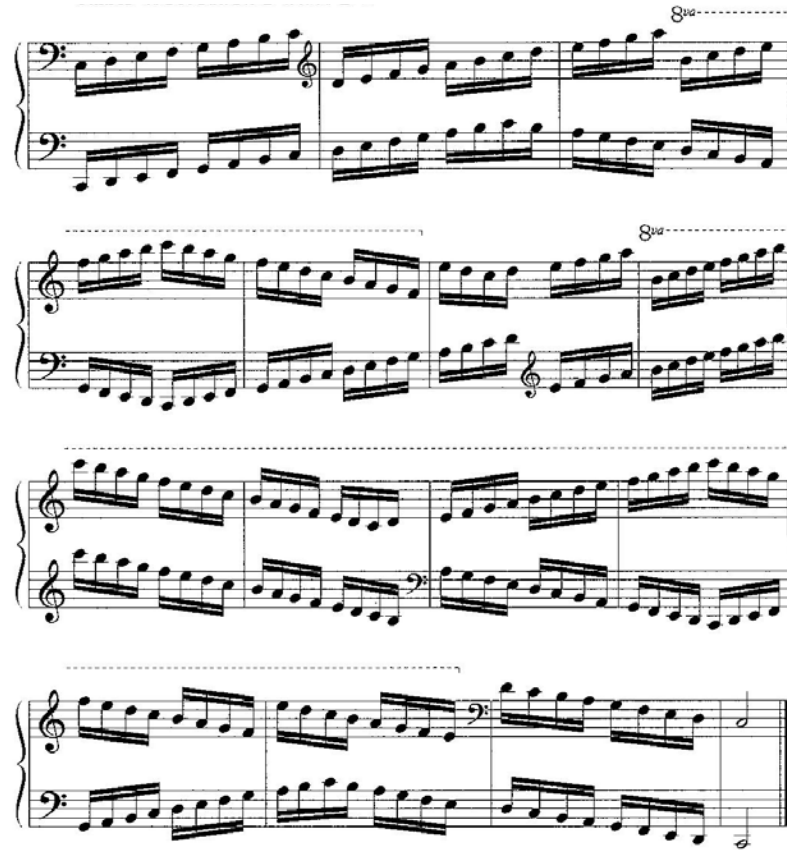


Figure 55: The Tonic-Subdominant-Dominant Seventh-Tonic Cadence (I-IV-V7-I)

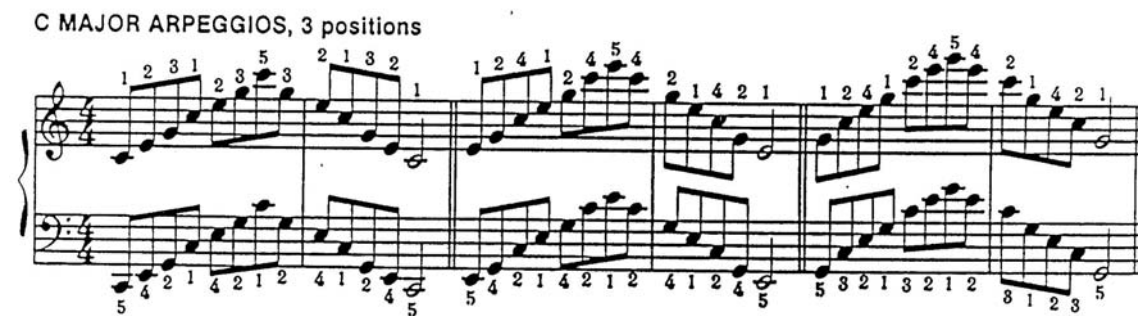


Exercise 3. Play all twelve major scales in the Four Octave Formula Pattern, ending with the I-IV-V7-I cadence. (The scales may be divided into groups and played over several practice sessions.)

1. Practice the scales in order of the Circle of 5ths (p. 101). For variety, practice the scales in chromatic order, e.g. C major, C sharp major, D major, E flat major, etc.
2. Use the “eyeglasses” mnemonic shown in the Two Octave Formula Pattern (Level 4, Unit 4, p. 138). Please note that each segment here spans two octaves instead of one.
3. Chart the tempo of the MM to note increasing mastery.

Unit 4: Major Arpeggios, Root Position and Inversions, Four Octaves Ascending and Descending, HT

Figure 56:



2. The Rule of Fingering for Arpeggios is the same as the Rule of Fingering for Scales (Level 2, Unit 2, p. 114).

Rule of Fingering for Arpeggios:

RH thumb plays the first white note ascending

LH thumb plays the first white note descending

Unit 5: Dominant Seventh Chords “Creeping” in One Octave Ascending and Descending, HS; followed immediately by Dominant Seventh Chords Solid and Interlaced (Broken) in Two Octaves Ascending and Descending, HS

Figure 57: Dominant Seventh Chords “Creeping” (shown ascending only)



Exercise 5. Play the Dominant Seventh chords “creeping”, ascending and descending, HS

1. Play the first chord. Hold down all the finger notes and lift the thumb note.
2. Replace fingers 2, 4 and 5 with fingers 1, 2 and 4. This places the new fifth finger note one octave above the previous thumb note.
3. Repeat for all the inversions.

- **Mnemonic: to express the close intervals in the V7 chord position:**

Root position: spread apart

1st inversion: close on top (fingers 4 and 5 are a 2nd apart)

2nd inversion: close in the middle

3rd inversion: close on the bottom.

When visualizing these chords, remember: *the same two notes always form the close interval* (in this case F and G).

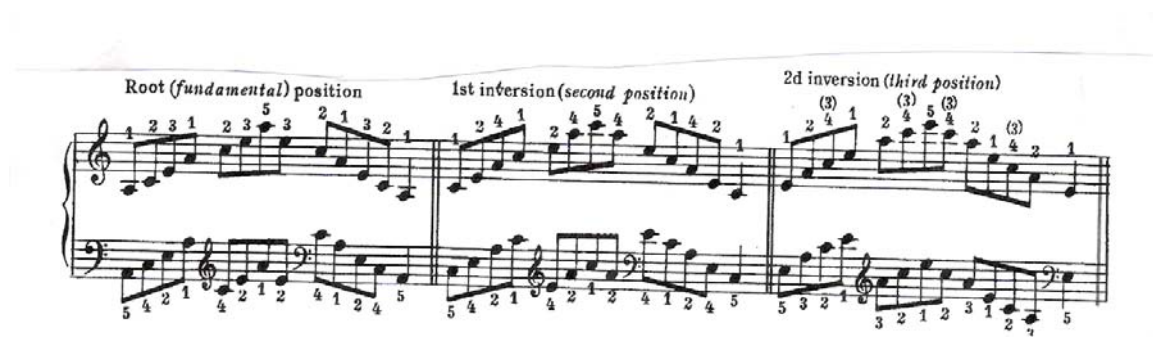
Figure 58: Dominant Seventh Chords Solid and Interlaced (Broken)



Exercise 6. Play all of the Dominant Seventh chords in solid and broken form, two octaves ascending and descending. In every case, begin with the “creeping” pattern until the eyes can spot the patterns on the keys.

Unit 6: Minor Arpeggios, Root Position and Inversions, Four Octaves Ascending and Descending, HT

Figure 59: Minor Arpeggios, Root Position and Inversions (in two octaves)



Exercise 7. Play all the minor arpeggios, four octaves ascending and descending, HT, in any order using the Rule of Fingering for Arpeggios (Level 5, Unit 4, p. 146).

Unit 7: Octave Technique

1. A common misconception is that the ability to play octaves is dependent on the size of the hand. The fact is that the stretch for octaves depends on *the stretch between the thumb and the index finger*.
2. Spend a **few** seconds each day **gently** stretching the skin between the thumb and the index finger

3. Playing octaves is exhausting and damaging if tension builds in the wrist and arm. Similar to playing fast scales with turnarounds (Level 5, Unit 2, p. 144), tension can be released when practicing octave scales by keeping the wrist flexible.
4. Set the hand by crossing the third finger over the index finger, as though for “good luck” (see figure below). This helps to maintain a consistent space between the thumb and fifth finger.

Figure 60: Fingers Cross to Set Position for Octaves

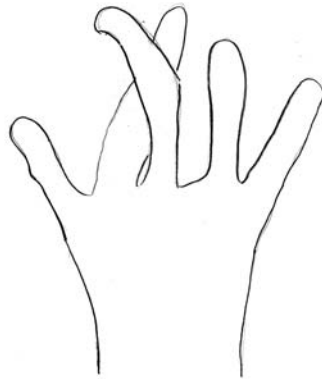
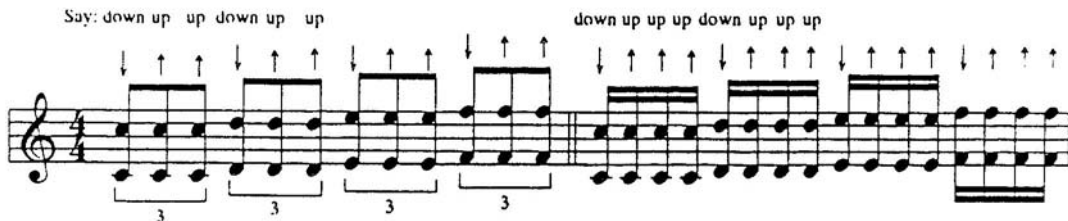


Figure 61: The Preparatory Octave Exercise

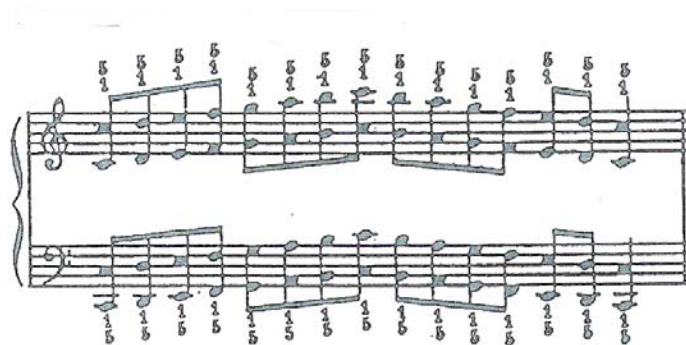


Exercise 8. Practice the Preparatory Octave Exercise HS, then HT

1. Practice a one-octave C major scale. Repeat each note of the scale three times and drop the wrist completely at the beginning of each group of three notes.
2. Say “down, up, up” as the wrist drops down to its lowest natural point of rest and then rises gradually with the second and third notes.
3. When this becomes comfortable, practice in groups of four, dropping the wrist on the first note and gradually letting it rise on the remaining three notes.
4. This exercise should feel comfortable at all times with no accumulation of tension in the wrist.
5. Practice at a tempo which permits total relaxation of the wrist and arm.
6. As the tempo increases, the wrist drops less and less but remains flexible and released.

**Unit 8: Octave Scales, Major and Harmonic Minor, Two Octaves
Ascending and Descending, HS, followed immediately by
HT**

Figure 62: Octave Scale in Octaves (shown one octave, HT)



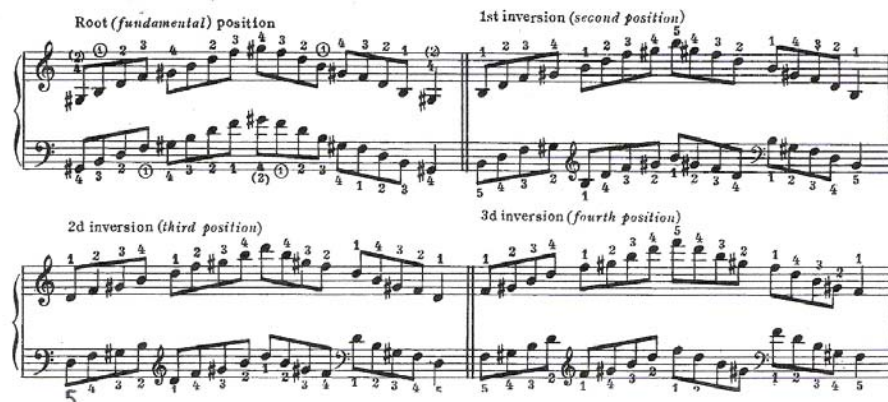
- **The Rule of Fingering for Octaves:** Use 5-1 on all octaves
Optional Fingering for Octaves: Use 5-1 on white key octaves and
4-1 on black key octaves

Exercise 9. Play every major and harmonic minor scale in octaves as shown above, HS and then HT.

1. The order in which the keys are chosen is optional.
2. When playing octaves HT, *the eyes usually watch the LH thumb and the ear listens for the RH fifth finger note.*
3. Try to eliminate any “in-out” motion of the hands on the keys by playing as far in on the white keys and as close to the ends of the black keys as possible. This permits greater speed with less fatigue.

Unit 9: Diminished Seventh Arpeggios, Root Position and Inversions, Four Octaves Ascending and Descending, HT

Figure 63: Diminished Seventh Arpeggio



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1. The example above shows two octave arpeggios, HT.
2. The diminished seventh arpeggio is created on the leading tone (7th degree) of each minor scale.

Exercise 10. Play the diminished seventh arpeggios in all twelve keys, four octaves, ascending and descending, HT.

Level 6:

Unit 1: Tapping Rhythms and Counting Out Loud with the MM, Using the Complete Counting Chart (See Teaching Strategies, P.27?)

1. In Level 5, the Partial Counting Chart ended with sixteenth notes. Now use the complete chart with the addition of triplet sixteenth notes and thirty-second notes.
2. When tapping these two last rhythms, the hands go faster than the mouth can form the words. Therefore, count *1 and 2 and* etc. (indicated by 1 + 2 + etc.) while tapping the rhythm with *both hands alternating continuously*, as one hand cannot tap twice in a row at this speed.
3. Tap the quarter notes at a very moderate speed so that the thirty-second notes begin easily and accurately.

Exercise 1. Tap the rhythms of the Complete Counting Chart with the MM and then without

Unit 2: Major and Harmonic Minor Scales, Separated by a Third, Four Octaves Ascending and Descending, HT

Figure 64: The Major Scale Separated by a Third (shown two octaves only)

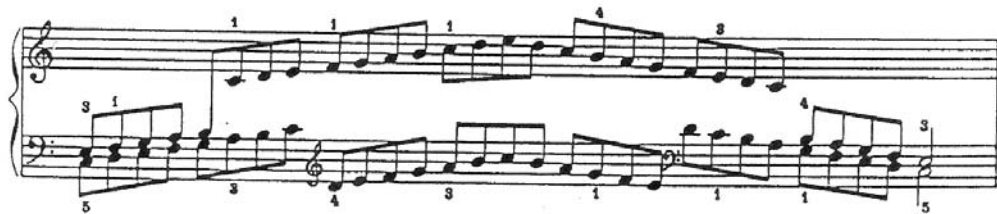


Figure 65: The Harmonic Minor Scale Separated by a Third (shown two octaves only)

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Level 6

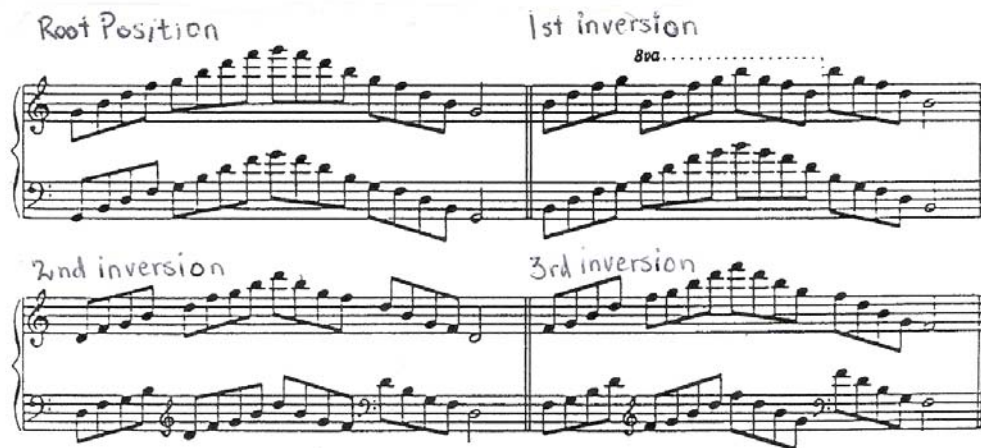


1. The examples above show the major and harmonic minor scales two octaves ascending and descending.
2. Playing these scales may seem relatively simple because the RH fingering is easy to track.
3. When first learning this pattern, *mime* the first two notes of the RH scale then begin to play HT, as shown in the examples above.

Exercise 2. Play all the major and harmonic minor scales four octaves ascending and descending, HT.

Unit 3: Dominant Seventh Arpeggios, Root Position and Inversions, Four Octaves Ascending and Descending, HT

Figure 66: Dominant Seventh Arpeggios, root position and inversions



1. The example above shows a V7 arpeggio and its inversions two octaves ascending and descending, at the interval of two octaves. They are to be played one octave apart.

2. The shapes that these arpeggios form on the keyboard are easier to visualize after playing the dominant seventh chords in solid form with the mnemonic from Level 5:

Root Position: *spread apart*

1st Inversion: *close on top* (fingers 4 and 5 are only a 2nd apart)

2nd Inversion: *close in the middle*

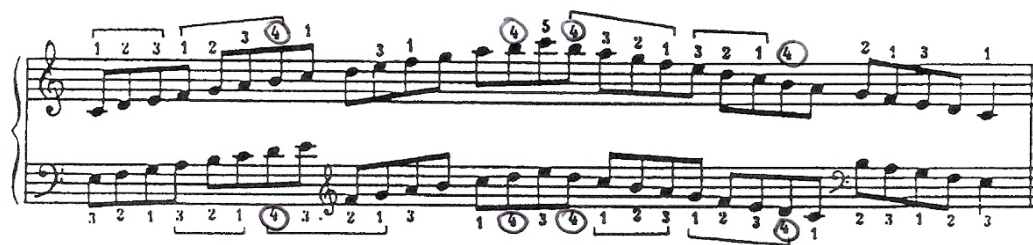
3rd Inversion: *close on the bottom.*

3. Begin to play each inversion using RH finger 1 and LH finger 5 (or appropriate finger if LH plays a black key). Some teachers recommend playing the inversions as though playing from the root position, i.e. play the first inversion above using RH finger 2 and LH finger 4. The reason for our recommendation becomes clear in Arpeggios in Four Octave Formula Pattern, Eleven Positions on One Note (Level 7, Unit 6, p. 166).

Exercise 3. Play the V7 arpeggios, root position and inversion, four octaves ascending and descending in all twelve keys, HT.

Unit 4: Major Scales Separated by a Sixth, Four Octaves Ascending and Descending, HT

Figure 67: C major scale separated by a sixth



1. The example above shows the scale two octaves ascending and descending.
2. For understanding and comfort when first learning this pattern, mime the first two notes of the LH scale and then play the scale HT from the beginning as shown in the example above.
3. It is helpful to learn these scales in Circle of 5ths order because C major, G major, D major, A major and E major all have fourth finger notes which occur at the same time. See circled 4th finger notes in example above.

Exercise 4. Play two octaves of each scale ascending and descending in all twelve keys, HT, then four octaves.

Figure 68 C major arpeggio, two octave Formula pattern



Exercise 6. Play each of the major and minor arpeggios, root position and inversions in the Four Octave Formula Pattern.

1. Take as much time as needed to develop comfort in playing each one.
2. The “eyeglasses” mnemonic (Level 4, Unit 4, p. 138) works as well for arpeggios in formula pattern as it does for scales.
3. For understanding and comfort when first learning this pattern, STOP and re-orient the eyes at the end of each two-octave segment.
4. Play the arpeggios lightly and aim for increasing speed.

Unit 5: Chromatic Scale in Octaves, Two Octaves Ascending and Descending, HT



1. The scale above shows the chromatic scale in octaves, one octave ascending and descending.
2. Finger 4 is shown to play all of the black keys in the scale above. If this strains the hands, use finger 5 instead.
3. Set the hand as if for “good luck” by crossing the third finger over the index finger (Level 5, Unit 8, p. 150).
4. Play the white keys as close in to the black keys as possible, and as close to the ends of the black keys as possible to minimize the “in-and-out” movement that consumes energy and decreases speed.
5. Aim for a smooth sound without playing the scale legato.

Exercise 7. Play the scale two octaves ascending and descending, HT, beginning on any note.

Unit 6: Double Thirds Exercise

Figure 69: The Double Thirds Exercise



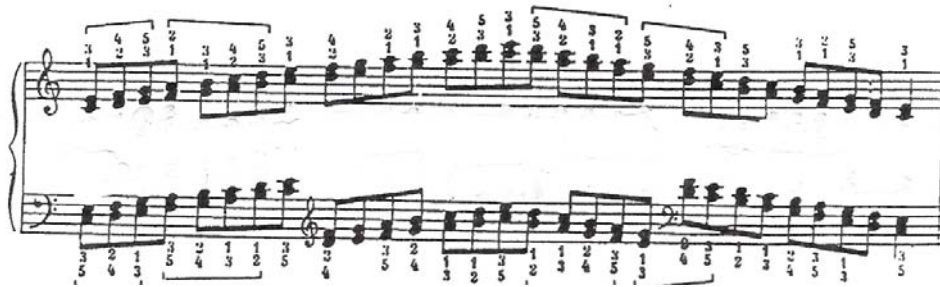
1. Drop the wrist on 1/3 and 3/5 in each hand.
2. This exercise develops co-ordination to a very high level. Aim to hear each third played absolutely together, that is, without “wobbles”.

Exercise 8. Play the exercise descending stepwise all the way to C major as shown in the example above, keeping the wrists relaxed.

Unit 7: Major and Harmonic Minor Double Thirds Scales, Two Octaves Ascending and Descending, HS

Figure 70: C major double thirds scale

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1. Teach these scales over a period of weeks or even months.
- 2 Do not try to make the scale legato. Instead, feel that the wrist is shaking the fingers out or “throwing” the fingers. By doing this, no time is lost twisting the hand to connect when fingers 3 and 5 are followed by 1 and 3.
3. Use the Circle of 5ths for presentation of the scales or learn them in random order.

Exercise 9. Play each major and harmonic double thirds scale two octaves ascending and descending, HS, then HT. As comfort develops, extend the scale to four octaves.

Level 7:

Unit 1: Tapping Rhythms and Counting Out Loud with MM using the Complete Counting Chart (See Level 6, Unit 1, P.41 for the Chart)

The goal is always to be able to play the complete pattern in perfect rhythm, gradually increasing the starting tempo.

Exercise 1. Practice this exercise often, both with and without the MM, until the changing meters of duple and triple feel comfortable

Unit 2: Major and Harmonic Minor Scales with Connecting Turnarounds, Four Octave Formula Pattern (See Level 3, Unit 8, P. 132 for the Scales with Turnaround pattern and Level 5, Unit 3, P. 145 for the four octave formula pattern scale)

Exercise 2. Play all the major and harmonic minor scales with turnarounds in the Four Octave Formula pattern.

1. This creates a large exercise which is best tackled one or two scales at a time. For example, play only C major, a minor, F major and d minor. After that, scales may be added one major and minor set at a time.
2. It is important always to be aware of keeping the wrist flexible, dropping it as frequently as needed and always on the turnarounds (drop on the tonic/thumb note, say “up, up, up”, while the wrist gradually rises and drop again on the next thumb note). The faster the speed, the less obvious is the dropping of the wrist.
3. Play the scales lightly and softly for greater speed and freedom from tension.

Unit 3: Major and Harmonic Minor Double Thirds Scales with Connecting Turnarounds, Four Octave Formula Pattern, HT

Exercise 3. Play the double thirds scales as in the combination above for single note scales.

1. Feel that the hands are just shaking the notes out of the wrist and make no effort to play legato. Some pianists find the image of “throwing” the notes useful.
2. Do not make any attempt to connect the notes where the thumb has to reposition itself. Simply let the entire hand move to the new position easily and quickly.
3. These scales are best learned one or two at a time.

Unit 4: Interlaced (Broken) Four Note Chords, Eleven Positions on One Note, Four Octaves Ascending and Descending, HT

Figure 71: Broken four note chords, interlaced, four octaves. Shown for RH. LH plays one octave lower.



* turnaround: necessary only for major and minor positions.

The eleven positions are:

1. Root position major (+)
2. Root position minor (-)

3. First inversion major (+)
4. First inversion minor (-)
5. Second inversion major (+)
6. Second inversion minor (-)
7. Diminished seventh (o7) 5 note form, root position
8. Dominant seventh (V7) 5 note form, root position
9. Dominant seventh (V7), first inversion
10. Dominant seventh (V7), second inversion
11. Dominant seventh (V7), third inversion

Figure 72: Eleven positions on the note C

This example shows 11 positions on the note C.



Exercise 4. Play the interlaced chord pattern for C major and C minor to begin with, then add one or two positions at a time until all eleven positions are included.

1. Do not move to another key until all eleven positions are comfortable
2. This exercise develops a profound understanding of chord positions and inversions.
4. Probably only a few sets will be practiced each day because of the endurance and time required. After learning all the sets in all keys, rotate playing the keys so that all twelve have been played before repeating any one.

Unit 5: Interlaced (Broken) Four Note Chords, Alternate Note Pattern, Eleven Positions on One Note, Four Octaves Ascending and Descending, HT

Figure 73: Alternate note pattern (shows only two octaves)



Exercise 5. Play the alternate note broken chord pattern, four octaves ascending and descending, HT.

1. Refer to the eleven positions on one note in Unit 4 and combine the alternate note pattern with those positions.
2. This exercise should be learned in small steps, as with Exercise 4.
3. This is a major endurance challenge. Practice only a few complete sets each day after they have all been learned until the accumulated numbers of sets feels comfortable.
4. Rotate the beginning note so that all twelve keys are practiced.

Unit 6: Arpeggios, Eleven Positions on One Note, Four Octave Formula Pattern

Figure 75: C major arpeggio



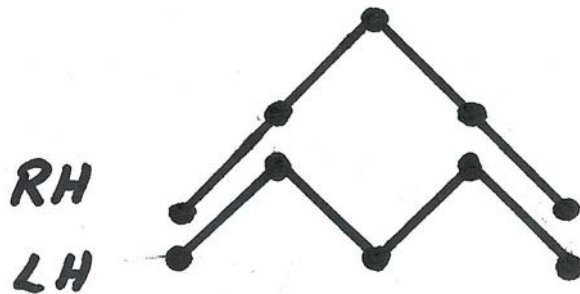
1. The example shows only the arpeggio in the root position of C major in the four octave Formula Pattern. See Unit 4 for the eleven positions on one note example.
2. Combining the arpeggios with the eleven positions on one note is not as strenuous as the broken chords. Nevertheless, they should be learned in small steps.
3. Once learned, play a few sets each day, gradually adding extra sets as endurance and time permits.

Exercise 6. Play eleven positions on C arpeggio formula pattern form, followed by all other keys as energy and time permits

Unit 7: Major and Harmonic Minor Octave Scales, Two Octave Formula Pattern (modified)

1. Play the Preparatory Octave Exercise (Level 5, Units 7, 8, P. 149-151) and single major and minor scales in octaves before tackling the octave scales in the modified Two Octave Formula Pattern.

Figure 74: Modified “Eyeglasses” Mnemonic



1. We suggest using a modified One Octave Formula Pattern: one octave ascending, one octave contrary motion (apart and back together) and one octave descending
2. This exercise should be learned in small steps, gradually adding keys when the previous ones feel comfortable.
3. Stop and shake the arms when there is fatigue and/or tension as often as needed. Try to complete the entire exercise, stopping as often as necessary, as this is the way to develop endurance.

Exercise 7. Play all major and harmonic minor octave scales in the modified one octave pattern as shown in the figure above.