CORNHUSKER MARCHING BAND PERCUSSION HANDBOOK

University of Nebraska–Lincoln Percussion Faculty

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How Do I Use This Handbook?

The purpose of this handbook is to provide the necessary information for a percussionist in preparation for performance in the Cornhusker Marching Band Percussion Section. The techniques and information presented here represent the most contemporary practices in marching percussion and the handbook is updated regularly to keep it current. It is the goal of the Cornhusker Marching Band Percussion Section to present high-energy, focused, and entertaining performances of extremely high musical merit for the benefit of both its audience and players.

The Instrument Assignment Process
Instrument assignment for the Cornhusker Marching Band Percussion Section is a thorough, full participation, hands-on learning process. The atmosphere is relaxed and low-pressure but realistic of our expectations and standards. It is intended to make sure we put the right people in the right spots. The materials for the process are found in this book. The requirements for each of the instruments are given and it is up to the player to prepare accordingly.

It is strongly encouraged that you try more than one instrument. This is a highly competitive group and there is a good chance you may not make it on your first choice of instrument. Keep your options open!

The instrumentation will consist of no more than:

14 Front Ensemble Players
8 Snare Drummers
4 Tenor Drummers
5 Bass Drummers
8 Cymbal Players

EXPECTATIONS

The Cornhusker Marching Band percussion section is a community of individuals who are all committed to one thing: Doing whatever it takes to help the group succeed and function at the highest level.

Maturity
This is a professional organization. We have lots of fun and embrace the unique and valuable personalities of each person. However, we hold very high standards in how we perform, rehearse, and conduct ourselves as both musicians and citizens. Responsibility and maturity is expected without fail.

Fundamental Proficiency and Development
This is a college drumline that expects performances of the highest level. To play at a high level you must prepare at a high level. Fundamentals are the backbone and basis from which our playing begins and ends with. Players will place the utmost priority and constant attention on development and mastery of these basics.

Humility
Humility means being teachable, coachable, flexible, and maintaining a selfless attitude. Those who achieve the most brag the least.

Attitude
Your attitude is your choice alone 100% of the time. Life is often 10% of what happens to you and 90% of how you react to it. Members are expected to maintain and develop attitudes of contribution, optimism, service, and gratitude.

Conduct
What do you and how you do it. What you say and how you say it. On the field and off the field. We do the right thing regardless. We are not only a group, but a community and family first and foremost.

Impeccable Work Ethic
The title speaks for itself--We work hard. There are no substitutes here. Everyone is a starter and we depend on each other. You must have an eagerness 100% of the time to work hard: Every day. Every rehearsal. Every Performance.

Health
Each individual is expected to take the necessary care and action to ensure their mental and physical wellness functions at the highest level.

Practice and Preparation
Additional practice is necessary and required. Members are expected to consistently refine and work their fundamentals and show music away from group rehearsal. Progress and preparation should go without saying.

Practice

"The artist is nothing without the gift, but the gift is nothing without the work."
-Emile Zola

The UNL Drumline requires commitment and discipline, just as a job, education and family would demand. Your mind is a deep well full of potential, but it must be worked in order to prosper. By applying yourself in the right ways, being great will become more effortless, require less mental fatigue, and open up doors and opportunities you might never have imagined. Having the piece of mind you have done your best should become a daily mantra.

To be the best, you must practice **performing**. There are times to relax and be casual, but part of your time–even alone with no one around–should be spent as if you were being watched in performance. Visualize being surrounded by others. See yourself projecting confidence and power. At the same time, give yourself permission to make mistakes. Always focus on progress, not perfection. Great musicians, athletes and others put themselves into "real-world scenarios" on a daily basis. They allow room for mistakes, creativity, and spontaneity. In this manner, when the game or performance comes, it's a familiar and comfortable situation!

Using a Metronome
Many people think that using a metronome means turning it on at the start of your rehearsal and off at the end. In this case you are using the metronome as a crutch more than a tool. Often one can spot those who fall prey to this because they can play a musical excerpt with a metronome very well until it is shut it off and they are asked to play it again. Their ability to feel themselves drag or rush is hindered because they are more used to playing time with the metronome than keeping time themselves (which takes energy and thought). Here are a few suggestions to try when using a metronome.
Hit more than just the standard times (100, 110, 120, 130...). In doing this, you are increasing your sensitivity to time. You are teaching yourself to feel the difference between 110 and 112 instead of 110 and 120. A famous musician was quoted saying that "...no one plays truly in tune, the best just catch it before others do." The same is true for time. Increase your sensitivity to time and you will find yourself among those who can keep great time.

Use the metronome in a creative way like setting it to a comfortable tempo and playing your favorite exercise or etude while using the click as the upbeat. Now try the same with the click representing other notes of a subdivision (maybe 'e' or 'a' of a 16th note based exercise). Also try playing 8th note based exercises with triplets set on the metronome or vice versa. Rehearsing odd meters with a metronome is one of the best ways to solidify time and feel. Try practicing 7/8 or 5/8 to a metronome and you will find that the quarter note falls on the beginning of the measure every 2 bars. Try practicing

scales and other exercises to the quarter note and don't shy away from the metronome when facing an odd meter.

Listening
Sometimes our musical education focuses on academia and the technical chores of becoming proficient on our instrument. These are important aspects to development, but we have to remember to stay in touch with why we're doing it all in the first place. This is why listening is so important. **Listen, listen, listen**. The more diverse your musical palette, the more intuitive you will be when playing music with the ensemble. **Spend as much time listening to music as you do practicing your instrument**. They are mutually beneficial.

What is DELIBERATE practice?

Design:
1. It is designed to take us to the next level. It should be uncomfortable, otherwise we are doing the same routine to maintain a level we most likely reached years ago.
2. Great people identify and act upon those areas in which they need the most improvement.
3. Comfort is easy, we must choose activities just outside our reach, constantly challenging ourselves.

It Can Be Repeated:
1. One must demand repetition of activities in their learning zone and have a plan in place on how to reach it.
2. Truly great people repeat activities at a mind boggling rate. The have identified what needs work and they do it everyday so that in any situation, they will be prepared.

Feedback is Available:
1. Having feedback from a coach or others lets one see the effects of what they have done, otherwise they stop caring and will not get any better

It is Highly Demanding Mentally:
1. Activities should constantly engage the mind
2. Great people can focus intently and accomplish more in a shorter period of time

It is Not Much Fun:
1. The activities that stretch and make us better are not inherently enjoyable. The things we already know are always comfortable
2. If activities that lead to greatness were comfy and easy, everyone would be doing them and no one would be distinguishable
3. By doing activities that are not enjoyable, you are choosing to separate yourself from the rest in a deliberate way.

Final Thoughts

- You must have a plan in place. Put something down in writing and stick with it. Pretty soon it will become a habit–and a good habit at that.
- Find a friend to play with, have them provide feedback, be accountable with each other.
- Scour the internet and library. These sources are running wild with information to keep you busy for years.
- Fundamentals are the most important foundation for what you do in life. They cannot be overlooked, but rather incorporated as part of your daily routine.
- Most importantly, you must work on the areas that you are not good at. This is the only way you will get better.

Parts of this were excerpted from *Talent is Overrated* by Geoff Colvin

Snare Drums

The snare drum acts as the soprano voice in the percussion choir on the field. Snare drummers must have a complete mastery of all the basic drumming techniques presented in this book. Because of the large number of players and the very short characteristic sound of the instrument, they must be able to execute them in conjunction with other players, matching them exactly in both sight and sound. Snare drummers will also be called upon to execute ride patterns on cymbals. This requires additional coordination skills much as those used by drum set players.

The general purpose playing spot on the snare drum is in the center of the head. Spots between this and the far edge will also be used for nuances of tone color. These alterations to the general playing spot will be specified in the music (see below). Another technique to be learned by snare drummers is the rim shot. Rim shots alter the tone of the drum giving a sharp penetrating sound. Striking the head with the bead of the stick and the rim with the shaft of the stick simultaneously creates rim shots.

Players are individually responsible for the care and maintenance of their instruments. You should familiarize yourself with how to change heads properly and keep the drum in tune. The overall relative pitch of the drum should be high and the snare response crisp. To achieve this sound tune the batter (top) head to feel, where technical figures can be executed comfortably, and the snare (bottom) head to pitch. This means that the snare head may be higher sounding than the batter. It is extremely important to maintain even tension from point to point around the drum. Check this by tapping lightly at each tension point and adjusting so that all the pitches are the same. To adjust snare tension loosen the snares until they do not contact the head, then gradually tighten them while lightly tapping the center of the batter head with a stick. Stop tightening when a crisp sound is reached. Be careful not to over-tighten the snares as this diminishes response at softer dynamic levels.

Basic Technique Fundamentals

Grip

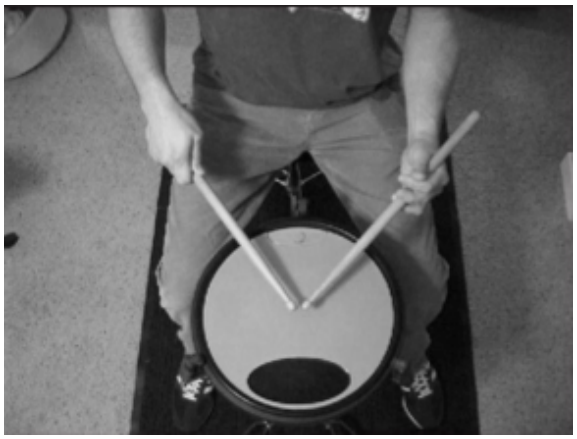
Snare drummers will use Matched-Traditional Grip, and the Tenors and Bass Drummers will use the Matched Grip. While there are many variations on these basic grips in the percussive world, we have chosen a system that allows for the greatest amount of power, flexibility, and relaxation.

Matched Grip

This is a grip that allows for the use of both the wrists and the fingers easily while maintaining the same form in the hand. It allows for the stick to be a more-or-less straight extension of the forearm; moving in conjunction with how the arm wants to naturally operate. The grip will operate from a 45º angle. Both arms will form this angle together when in the set position. The primary fulcrum of this grip will be the thumb-index finger connection. The fleshy pad of the thumb resides on the stick along with the index finger as shown below. The remaining three fingers will rest comfortably around the stick.

Traditional Grip Left Hand

The single most important aspect of the left hand traditional grip is the fulcrum. As seen below, the thumb and index finger form a connection somewhere around the first knuckle of the index finger. This is the single source of power and articulation for your left hand. Maintaining the finger connection in the fulcrum and staying “on top of” the stick, as seen below, is crucial. It cannot be stressed enough the importance of developing this muscle group and technique. The middle finger will rest comfortably on top of the stick. The ring finger will support the stick around the first knuckle and cuticle area while the pinky finger will rest naturally below that.



The Stroke

The most important fundamental stroke used is called the Free Stroke. Although this basic stroke must be modified to suit the various musical and technical demands, it is the core of all playing. A step-by-step method for the proper execution:

Free Stroke:

1. With a properly formed grip place the tips of the sticks or mallets together one inch above the proper playing spot.
2. Using the wrists alone lift the tips of the sticks to about nine inches over the playing spot.
3. Again using only the wrist, and with no lift, toss the stick straight at the instrument with maximum velocity and allow it to rebound back into position. The feel should be that of bouncing a ball. The hand is simply following the stick without hinderance.

Some checkpoints:

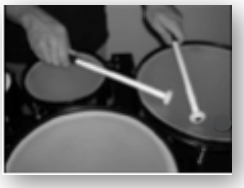
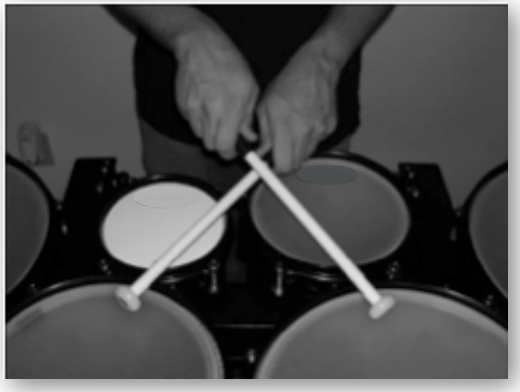
1. Are the fulcrums properly formed?
2. Are all your fingers on the stick?
3. Are your wrist motions correct?
4. If done properly the hand should feel like it follows the stick.
5. The grip should remain relaxed and natural yet firm like holding a wounded bird.
6. If the stick does not bounce all of the way back the player either stopped it or it wasn't tossed with enough velocity.

Tenors

The tenor drums, act as alto and tenor voices in the percussion choir on the field. Tenor drummers must have a complete mastery of the basic drumming techniques presented in this book except for the more advanced flam patterns. There is also the added dimension of moving these skills around five drums in exact visual and aural unison with other players. It is critical that the arms not be involved in producing strokes as this will interfere with the fluidity necessary to move from drum to drum. The ability to think and hear melodically is very helpful to tenor players when learning their parts.

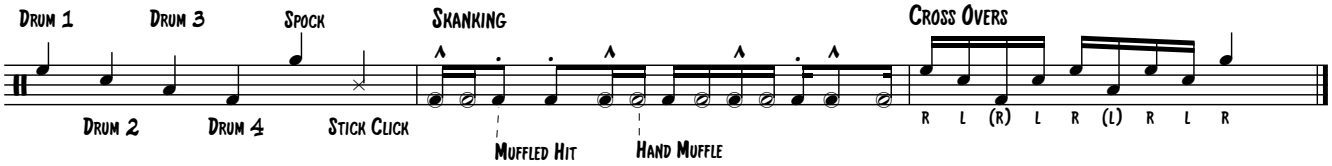
Tenors should be played about one to two inches from the in a straight line across the drums (see diagram below). This playing spot produces a sound rich in overtones that aids projection. The straight-line system of these playing spots also facilitates movement. Use the movement exercises below and the splits to develop the straight-line system. Practice with your back up against a wall, and pay careful attention to playing spots. Be sure to maintain hand positions when moving from drum to drum. The matched technique should always stay consistent. There are some special techniques to be learned by tenor drummers. Like the snare drummers. tenor drummers will also play rim-shots. Muffling a drum in rhythm just after playing a rim shot is called Skanking. The muffling with the hand is notated with an open and circled note. Crossovers are notated with the crossing stick in parentheses.




Players are **individually responsible** for the care and maintenance of their instruments. You should familiarize yourself with how to change heads properly and keep the drum in tune. It is extremely important to maintain even tension from point to point around the drum. Check this by tapping lightly at each tension point and adjusting so that all the pitches are the same. Care should be taken not to tune the relative pitches of the drums too close together. Tune like sized drums the same from player to player. It is important that each player owns a heavy-duty ratchet- type drum key, and has it at every rehearsal. Drum tuning is a constant concern, and players are individually responsible for the sound of their instrument.

Tenor Notation



Tenor Legato Patterns and Sweeps

The following two pages contain extra patterns specifically aimed at movement around the tenors.

When playing basic rebound strokes around the drums, players should focus on playing spots and stroke quality. The playing arm will move on a lateral plane while the shoulders and upper body remain relaxed. The Legato Patterns should be used as a starting point. Players are encouraged to come up with their own.

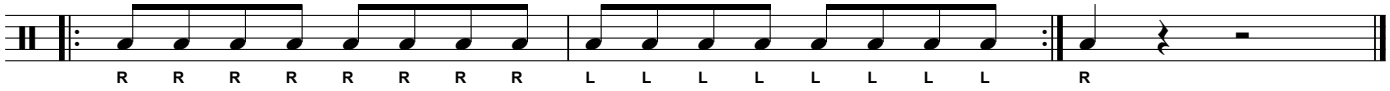
Sweeps involve a single motion that plays multiple notes on adjacent drums. Two major points will help in executing sweeps:

1. Enough velocity in the stick to attain proper bounce.
2. Careful attention to playing spots to reduce the distance the stick must travel.

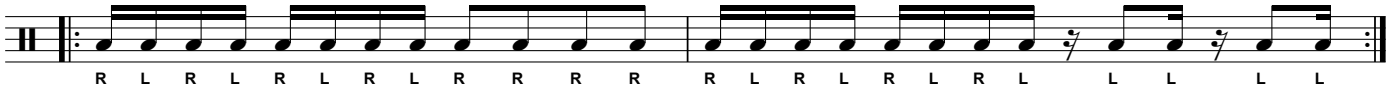
Developing strong double and triple strokes on a single drum is paramount to transferring the concept to a sweep motion.

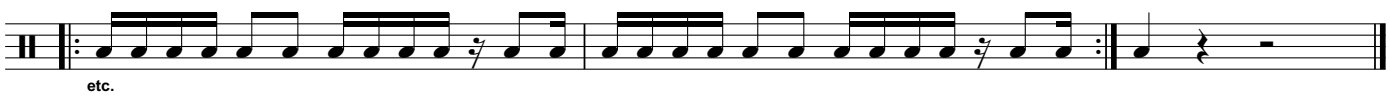
2018 UNL Drumline Exercises

8s (4x)

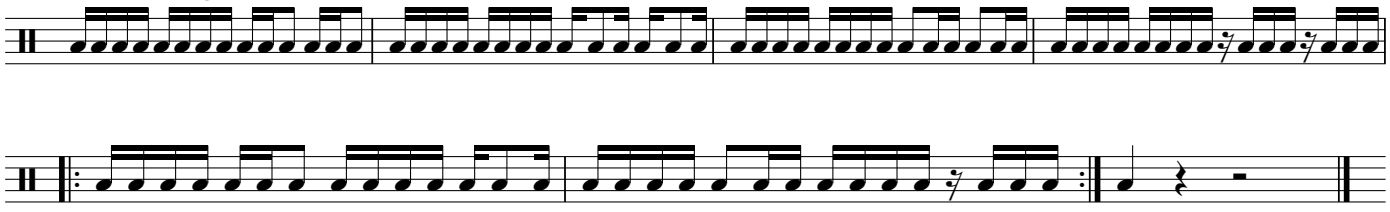


16th Note Timing (1-Note)

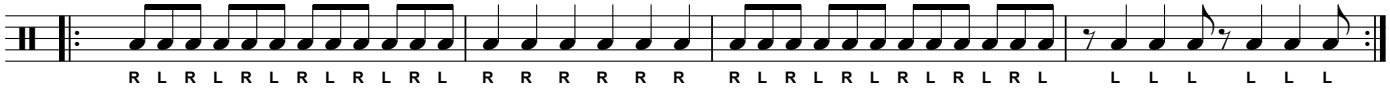


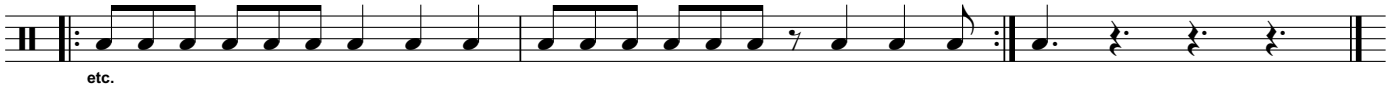


16th Note Timing (3-Note)

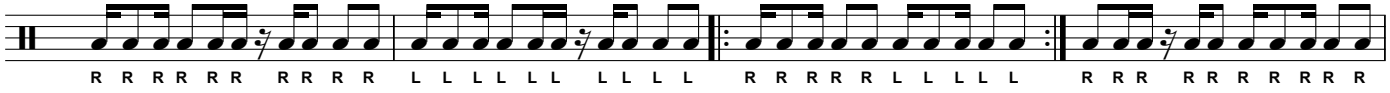


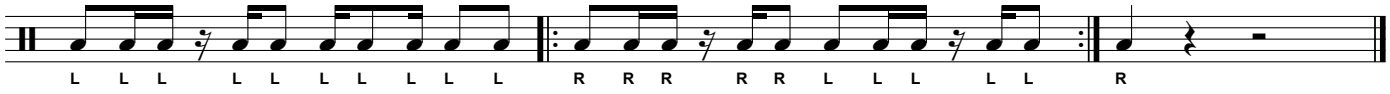
Triplet Timing (1-Note)



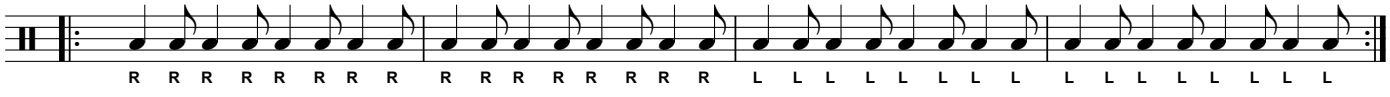


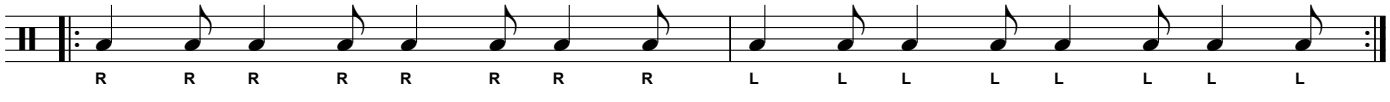
A/B Doubles

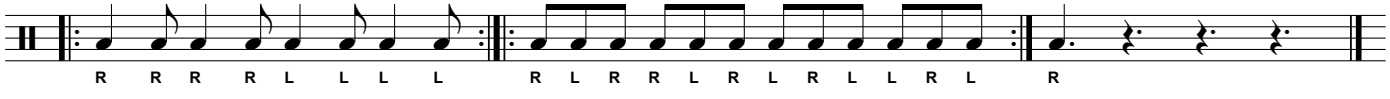




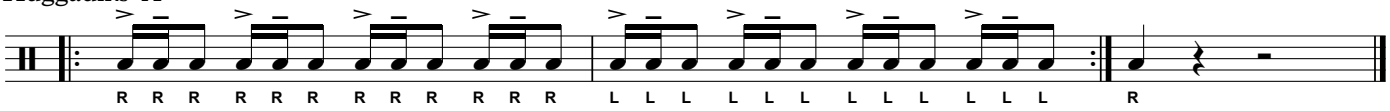
"Irish Spring" Doubles



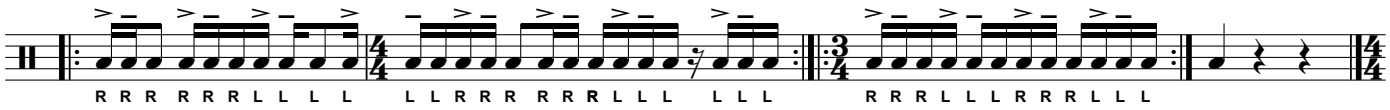




Huggadiks 'A'

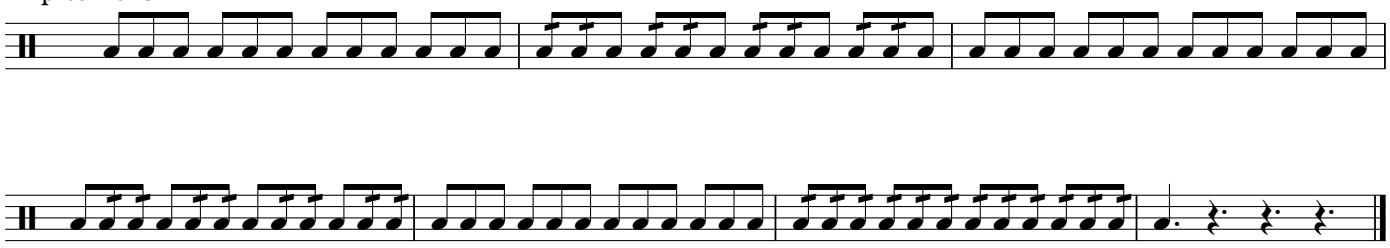


Huggadiks 'B'

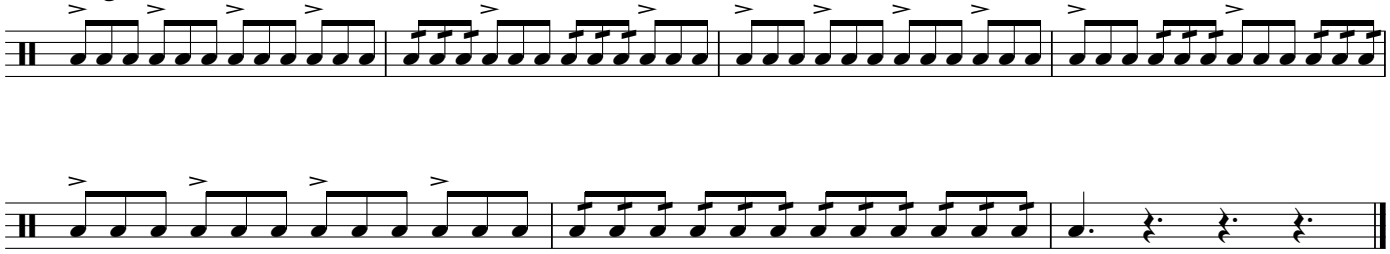


Gallop

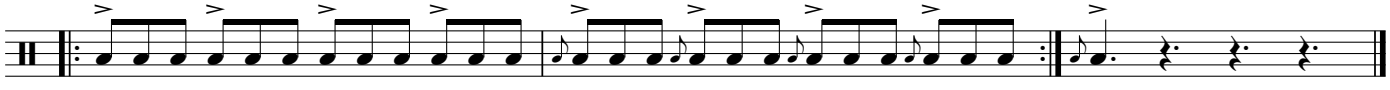
Triplet Rolls



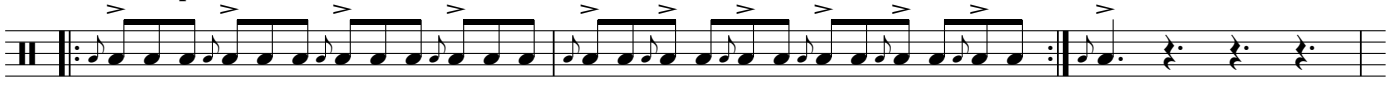
Two-Height Rolls



Accents/Flams



Flams/Flam Taps variation



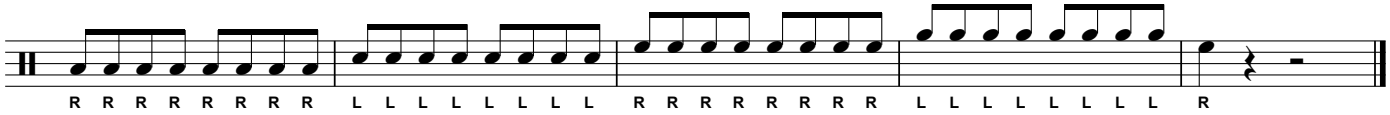
*Various flam rudiments may be substituted in the second bar (swisses, flam taps, cheeses, flam fives, etc.)

Tenor Arounds

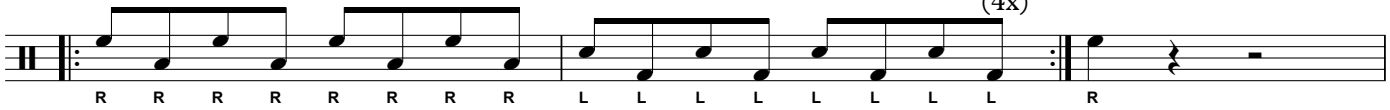
Play all exercises on drum 2, as well as the arounds

8s

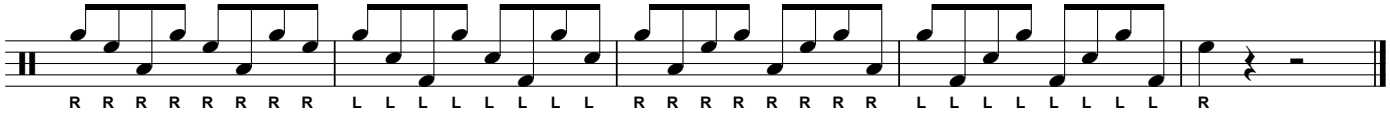
1



2 (Outs)



3 (Triangles)



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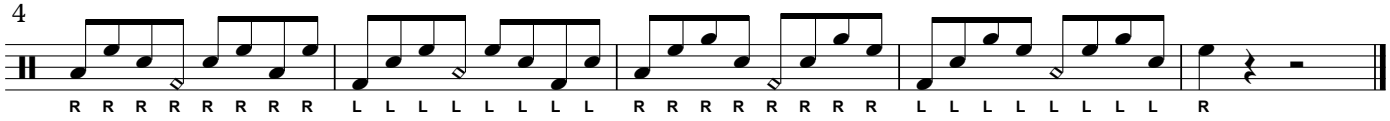
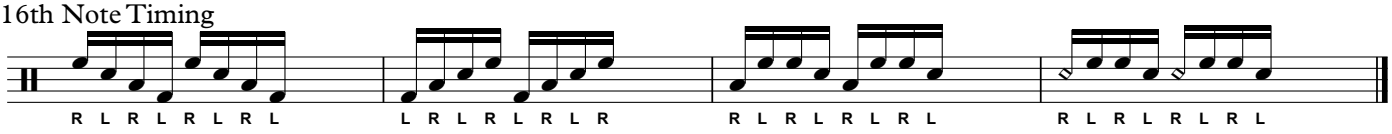
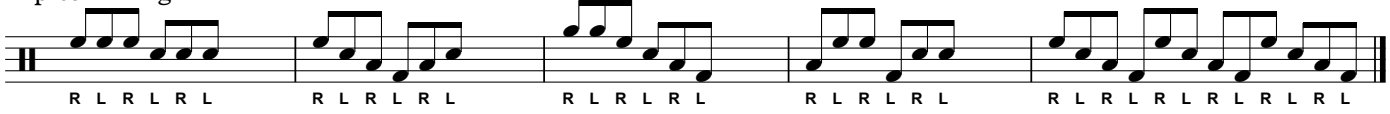


16th Note Timing

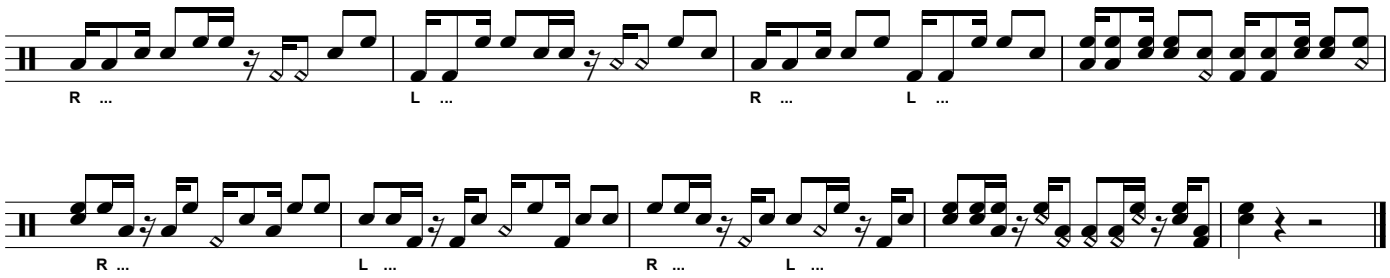


Triplet Timing



*Jungle patterns may also be used (without flams)

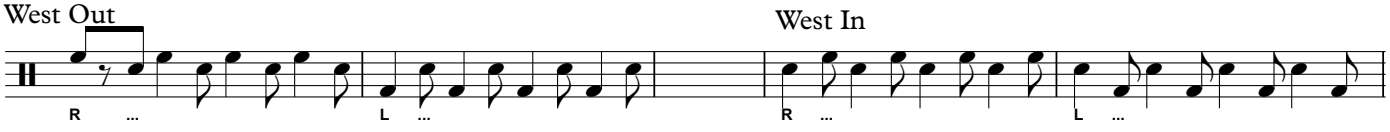
A/B Doubles



Irish Spring

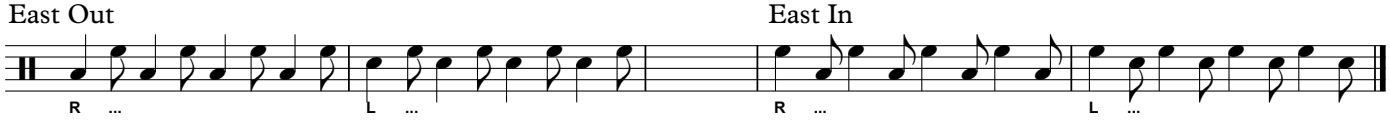
West Out

West In



East Out

East In



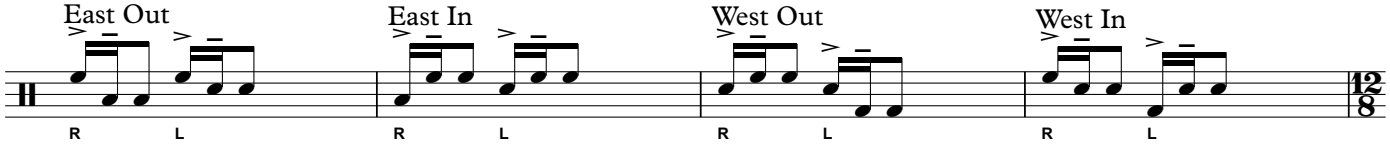
Huggadiks

East Out

East In

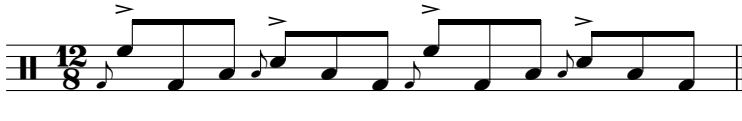
West Out

West In

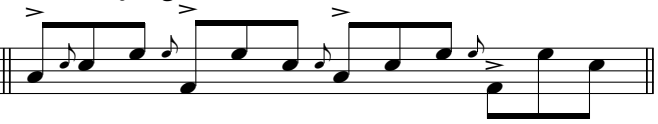


Jungle Patterns

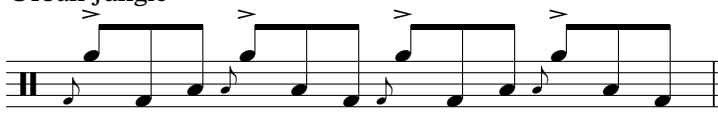
Jungle



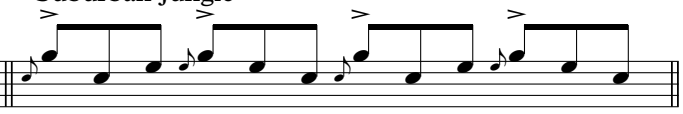
Reverse Jungle



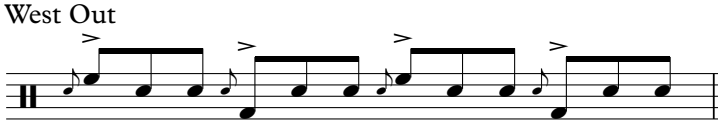
Urban Jungle



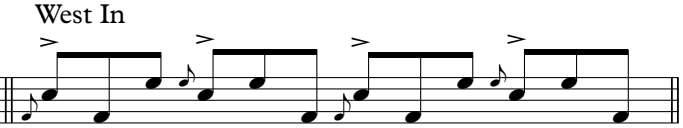
Suburban Jungle



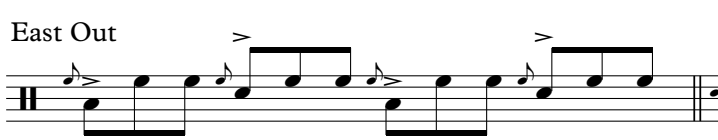
West Out



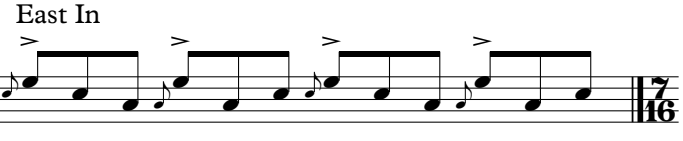
West In



East Out



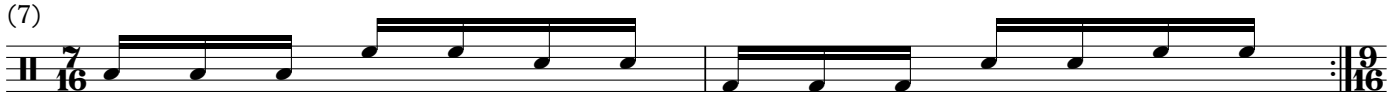
East In



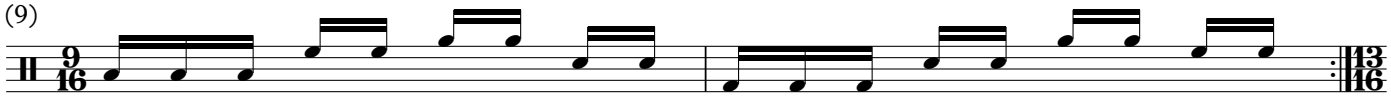
*Jungle patterns can be used for ANY accent/tap or flam exercise, or any exercise in 6/8, 12/8, etc.

Slow-Fast Patterns

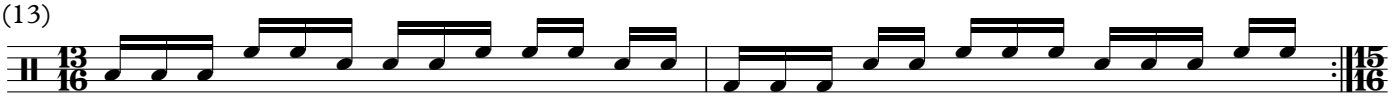
(7)



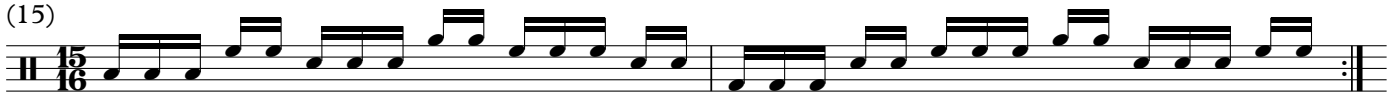
(9)



(13)

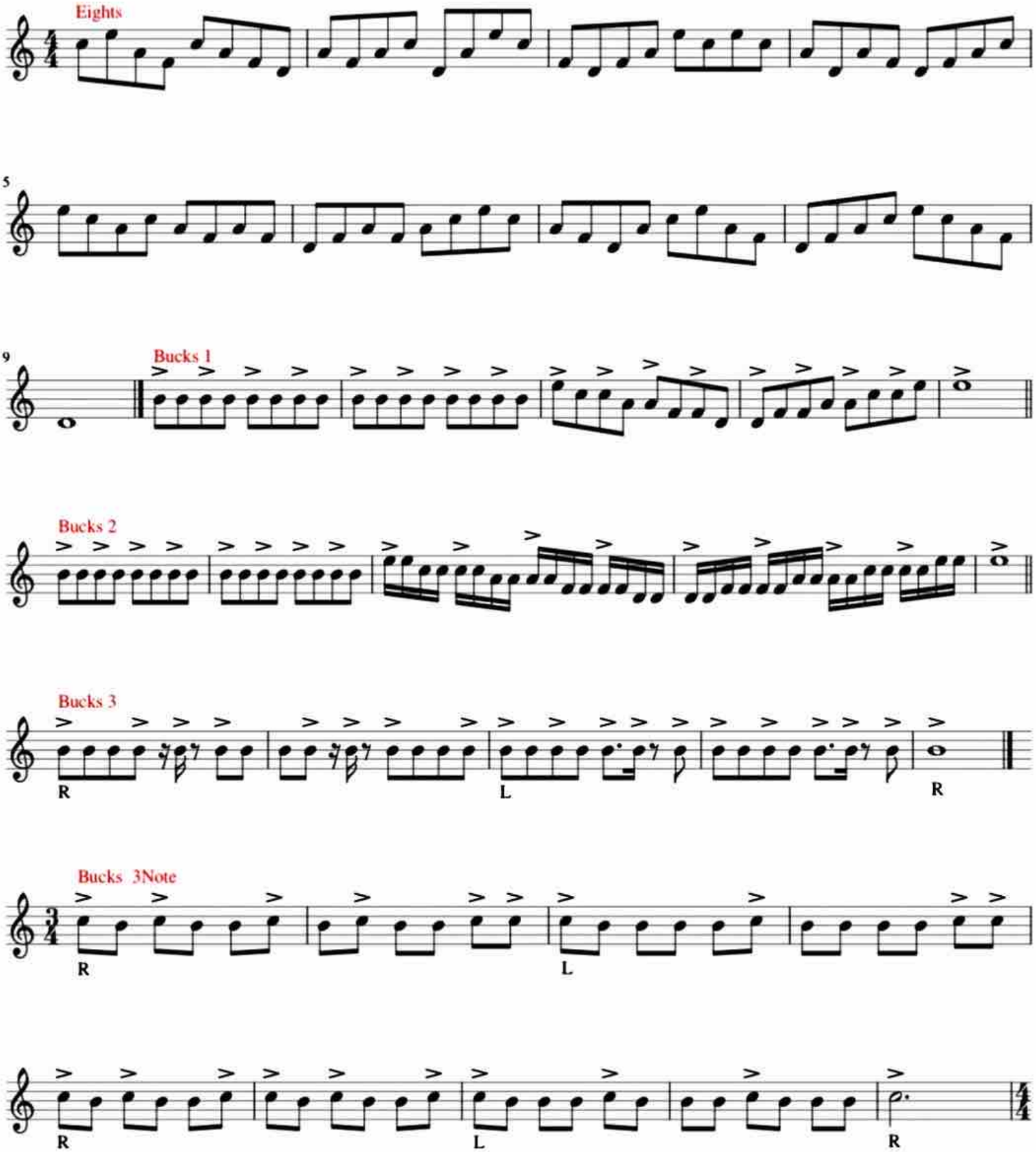


(15)

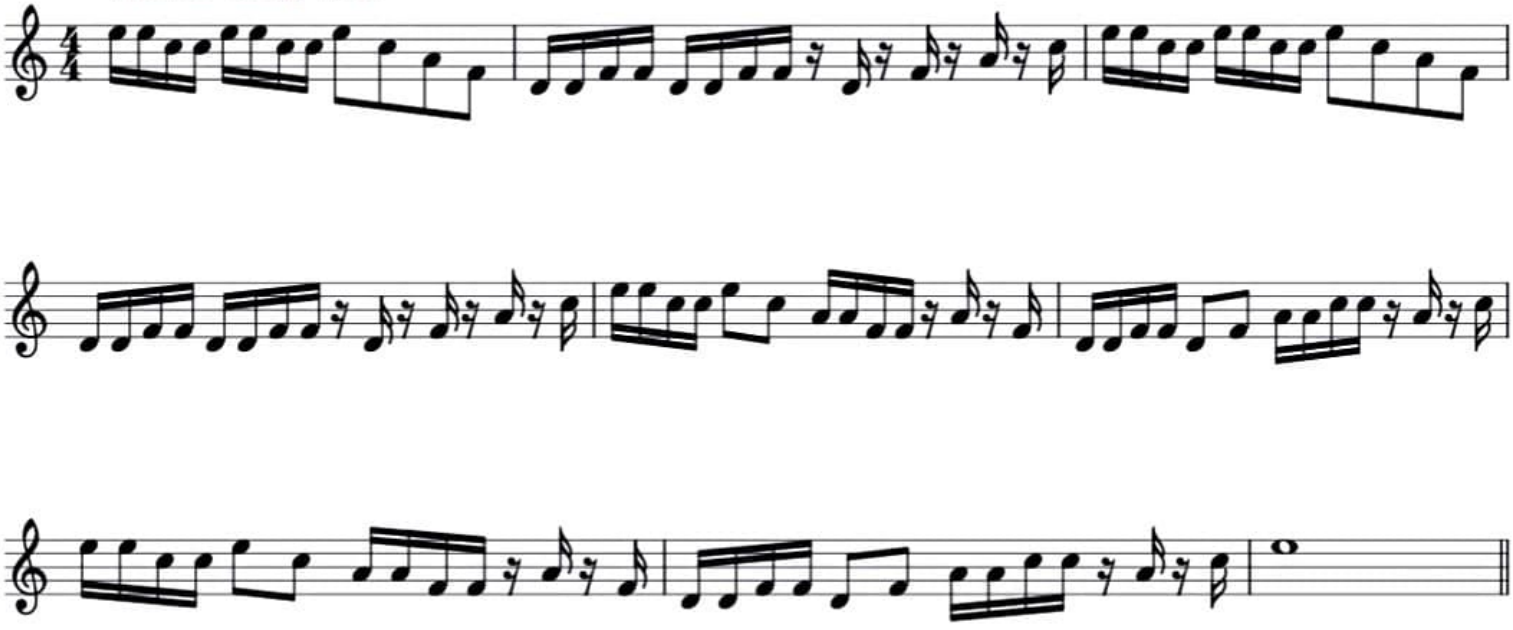


*Slow-fast patterns can be applied to practically all exercises with alternating sticking and no flams. (Timing, Gallop, Rolls, etc.)
**When starting exercises off the left hand, mirror the slow-fast patterns by starting on drum 4.

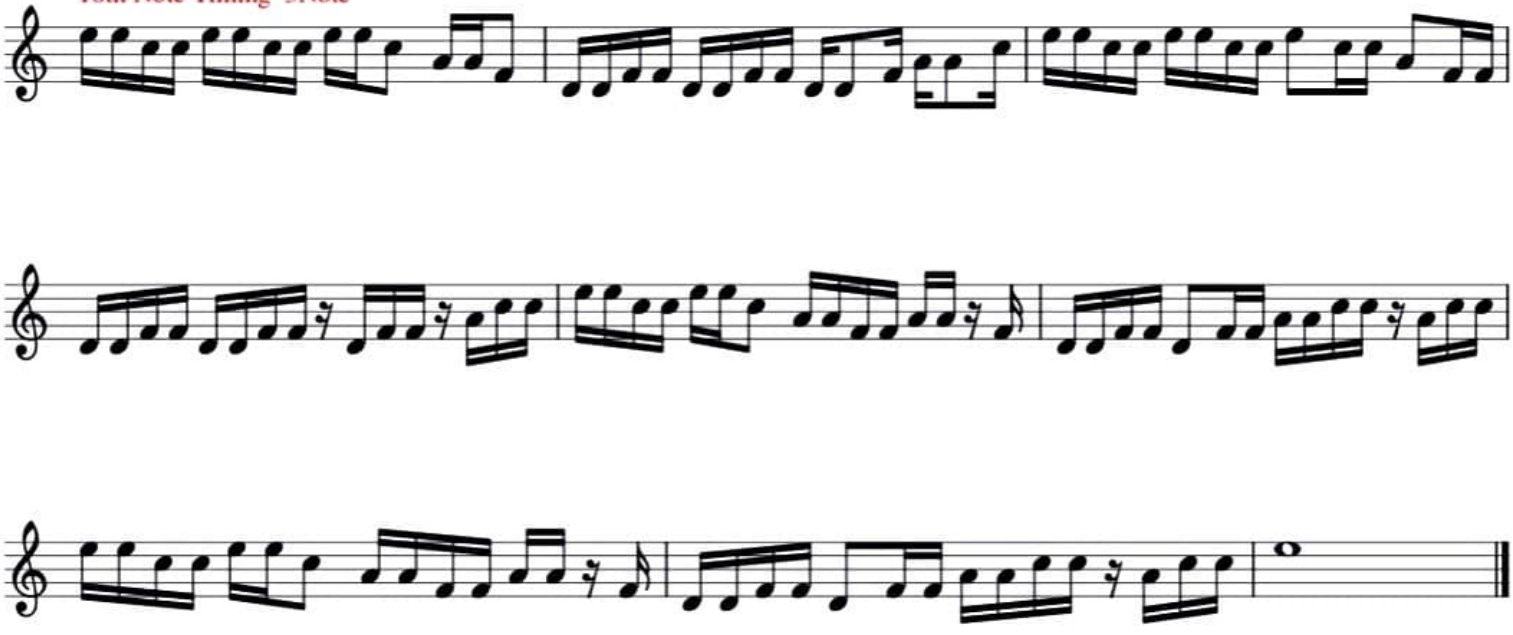
CMB Bass Exercises



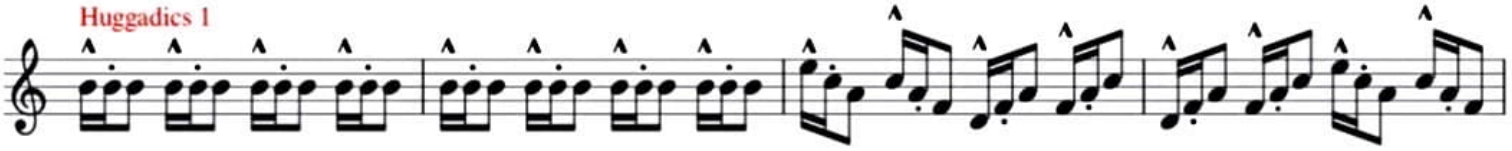
16th Note Timing 1Note



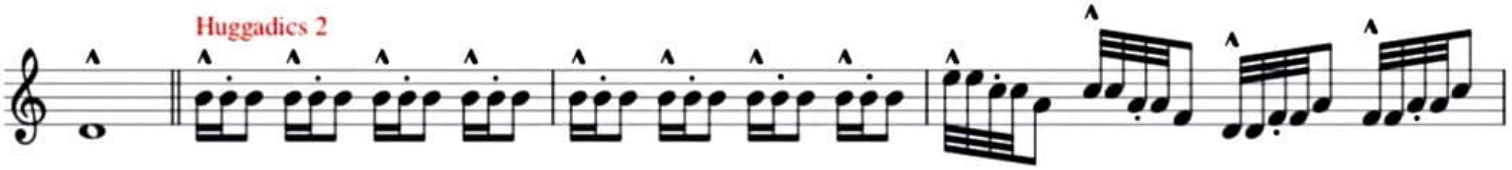
16th Note Timing 3Note



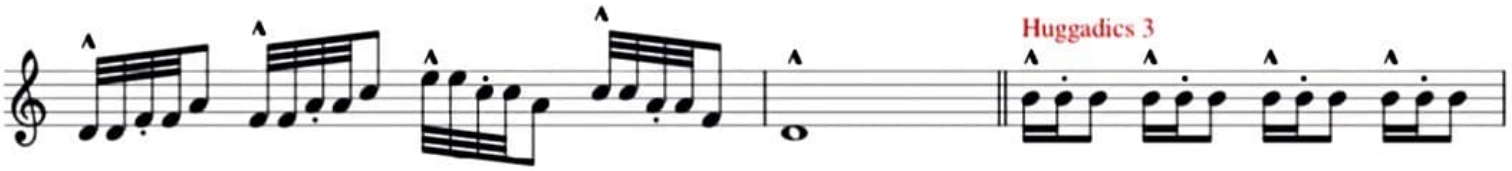
Huggadics 1



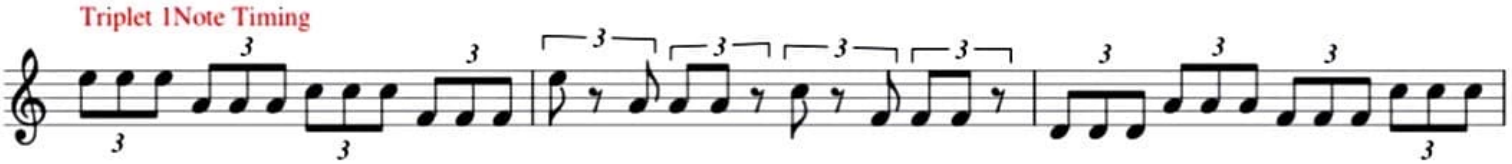
Huggadics 2

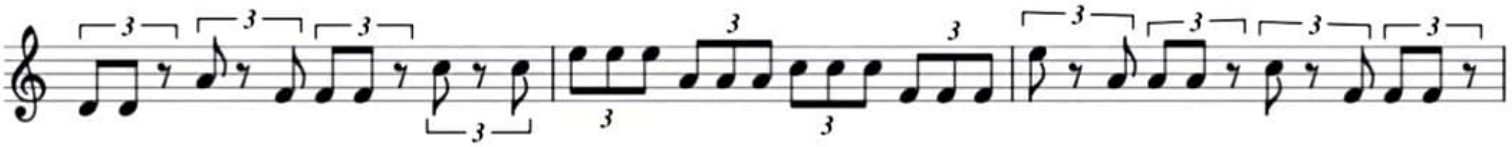


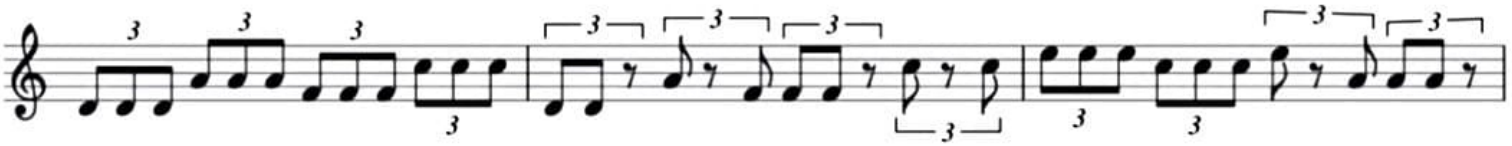
Huggadics 3

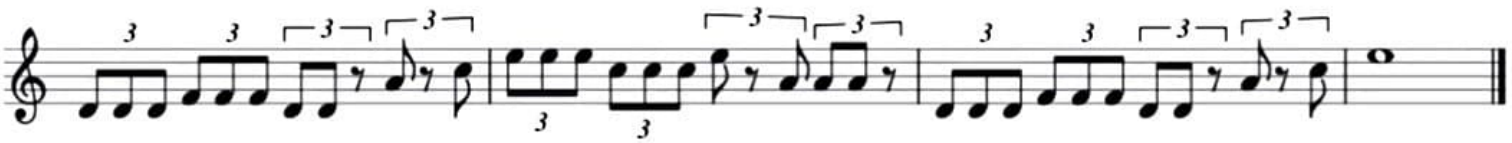


Triplet 1Note Timing

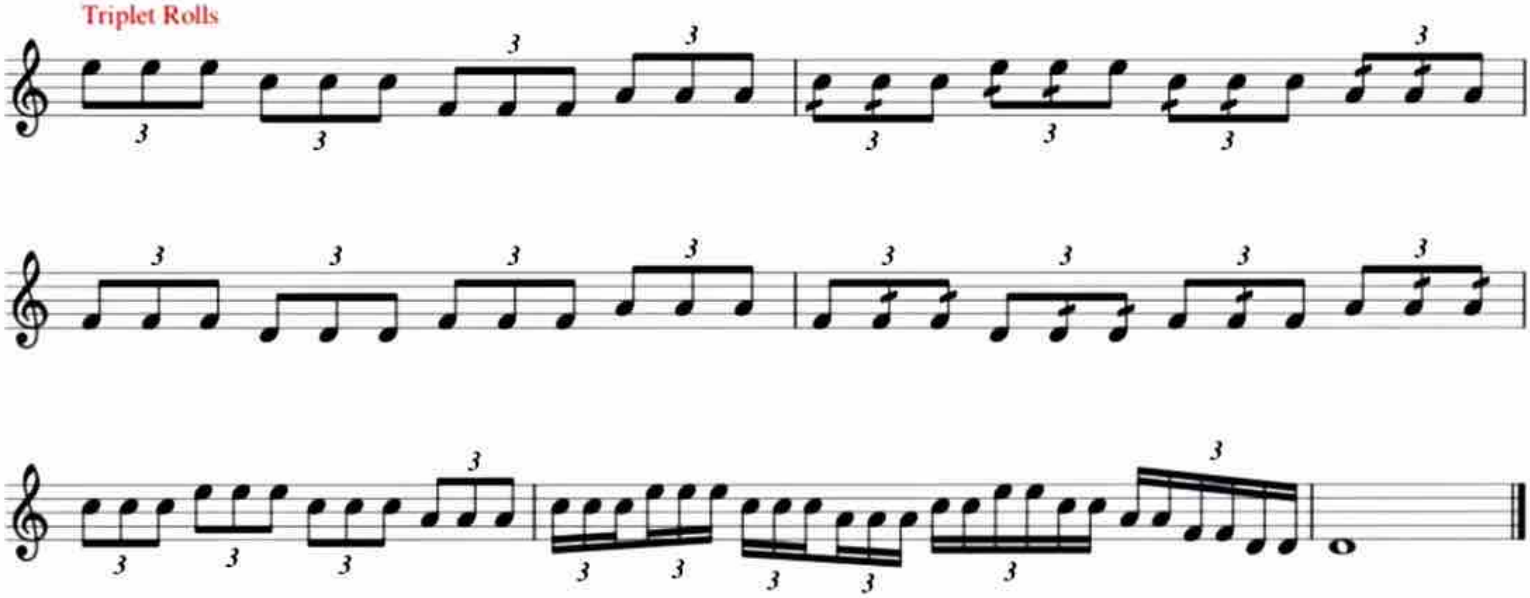




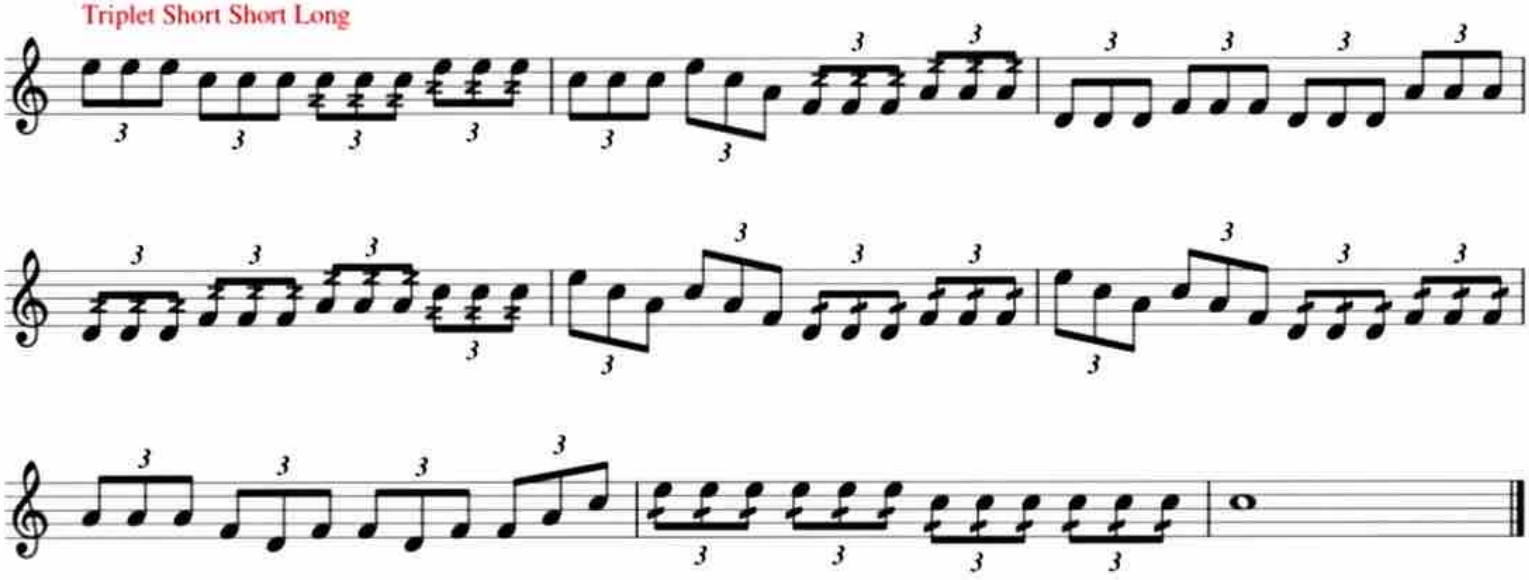




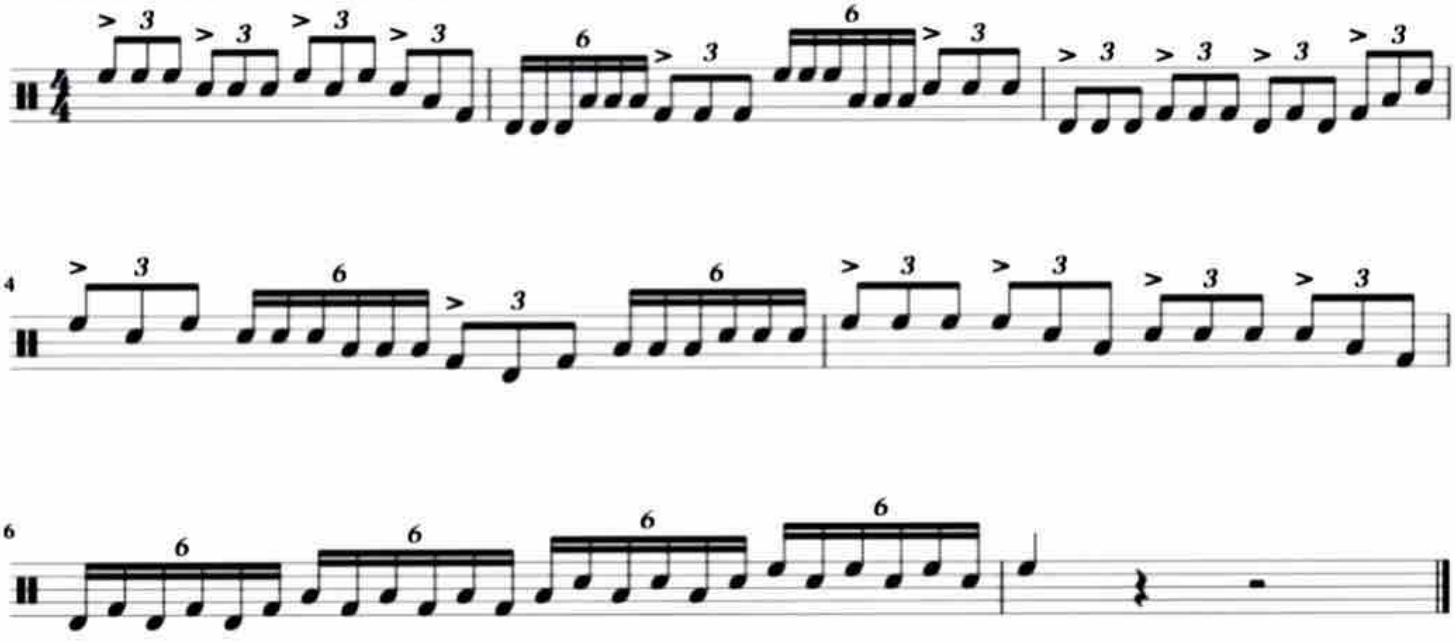
Triplet Rolls



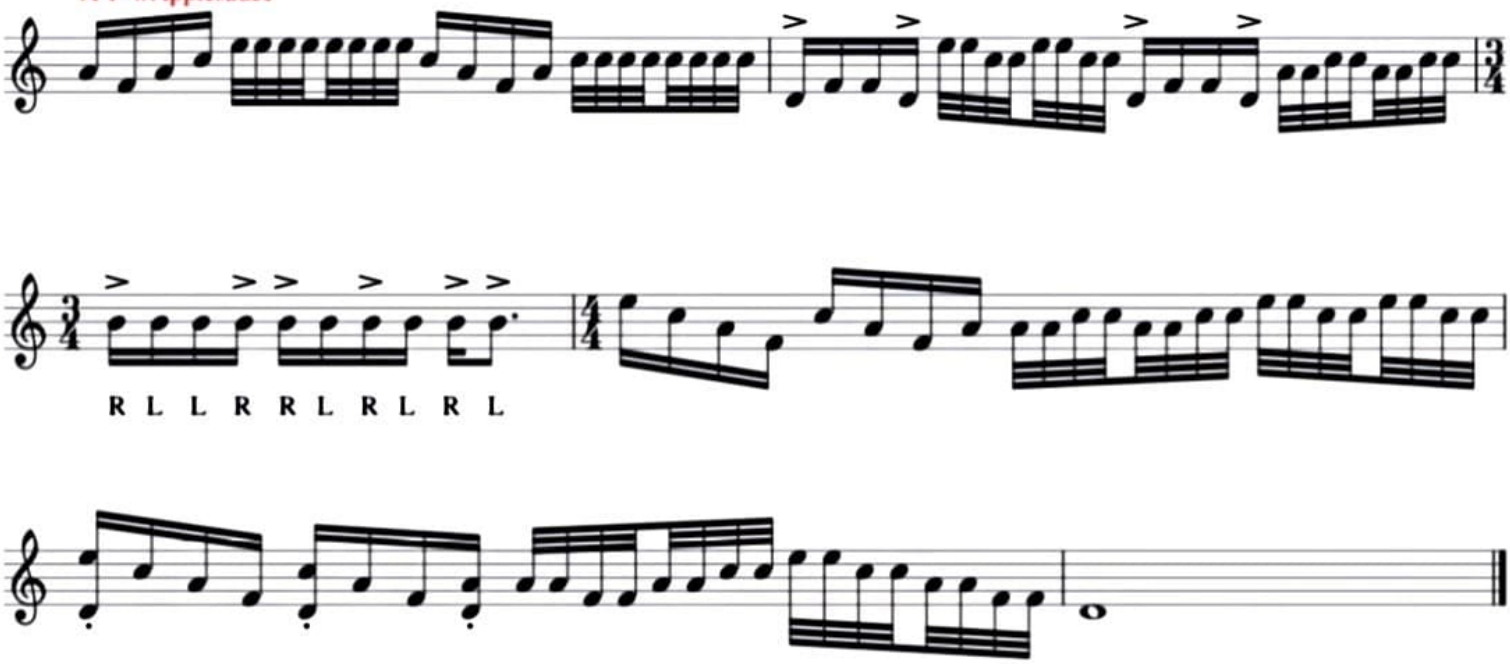
Triplet Short Short Long



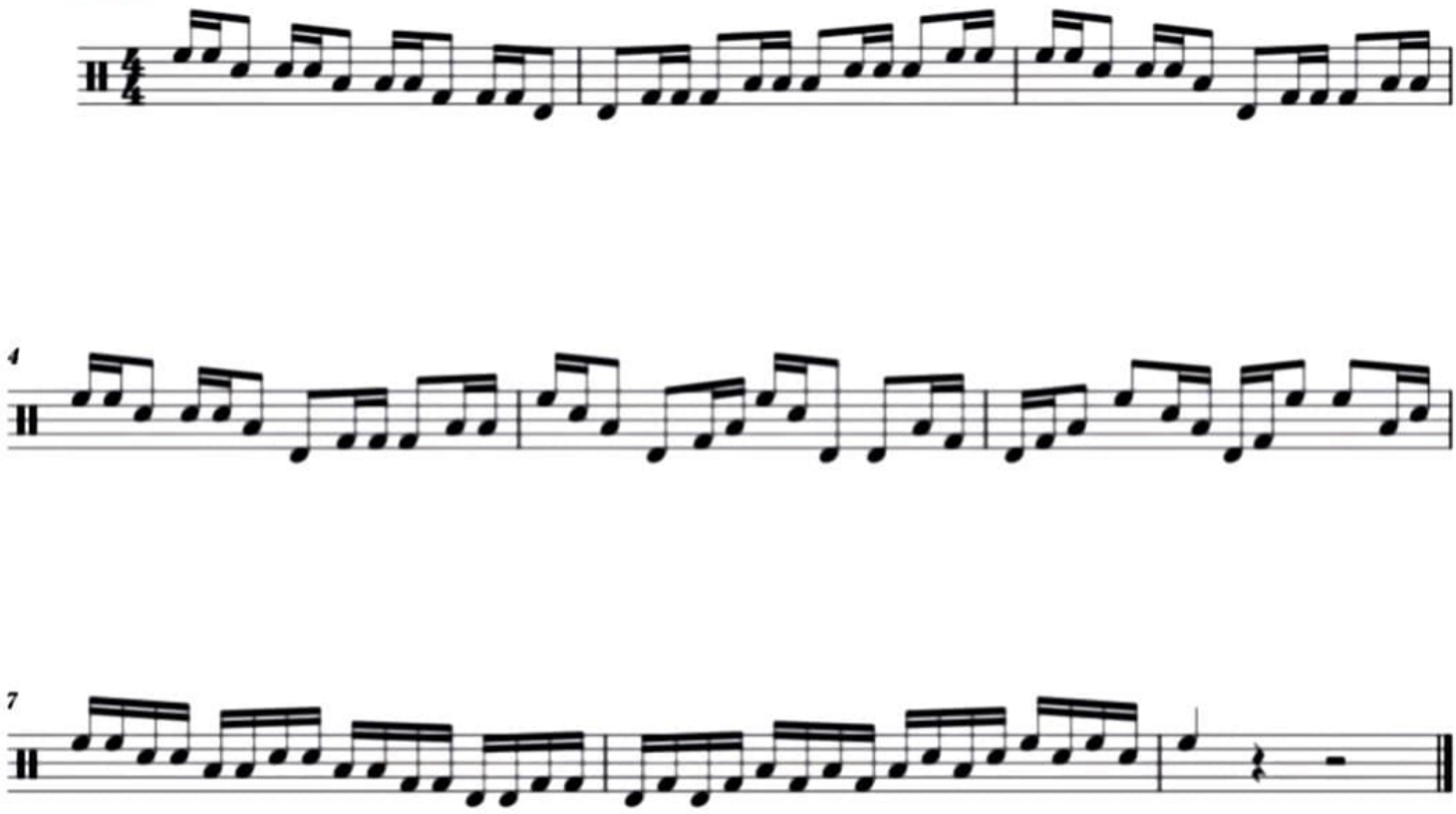
Two Height Rolls/Seven Stroke Rolls



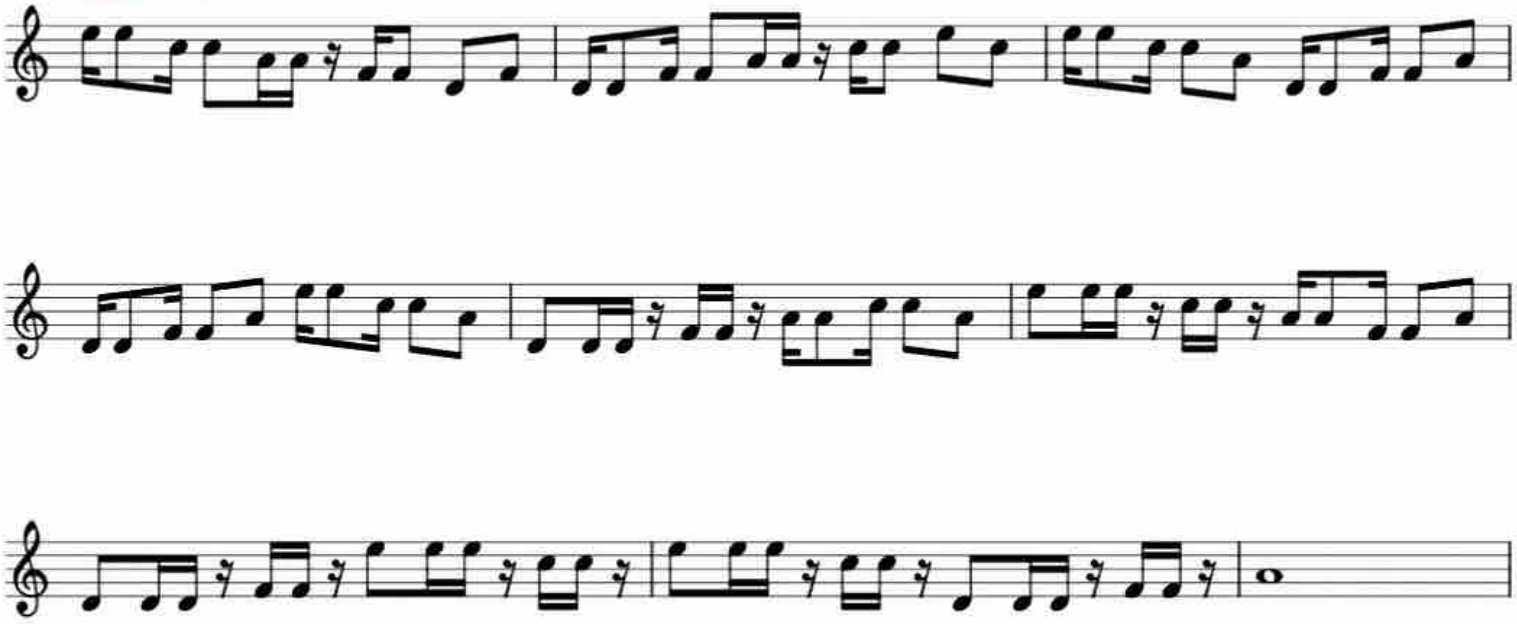
A 1-4/Applesauce



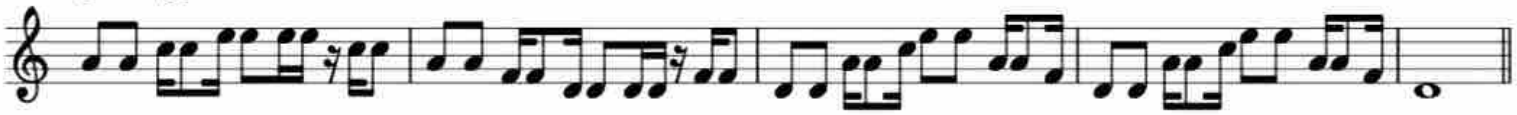
Gallup



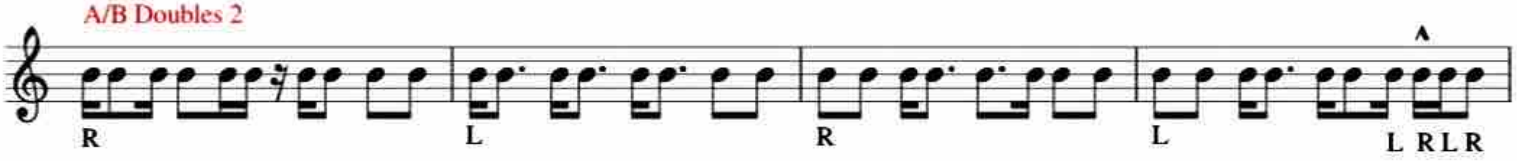
A/B Doubles 1



["C" Tag]



A/B Doubles 2



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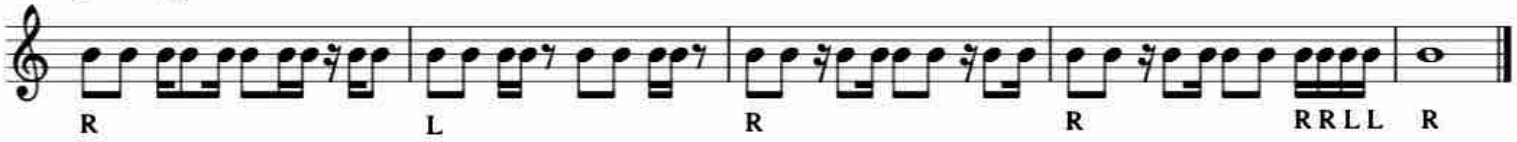
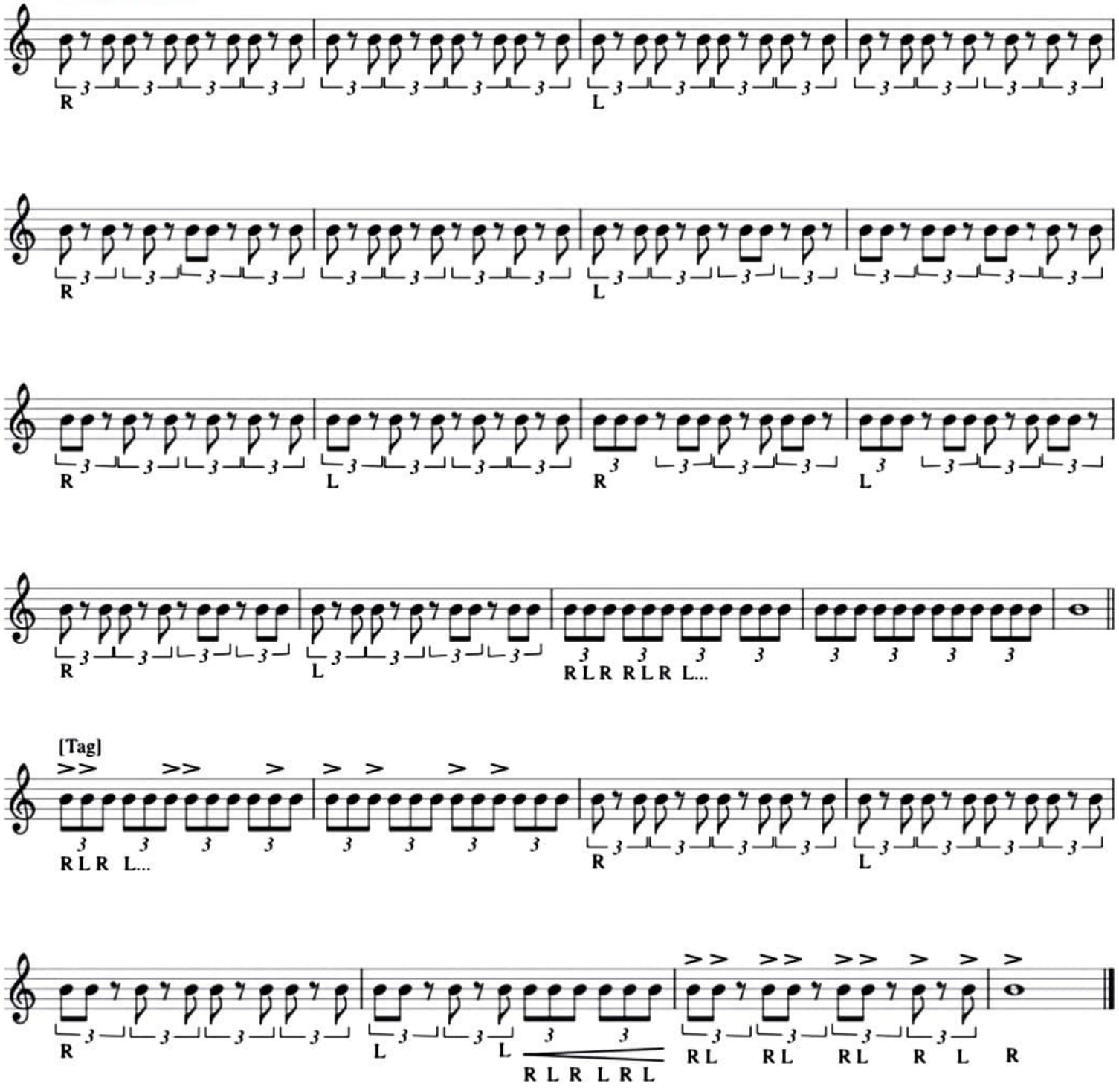
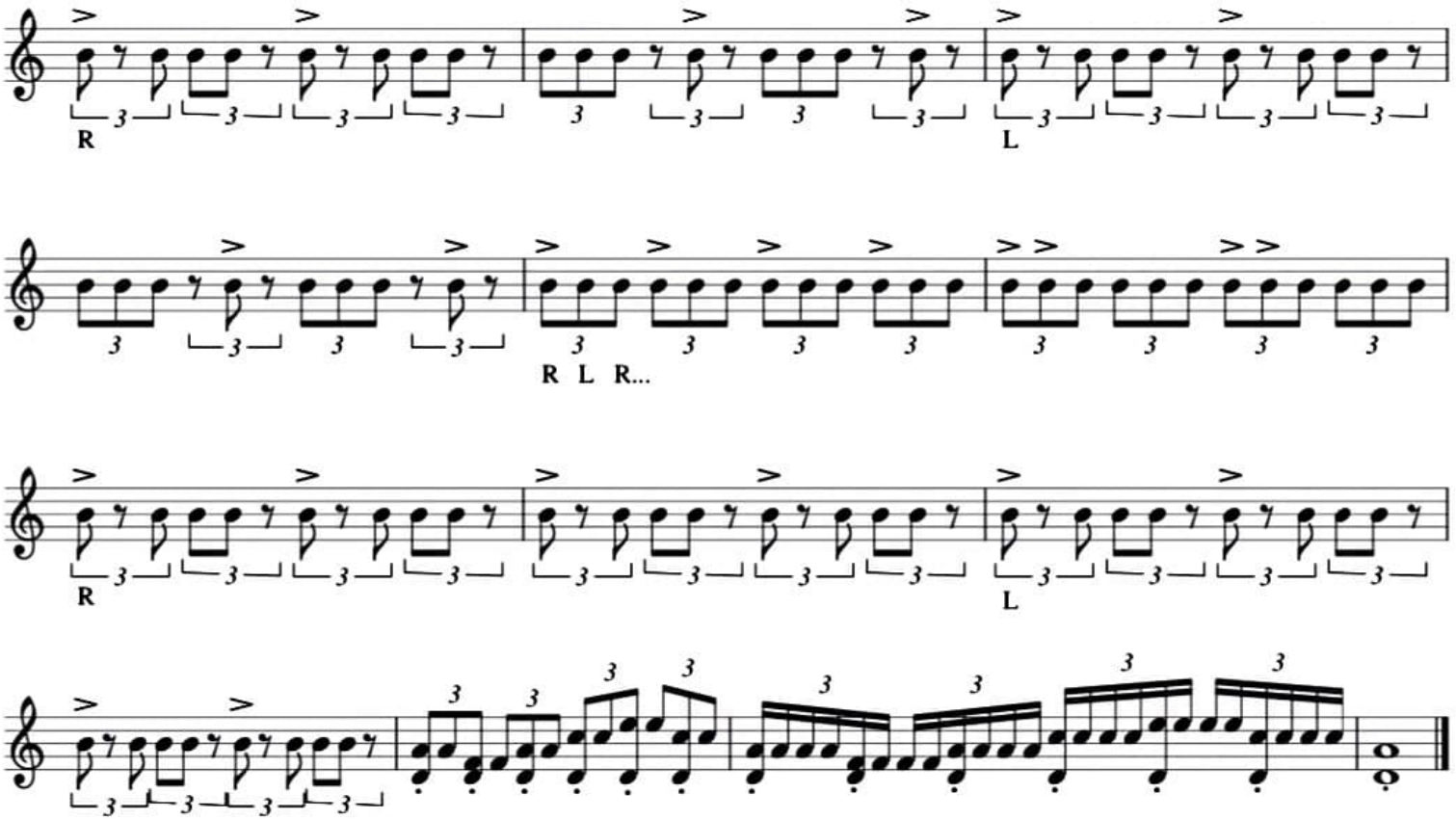


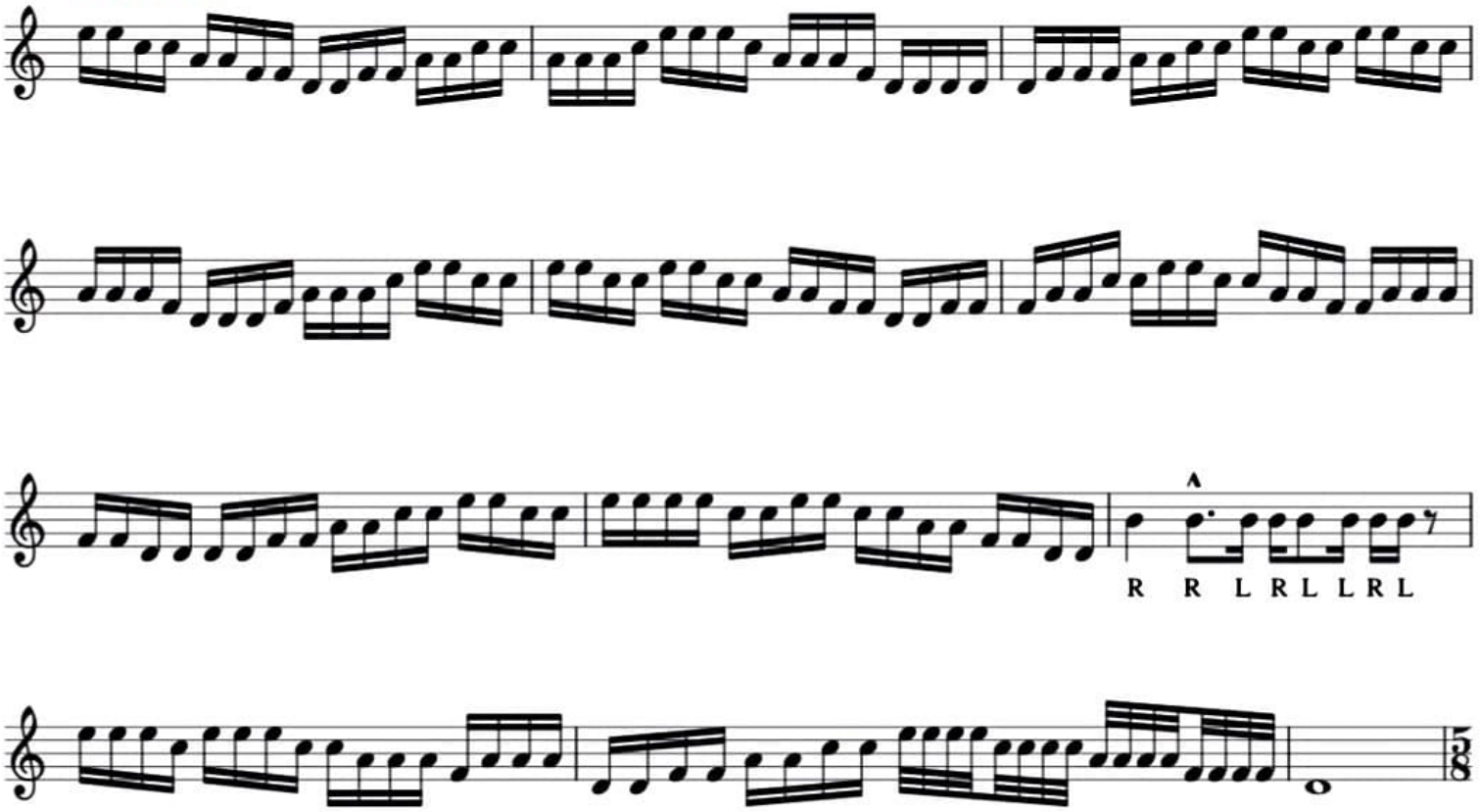
Immigrant Beat



Flam Accent

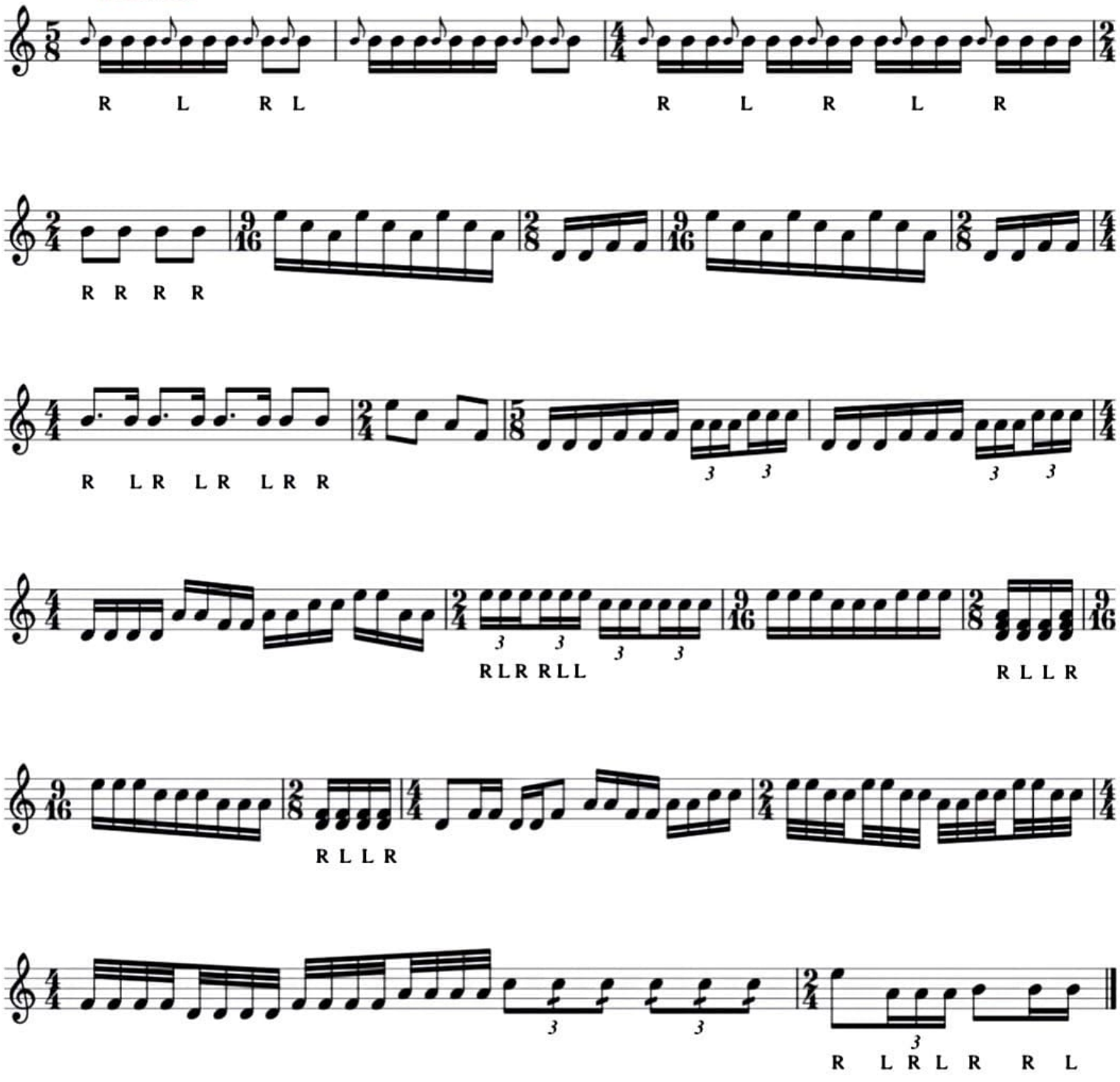


Stick Control



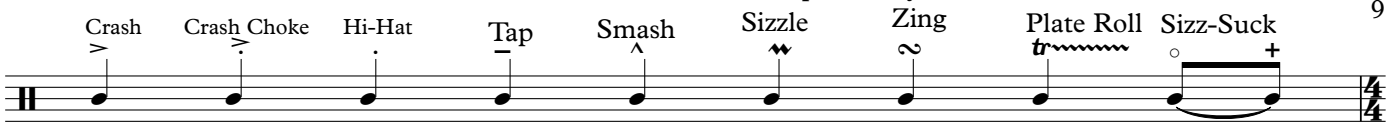
CMB Bass Exercises

Flam Works

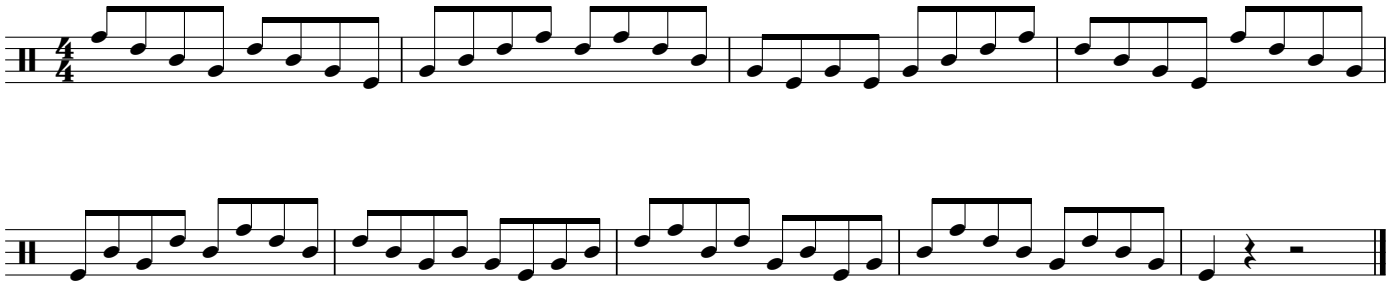


Cymbal Exercises

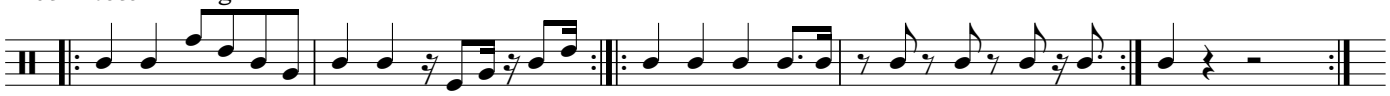
Use various sounds for exercises not specifically notated



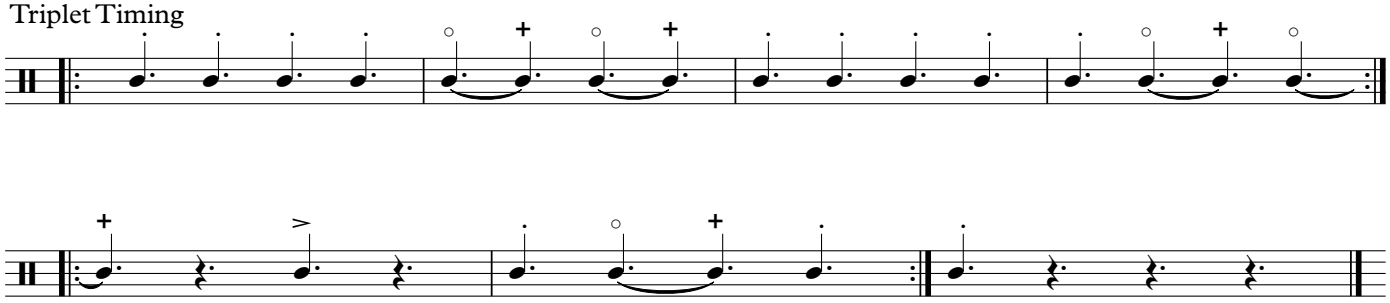
8s



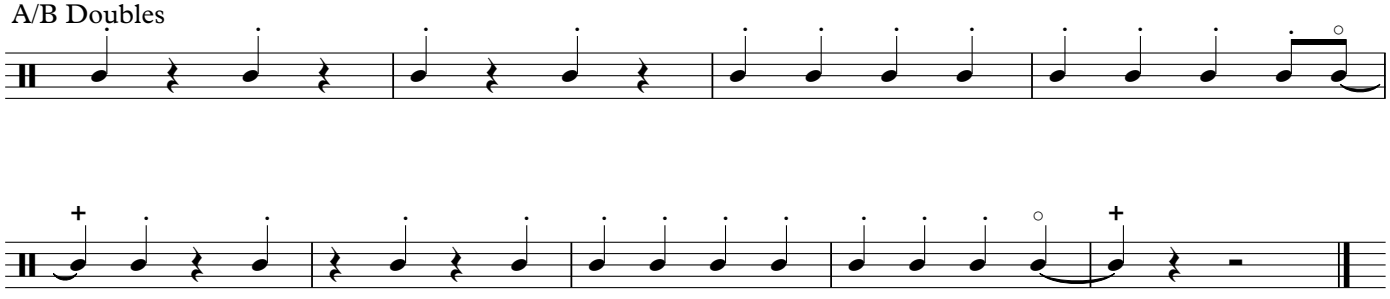
16th Note Timing



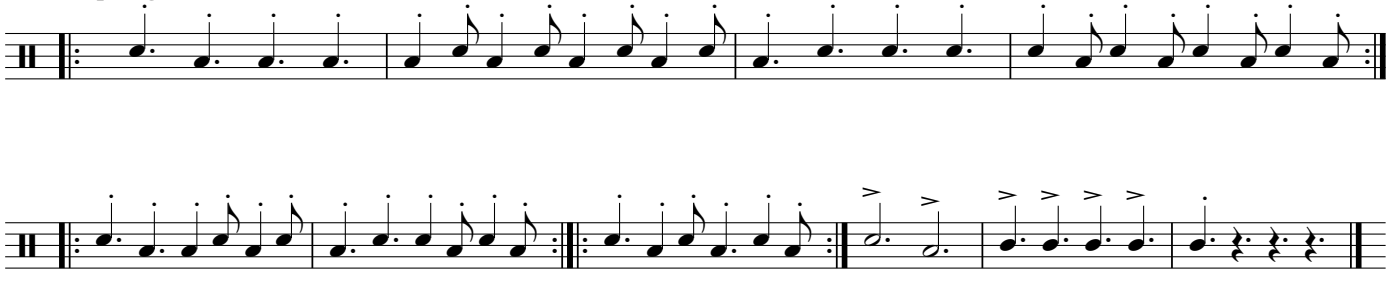
Triplet Timing



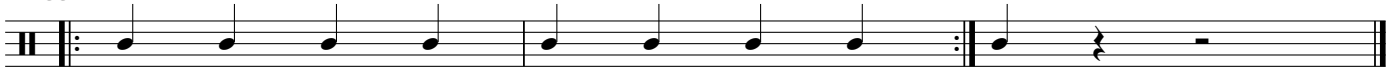
A/B Doubles



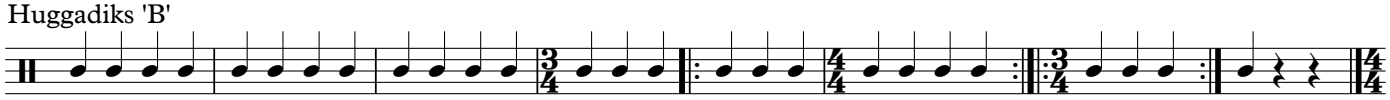
"Irish Spring" Doubles



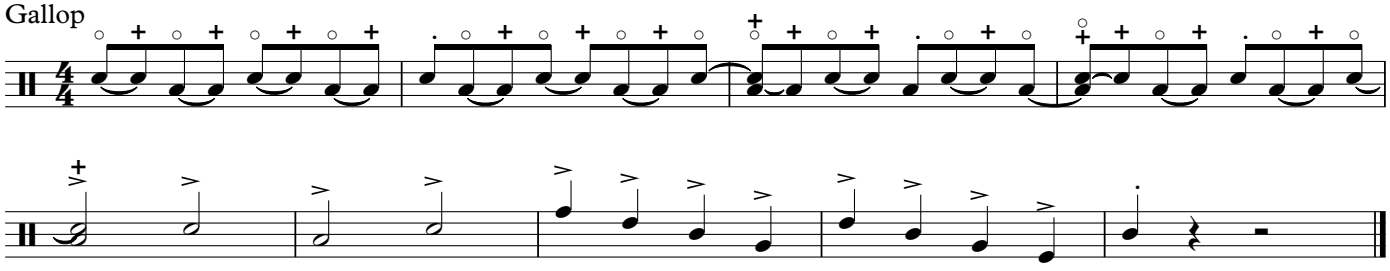
Huggadiks 'A'



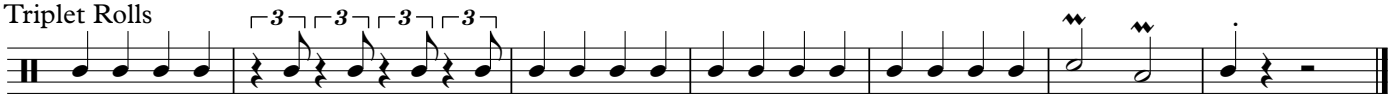
Huggadiks 'B'



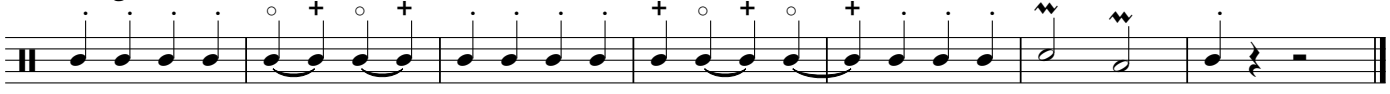
Gallop



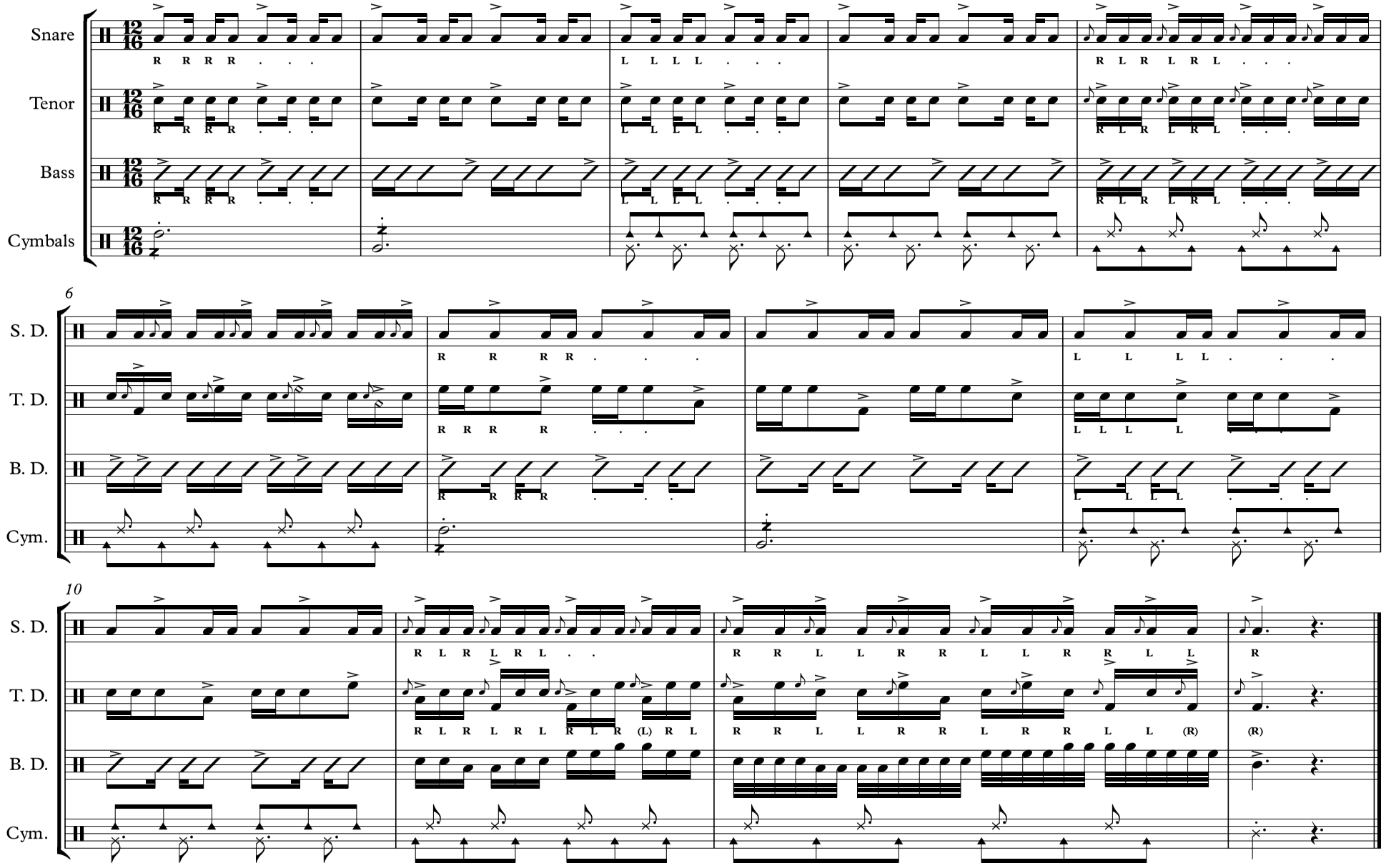
Triplet Rolls



Two-Height Rolls

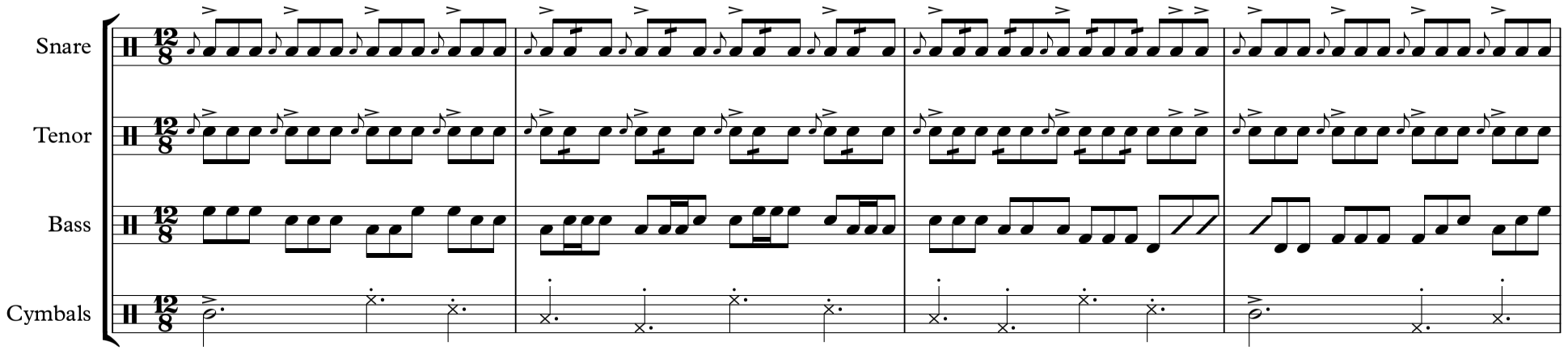


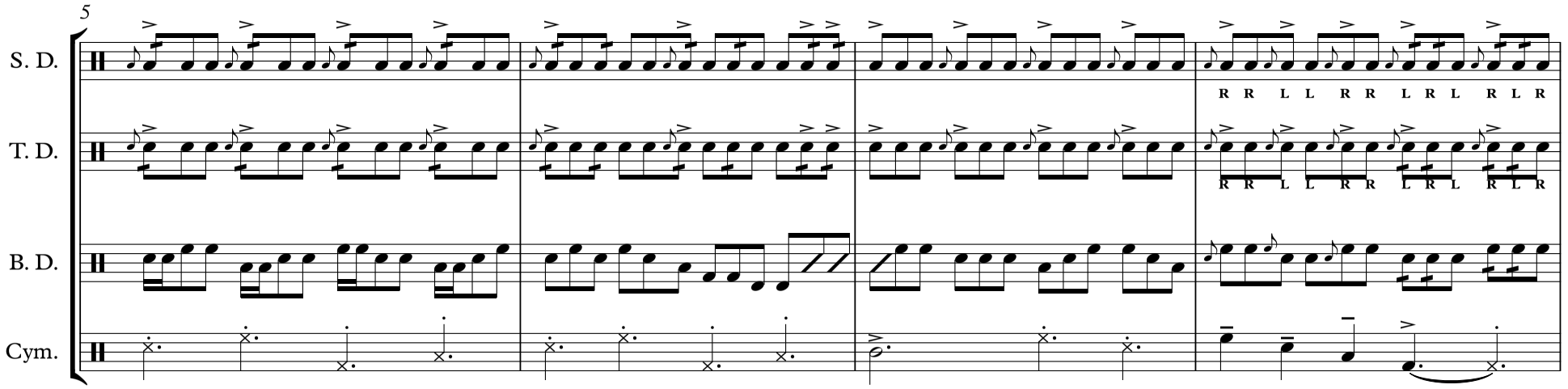
Flam Accent

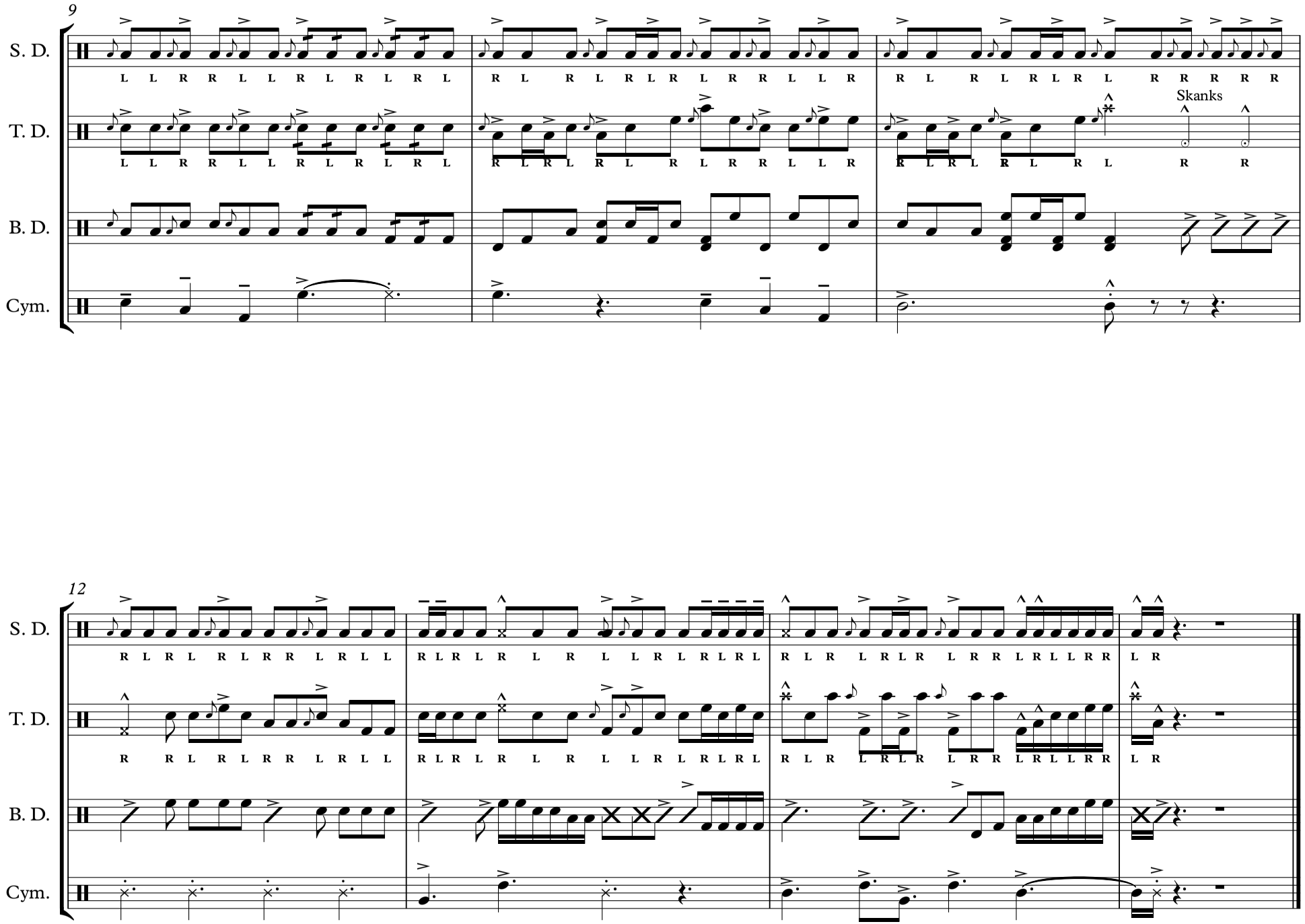


Big Red Cheese Wheel

Mike Roe

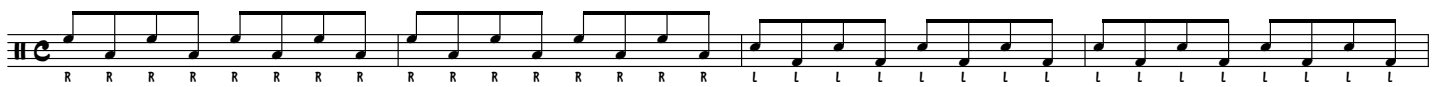




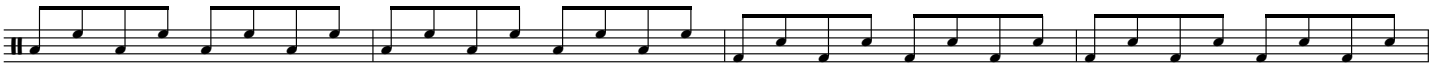

9
S. D.
T. D.
B. D.
Cym.
Skanks
12
S. D.
T. D.
B. D.
Cym.

Tenor Legato Patterns

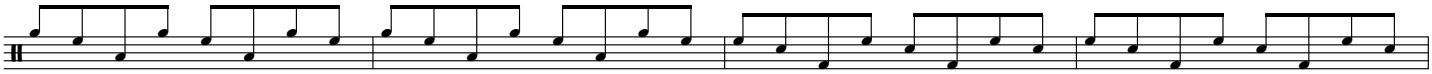
Outward Side to Side



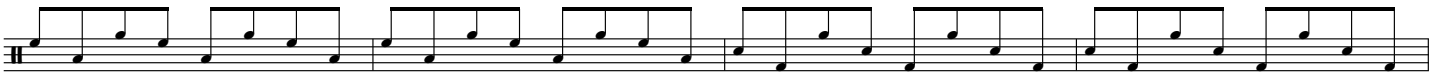
Inward Side to Side



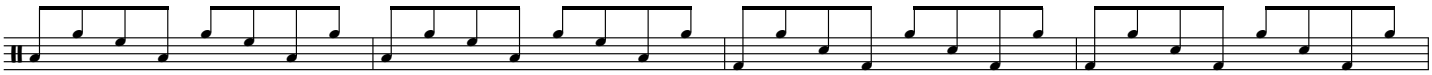
Outward Triangle 1



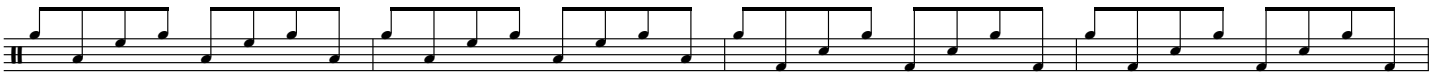
Outward Triangle 2



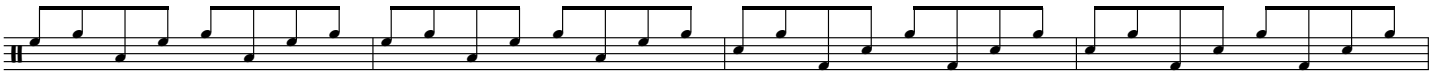
Outward Triangle 3



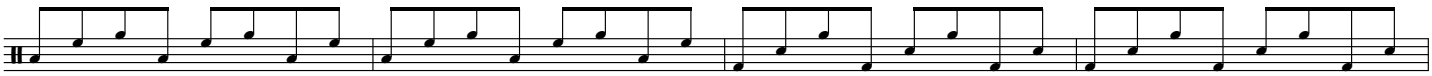
Inward Triangle 1



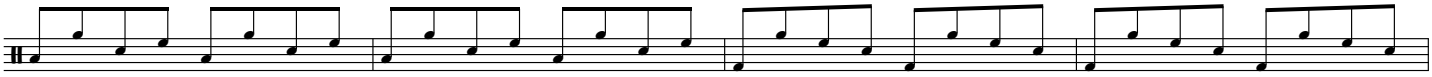
Inward Triangle 2



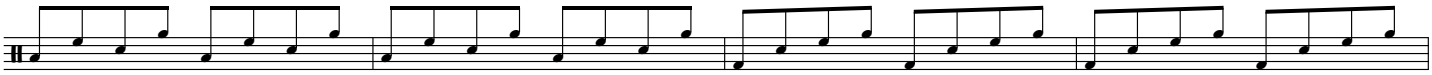
Inward Triangle 3



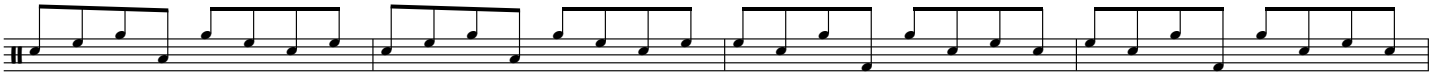
Circle Pattern



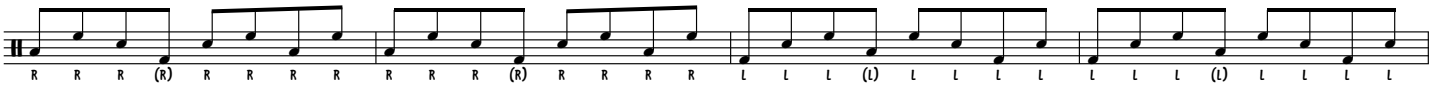
Reverse Circle Pattern



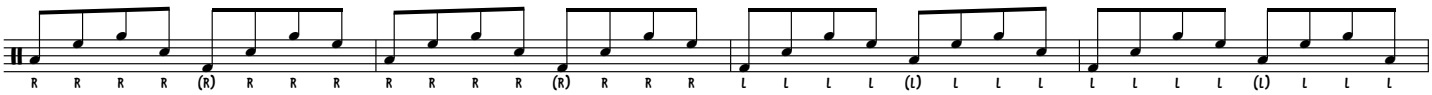
Z Pattern



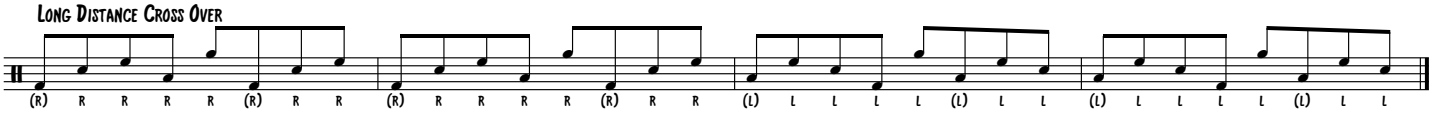
Cross Over



Rock Cross Over

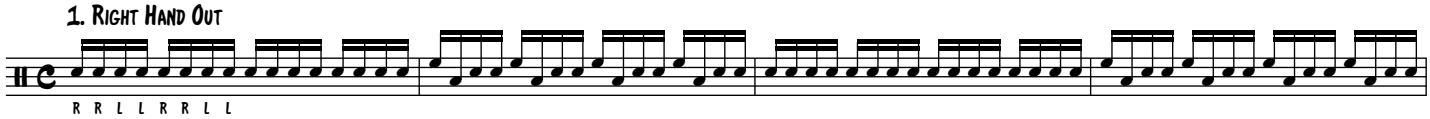


Long Distance Cross Over

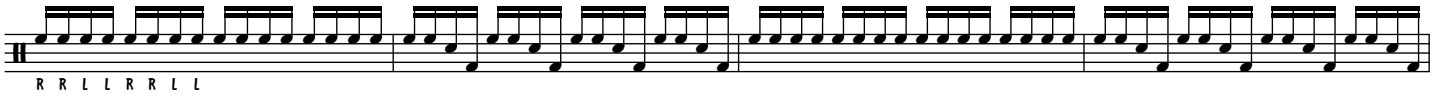


Sweeps

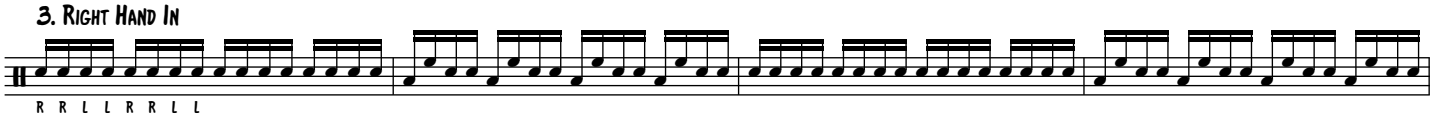
1. Right Hand Out



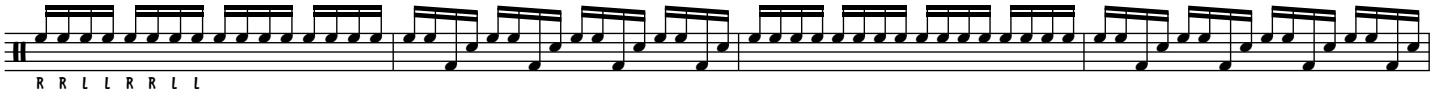
2. Left Hand Out



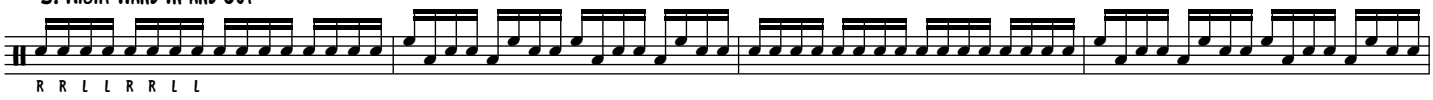
3. Right Hand In



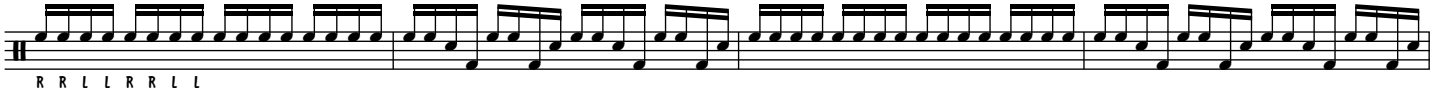
4. Left Hand In



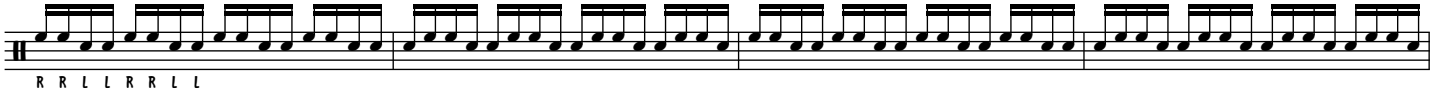
5. Right Hand In and Out



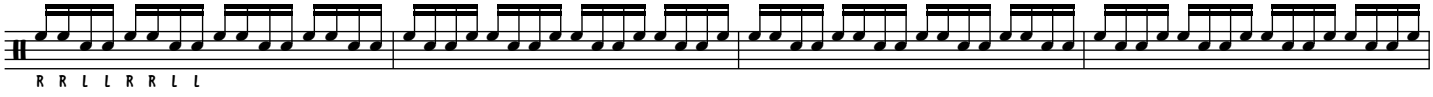
6. Left Hand In and Out



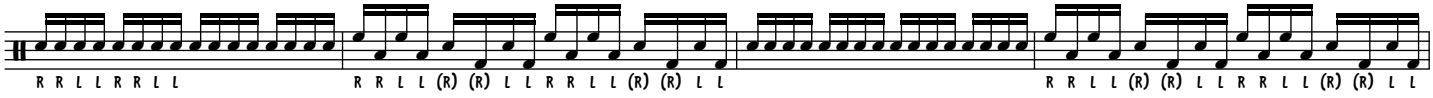
7. Both Hands Out



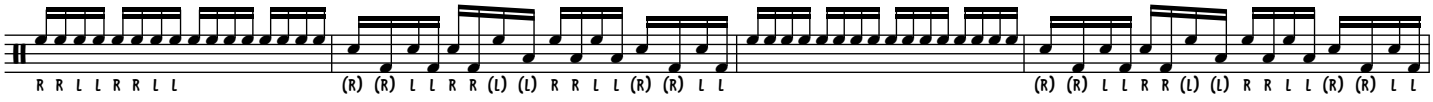
8. Both Hands In



9. Figure Eights Out

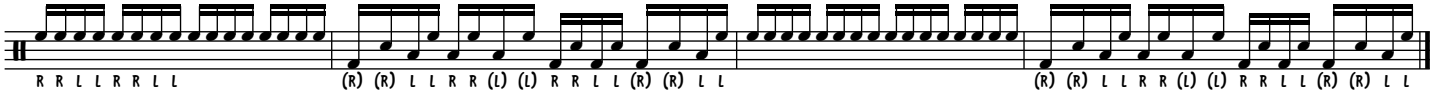


10. Full Figure Eights Out



11. Figure Eights In

12. Full Figure Eights In



Bass Drums

The bass drum section acts as tenor and bass voices in the percussion choir on the field. Bass drummers must have a complete mastery of all the basic drumming techniques presented in this book. 24th note figures will rarely last beyond three notes and 32nd note figures rarely longer than a quarter note. Since the playing surface is vertical, some stroke modifications are necessary.

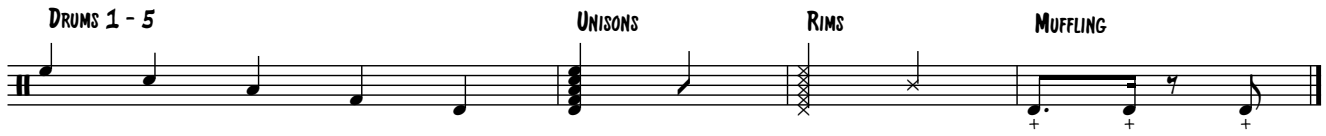
The principals of grip and stroke are basically the same as for snare, just turned sideways. The mallet should be held at an angle–just less 45º–up from the forearm. Leading with the mallet-head, break the wrist back with the forearm following naturally outward bringing the mallet to an angle. Complete the piston stroke by moving the arm back inwards and rotating the wrist. The general playing spot is just above center. In order for this tone to project most efficiently to the audience, the heads should always face toward the audience. Since most stickings are right hand lead, whenever possible direct the left drum head toward the audience thereby playing through the drum in their direction.

Sometimes the players will fill rests or create different sounds by playing on the rims. This will be notated in the music by replacing the note heads with a different shape. Also, players may be asked in the music to dampen one of the drumheads with the off hand for a muted sound. This is notated with a plus sign (see below). Of utmost importance to bass drummers is the ability to think and hear melodically.

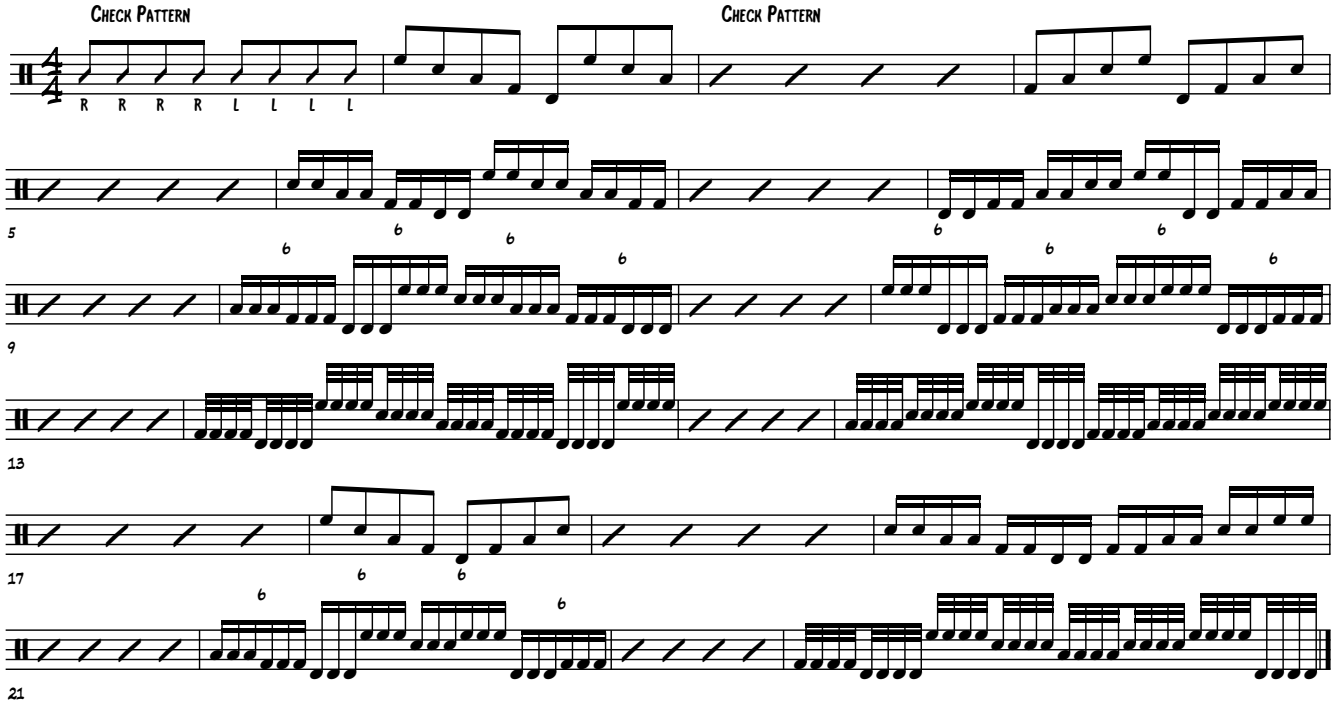
Mastery of all of the timing exercises is imperative. Rather than learning only his or her individual part, the player should know the part as a whole and plug-in his or her notes as required. Good bass drum sections can accurately play their music even after switching parts. Balance is another important concept for bass drum sections. Although there are five or six different instruments being played, relative volumes need to be regulated so the sound is as one. The lowest or anchor bass should be tuned similar to a concert bass drum as it is used for impact. Each of the other drums should be tuned to the pitch that gives it the most resonant tone, while avoiding too small or too large an

interval between them. It is extremely important to maintain even tension from point to point around the drum. Check this by tapping lightly at each tension point and adjusting so that all the pitches are the same. Also each side of the drum should be tuned to the same pitch.

Bass Notation

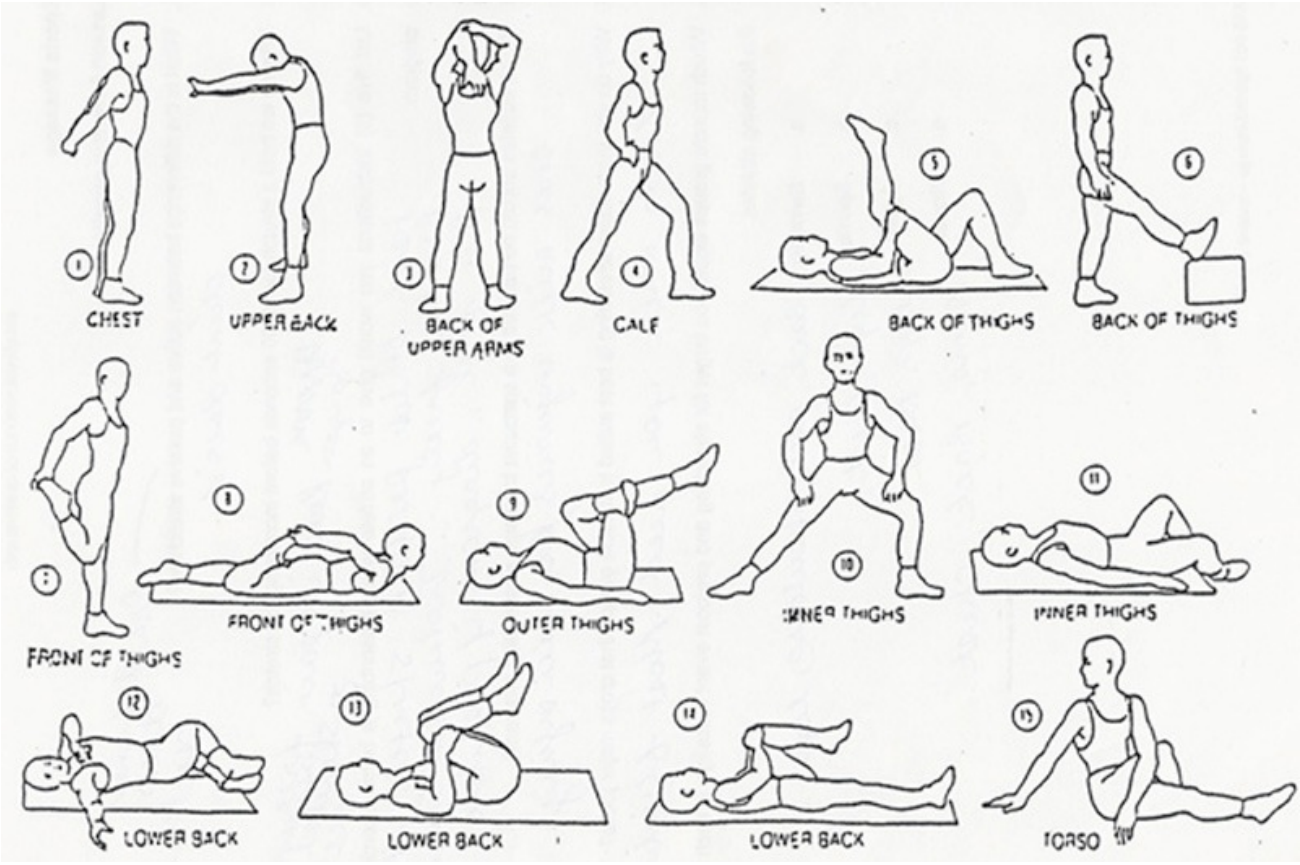


Movement Exercise



Health and Wellness

An important, yet often ignored, part of the drumline experience involves taking care of our body. Just as an athlete or other musician must warm up, so must we. On the macro level it is imperative we spend time stretching and developing our shoulders and back. On the micro level, we must give attention to our arms, wrists, fingers and be committed to a proper warm up routine. Tendonitis affects many percussionists, pianists, and other instrumentalists each year. The effects can be devastating. However, through proper instruction and listening to our bodies, we can take preventive steps from this happening. By treating our body well, not only will we combat tendonitis, but have a more enjoyable experience in our playing, marching and carriage of our instrument.



A basic warm up routine could consist of the following:

Taking a few minutes to stretch will allow blood to start moving into your muscle fibers, which will afford them more flexibility and oxygen to function properly. If you have ever sat down to play without a proper warmup, soon the forearms will begin to feel tight and have a burning sensation. This is a lack of oxygen and blood flow which can have damaging effects over the course of time. Find a routine that works for you, but do the right thing. Your body will thank you in the long run!

Hearing Protection

The ears of a musician are the most precious resource available. We depend on them to check ourselves, listen to nuances of touch, and interact with others around us. The noise levels while playing marching drums, drum sets, and other percussive instruments can reach well over 100 decibels. At that pressure, hearing damage can begin to occur after only 20 minutes of exposure. A simple search on the internet will reveal hundreds of drummers and musicians who suffer from tinnitus, a constant ringing of the eardrum. For many, it causes immense pain, discomfort, and disrupts their everyday living. Once damage has been done, it cannot be reversed. What you do in your own personal time is your choice, however, UNL Drumline members are required to wear hearing protection when rehearsing as a group.

There are several manufacturers of quality earplugs on the market. These are plugs which are both comfortable and have a choice of decibel filters as to keep the integrity of sound at a higher quality than foam earplugs.

Ear Inc.
http://www.earinc.com/p2-specialty-musician-er20.php

ER-20 Hi-Fi Ear Plugs
ER-20 Ultratech Plugs (same as Hi-Fi model but with a retaining cord)

Both retail for $15.00 a pair plus shipping.

For custom molded plugs:

Sensaphonics
http://www.sensaphonics.com/prod_erseries_customs.html

Westone
http://www.westone.com/hearing-protection-products/custom-fit-hearing-protection-products-4

The Mental Game of Life and Performance

To be a high-level performer, you must conquer the inner game. The game that encompasses the personal voice inside of you that dictates a running dialog in your mind. What you tell yourself, how you perceive ups and downs, how you control your emotions. Athletes deal with this on a daily basis, and the best have learned techniques to maintain their inner voice so they can perform on a high level.

This excerpt, from the book *The Mind Gym* by Gary Mack, explains the concept clearly:

> Sports psychology is especially prescribed for two kinds of athletes. Some perform well in practice but break down in competition because they become self-conscious or overanxious. Others possess worlds of talent but can't perform consistently. Consistency separates good athletes from great ones. The best athletes win consistently because they think, act, and practice consistently.
>
> Consistency is a defining quality. "Whatever your job, consistency is the hallmark," said Joe Torre, manager of the world champion New York Yankees. "It's much more important than doing something spectacular just once. Do your job consistently, and you will be considered good."
>
> Ben Crenshaw says that in golf you take the lies as they come. "Take the bad bounces with the good." Have you ever hit a terrible drive then followed it with a miraculous recovery shot out of the trees, landing the ball on the green? Don't act surprised when you do something well, and when you're struggling don't let others know it.
>
> Maintain the warrior mentality. Stand tall even if you feel you are coming apart on the inside, and carry yourself in a confident way. All performers can act themselves into a way of thinking just as they can think themselves into a way of acting. Mental attitude is always important. As a player, Dave Winfield, a member of the 3,000-hits club, knew that what he thought affected how he felt and how he felt affected how he performed. "Sometimes you have to say to yourself that you're going to have fun and feel good before you go out there," Winfield said. "Normally, you have fun after you do well, but I wanted to have fun before I did well. And that helped."
>
> To perform consistently you must prepare consistently. Act the way you want to become until you become the way you act.

Some techniques that can help calm the mind focus the inner voice include:

- Listening to calming or inspiring music before an activity
- Spending a few minutes with your eyes closed breathing deeply
- Meditation
- Stretching
- Visualization
- Incantations

How Do We Feel When We Play?

What Are The Ingredients?

Performing is a living and breathing activity. Without the human element, notes are merely ink on paper. Instruments are piles of metal and plastic–dead and lifeless. The opportunity for a group of people to engage in a singular activity, such as music, is an amazing opportunity. Consider an approach with a heart that is open, challenged, and excited. Too often we crush our personal potential by letting fear, doubt and negative internal talk cloud our mind.

The 'How-To'

How then do we accomplish this? First off, you and you alone control your internal thoughts. No other person, place, distraction or beyond is responsible for how you approach your playing. Practice directing the right and positive thoughts to your mind. Although we might have different ability and talent levels, we can choose to be confident at our given level at any moment in time.

Another factor is that of physiology–how the human body functions and the relationships between various systems. This can be simplified to a mind and body connection. Ask yourself this question: Are my thoughts and physical aspects of my body projecting the same image?

A person might be THINKING: I feel confident, powerful, relaxed and ready. Yet, that same person PHYSICALLY is: eyes at the ground and wandering, slouching in their posture, head tilted to the side, shoulders forward and weak.

What's wrong with this picture? The two body systems are not aligned with each other. It stands to say that this person is not going to be successful in playing to their potential. Studies have shown that by merely changing the body's physical posture, it can coax the mind into thoughts of confidence, relaxation, awareness, and more.

Wrapping It All Up

We place a high priority on the physical and mental aspects of what we do. After all, they control what comes out on the instrument. Those that watch from the crowd will see with their eyes much faster than they hear. Approaching everything you do with an aggressive, professional, relaxed, and confident mindset will add a whole new dimension to your experience now and in the future.

Core Essentials

Consider this scenario. A basketball team is fighting to the hilt for a league championship against their long-time rival. Back and forth the game switches hands– each team refusing to surrender. With minutes dwindling in overtime, one of the star players goes down with an ankle sprain battling for a rebound. With two other starters having fouled out, the coach has no other choice than to dig deep into his bench. In goes a player who has rarely seen playing time during the year, his moment to help the team squarely in front of him. The next three minutes unfold like a bad dream: shots clearly off target, fumbling the ball like a stick of butter and misplaced passes. A chance to redeem at the foul line only succumbs to both shots bricked off the rim.

What we learn in the aftermath tells an all too familiar story. This player showed up at practice each day, did what he was told, and worked hard. However, his time away from the coach and peers was strikingly different. He spent his time perfecting his dream dunks, fancy ball handling through his legs and behind his back, and spins that would make a professional dancer look amateur.

The moral of the story is this:

The best people and organizations place a premium on doing the fundamentals better than anyone else. The majority of their time is spent relentlessly practicing that which is the foundation from which everything else flows from. There are no shortcuts, only proper time spent on what is important.

Take ownership and pride in your personal development as a player. Nothing is more respectable and valuable than someone who can rock the basics at an extremely high level. It will pay off tremendously in the long run!

Developing Grip and Stroke

It is essential that players always maintain the integrity of the fundamentals outlined above. If you find yourself deviating from them even slightly, you are either playing an exercise for which you are not yet ready, or you are playing too fast. Once the player feels comfortable with the grip and is able to execute a proper rebound stroke, these skills can be reinforced using the exercises below. Start very slowly and emphasize the wrist turn--letting the hand follow the stick--striving for maximum rebound off the playing surface.

Strive to stay completely relaxed from the neck, through the shoulders and arms, all the way down to the fingers. It is very easy to see and hear when a player is not relaxed. Tension affects sound quality and disrupts the flow of the music. Although chops are a necessity at the levels we strive for, sound quality is primary.

The following exercise reinforces relaxation and sound quality. This should serve to keep your muscles flexible and limber. There are many variations which can be implemented in your own practice time. Replace the “16 on a hand” with 14, 15, 17, etc.

Add dynamics as well. Crescendo each hand up, decrescendo each hand down, alternate, and more. Developing a well-rounded routine when it comes to basic strokes will raise the level of your competency and abilities as a musician.

Dynamics and Musicality

The most crucial tool any musician possesses is his or her ears. It’s the feedback mechanism that allows awareness with ourselves, the players around us, and our interaction with an audience. In using our listening, dynamic levels can be seen as ranges rather than concrete points. The situational demands and context will always dictate our approach.

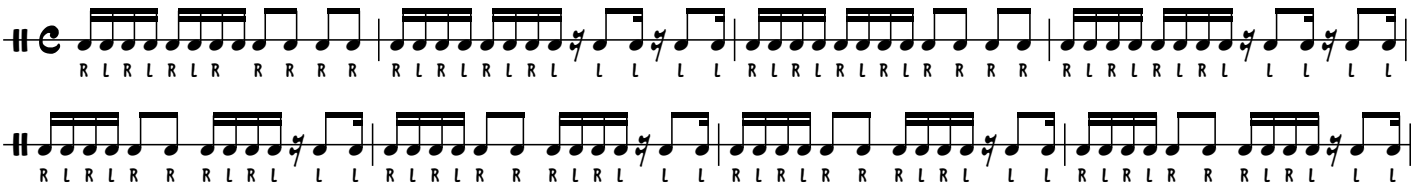
How are dynamics and musicality created then? Largely through velocity rather than simply stick heights. One could play at 9”, for example, but depending on how much velocity the stick it tossed with, the sound and style can be vastly different.

In this manner, we will rely on a musical and listening environment. When players are focused on blending and agreeing on style and volume, stick heights will take care of themselves.

Timing

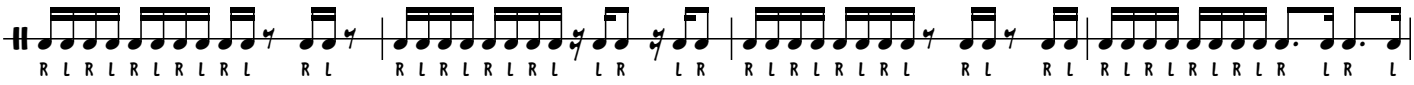
Natural Sticking Throughout

One Note 16th

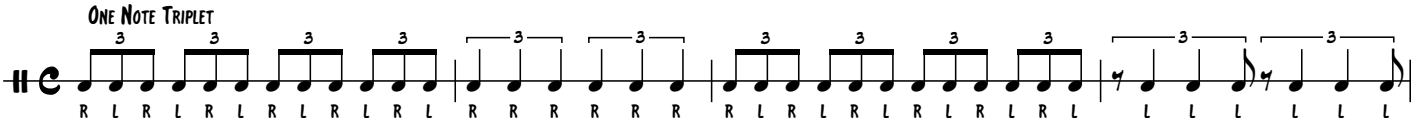


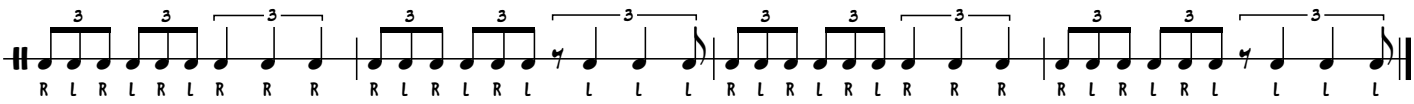
Three Note 16th

Two Note 16th

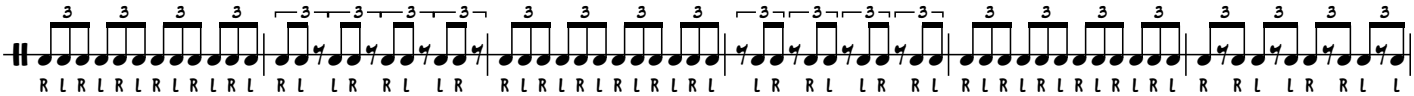


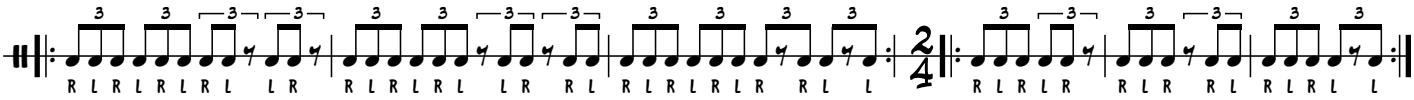
One Note Triplet



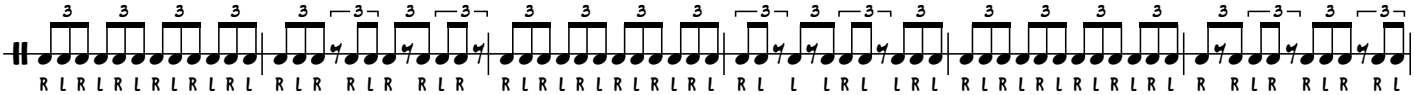


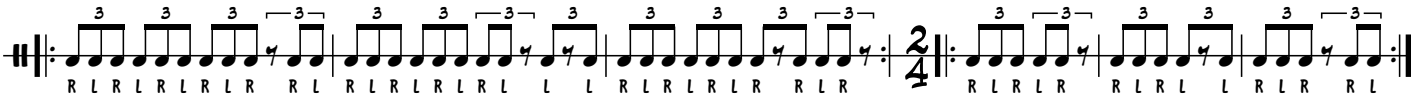
Two Note Triplet





Three Note Triplet





Accent Patterns

For the proper execution of accent patterns the ability to stop the stick over the playing spot must be mastered. This modified stroke is called a Down Stroke. The stick is caught, primarily with the back fingers and stopping the wrist, with the bead just above the playing surface. The original tossing feel is the same and everything in the grip and hand remains constant. To return to the louder dynamic, an Up Stroke is used. This is a stroke with an exaggerated rebound. It is important to develop the ability to control both the volume and rhythmic placement of taps following accents at various tempi.

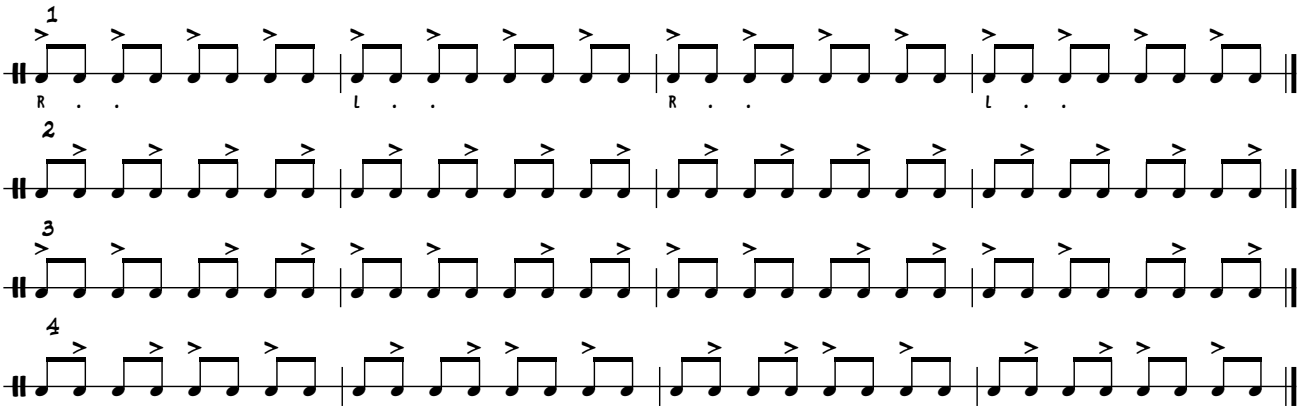
The accent basics below breaks down the simple strokes while the tap isolation exercises provide a comprehensive workout to isolate these stroke types within common performance patterns. Practice various accent-to-tap ratios: *f to p*, *mf to p, mp to p*.

Always remember to relax and keep the grip and stroke consistent. Accents and taps are a HUGE part of creating rudimental music, and the backbone of many rudiment combinations, so the concept of relaxation is paramount to creating a well blended and contrasting sound.

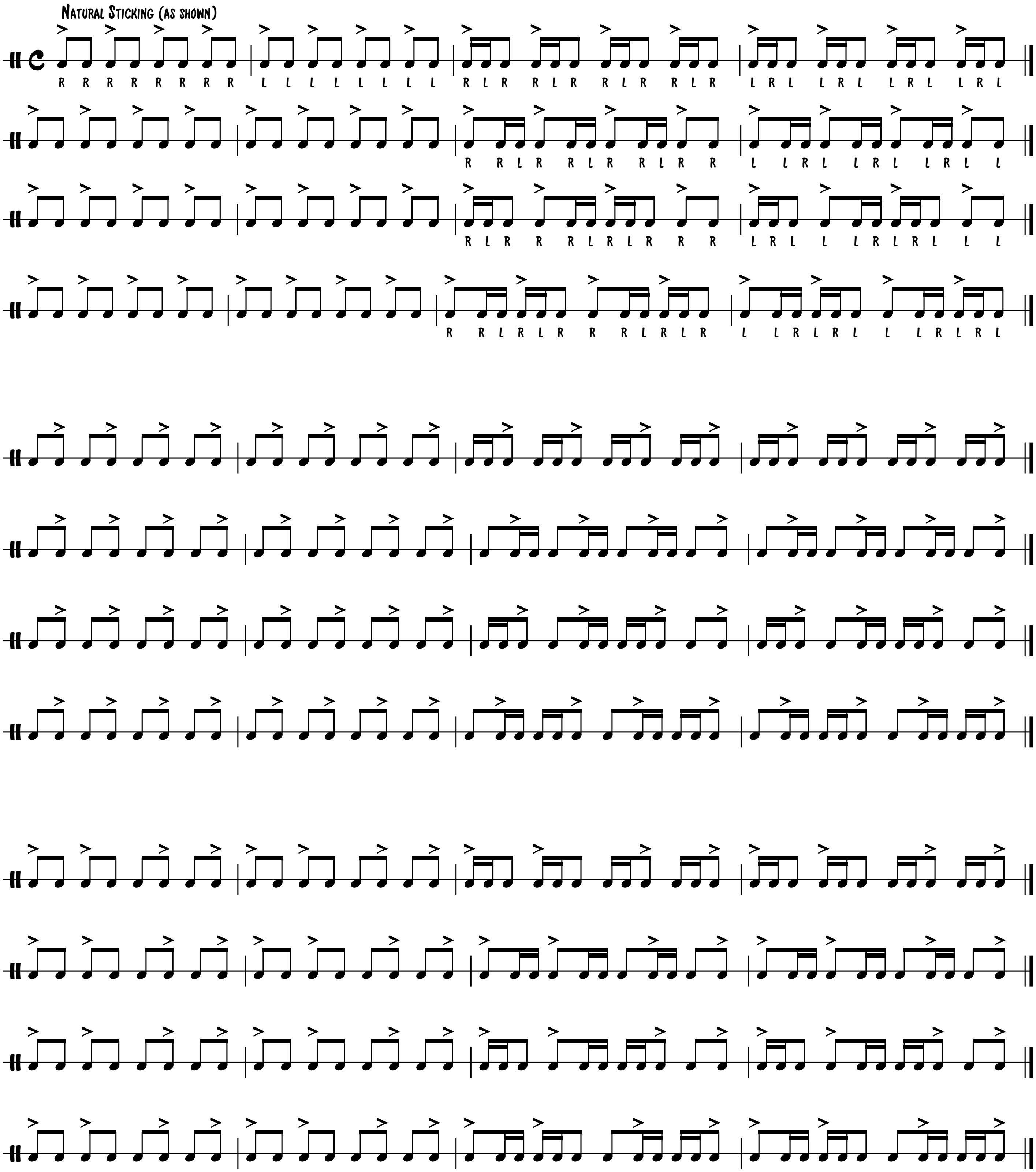
A few checkpoints:

1. Grip and pressure on the stick should stay exactly the same for both accent and tap
2. The tap should sound full and pronounced. It is still a stroke, just at a low height.
3. Sound quality, sound quality, sound quality.

Accent Basics

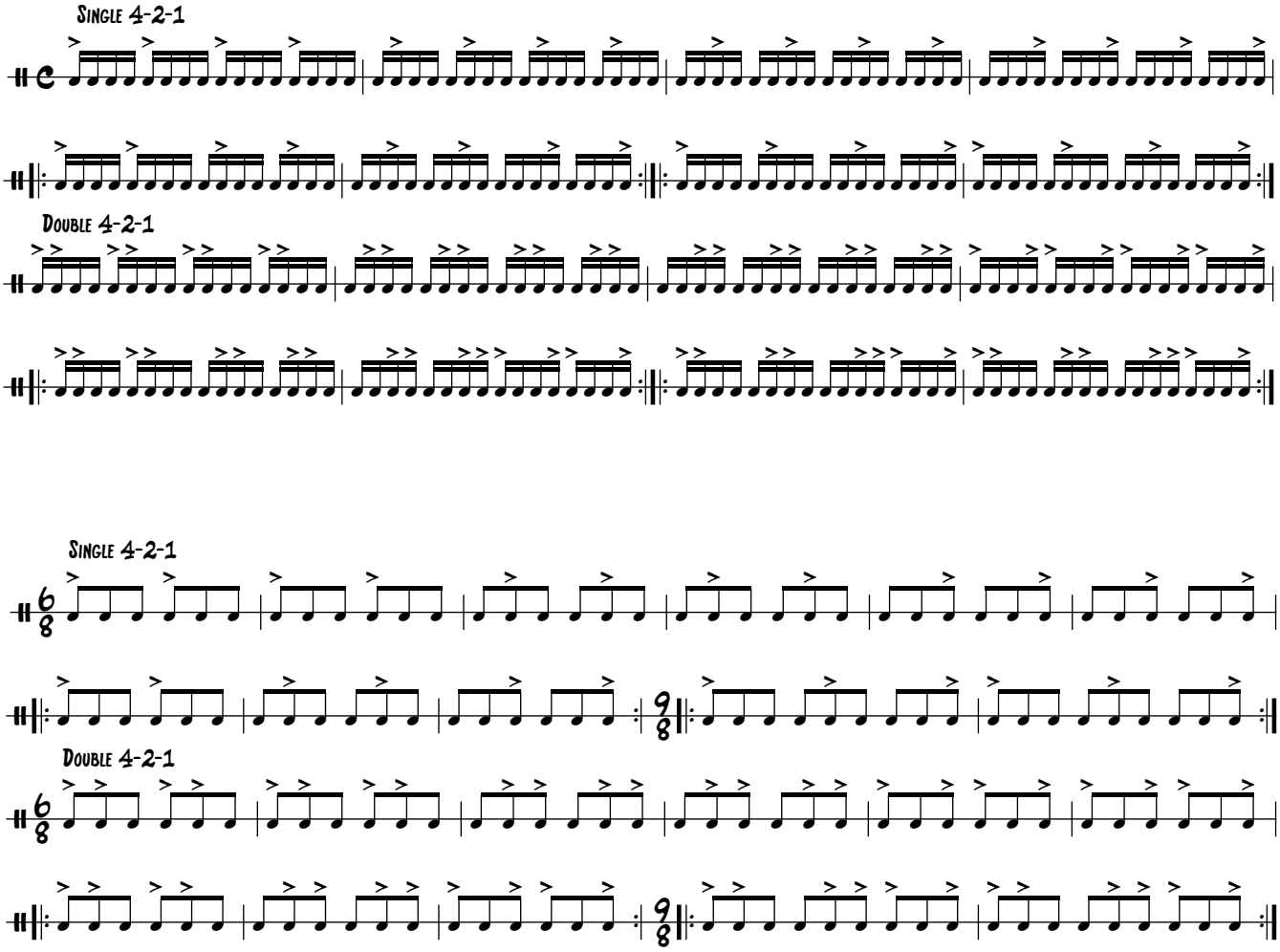


16th Note Tap Isolation



Triplet Tap Isolation

Accent Timing Concepts



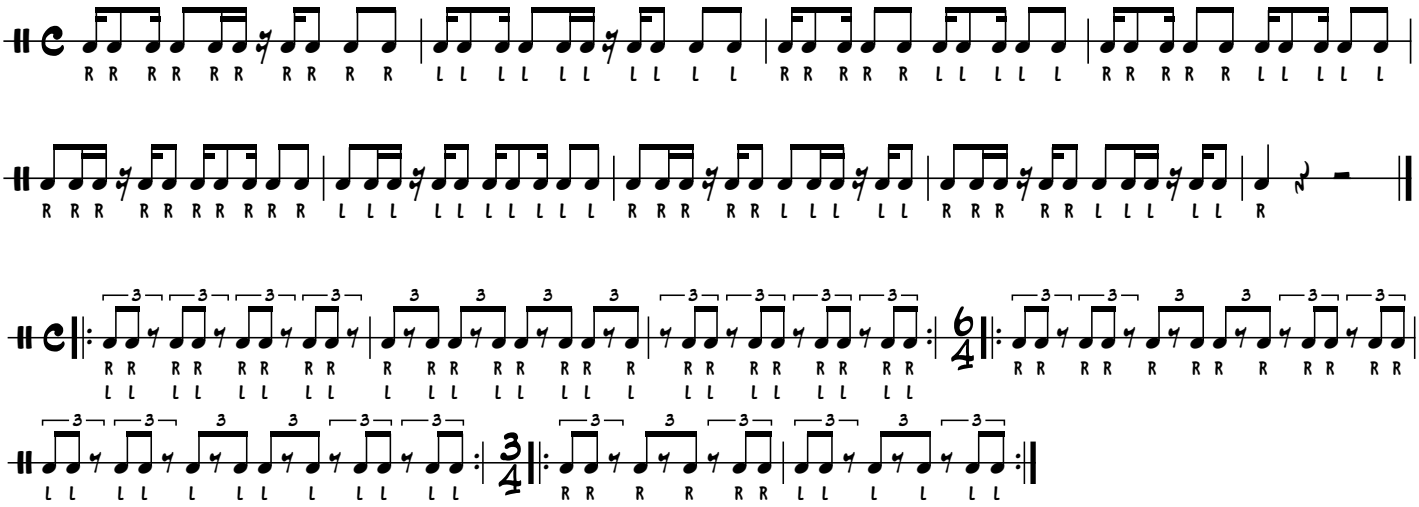
These exercises can be played numerous ways:

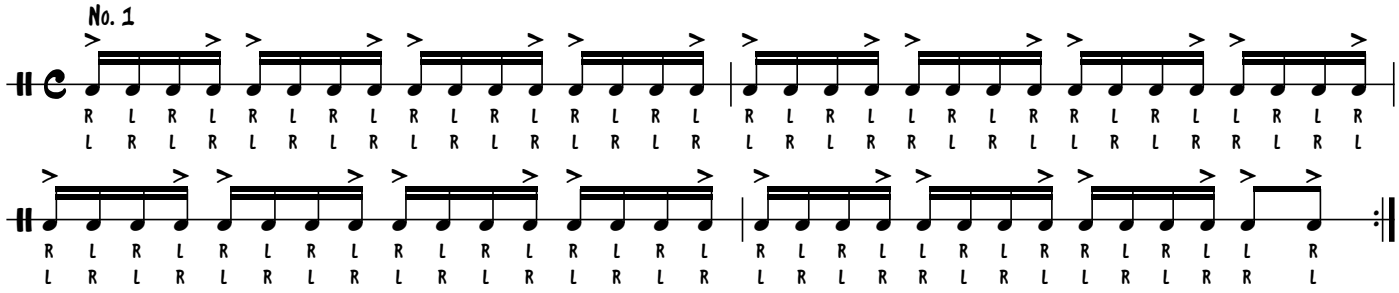
- As written
- Backwards (inverting each measure)
- Flam every accent
- Diddle the downbeat
- Diddle the accent

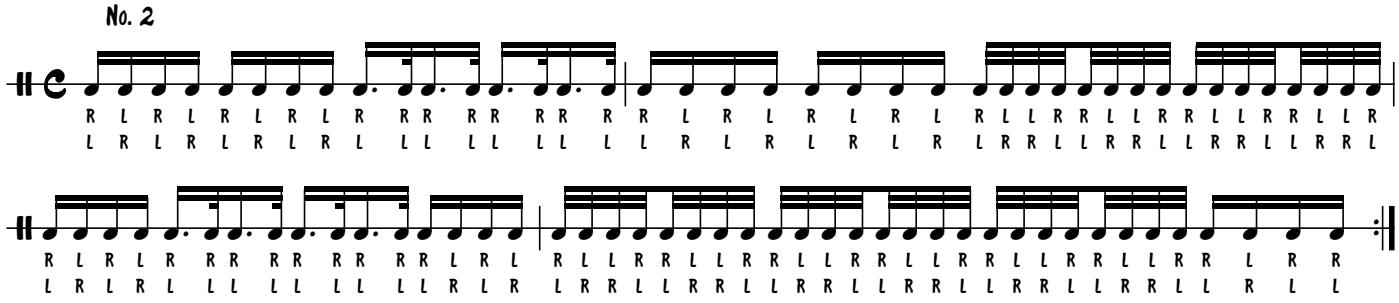
Double Strokes

Another large area that rudimental percussion features is that of double, triple, and quadruple strokes. These are largely produced by one large stroke followed by catching the stick and letting it rebound in the hand. Regardless of the tempo, the stick always stays in motion. As with the laws of physics, an object in motion stays in motion unless a force stops it, in this case our hand. Always keep the stick moving. Check your hand and arm tension as well. Too much and the stick will not bounce as needed. Too little and you will not be able to control the rebound.

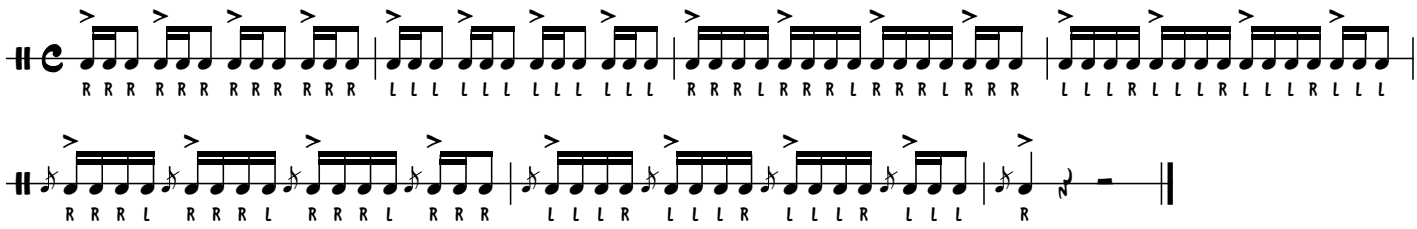
Triple strokes (hugadicks) on page 37 are executed with one stroke producing three gradually decaying notes. If you were to articulate these vocally, it might sound like this: DA-Da-da. Smooth and relaxed.







TRIPLE BEAT


R R R R R R R R R R R R
L L L L L L L L L L L L
R R R L R R R L R R R L R R R
L L L R L L L R L L L R L L L
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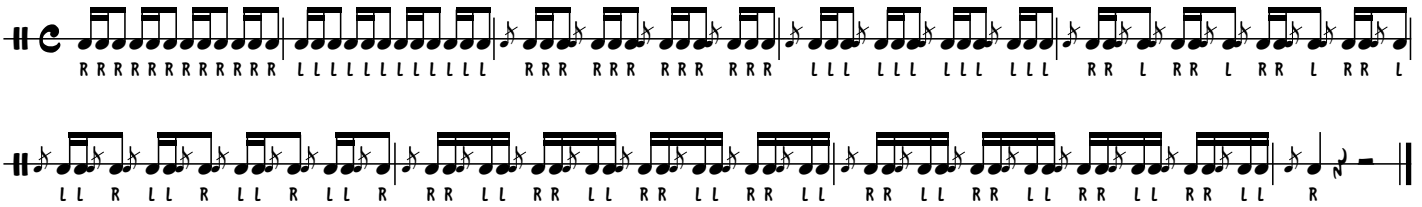
L L L R L L L R L L L R
R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L L R L L R L L R L L R
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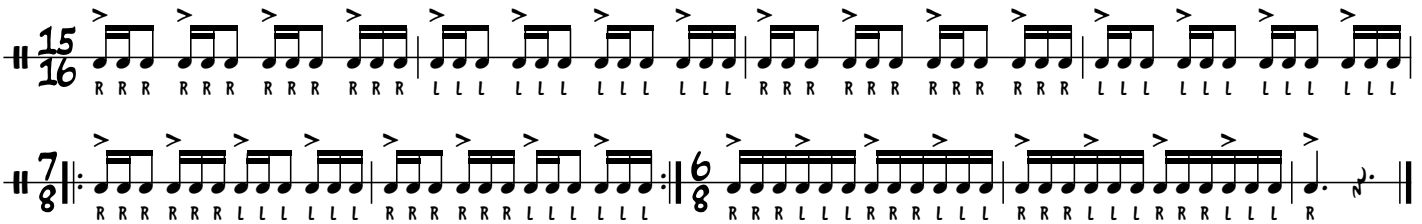
R R R R R R R R R R R R
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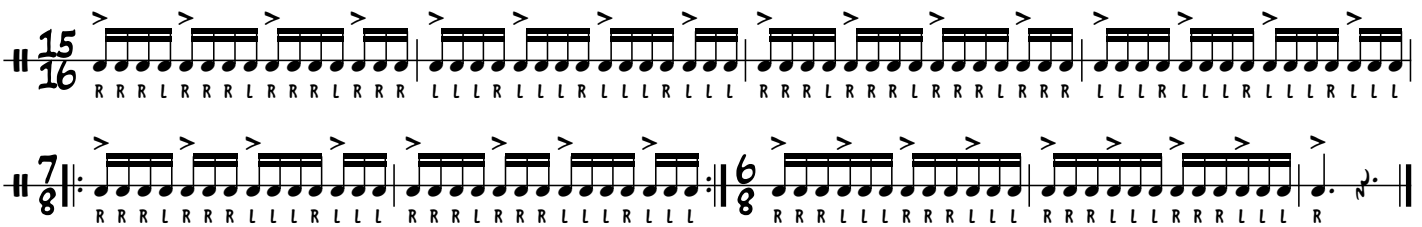
R R R L R R R L R R R L R R R
L L L R L L L R L L L R L L L
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L L L R L L L R L L L R L L L
R R R L L L R R R L L L R R R
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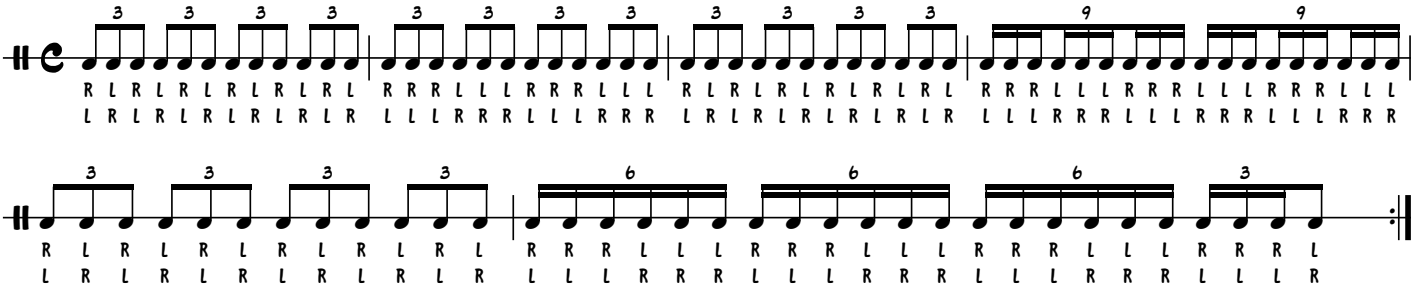
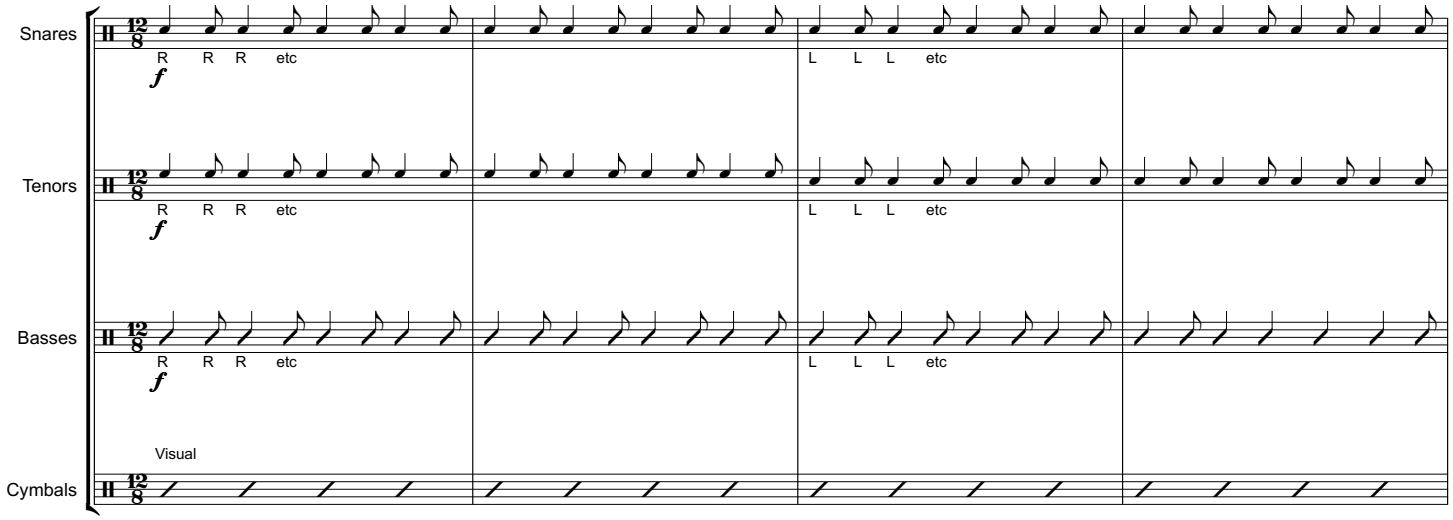
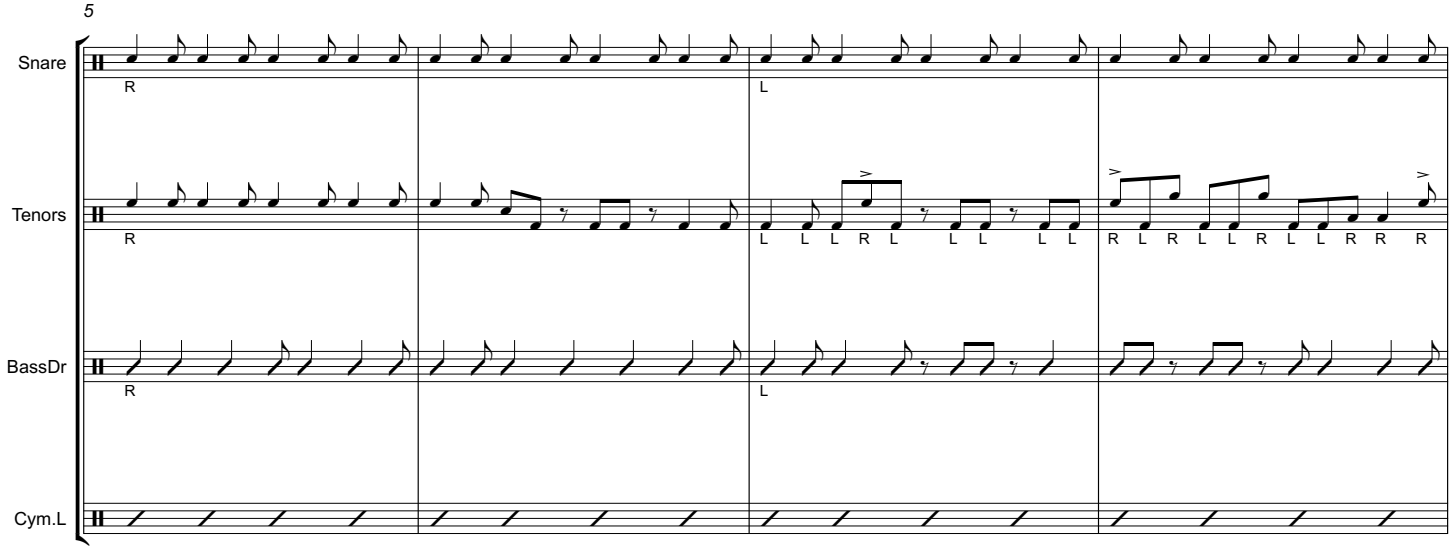
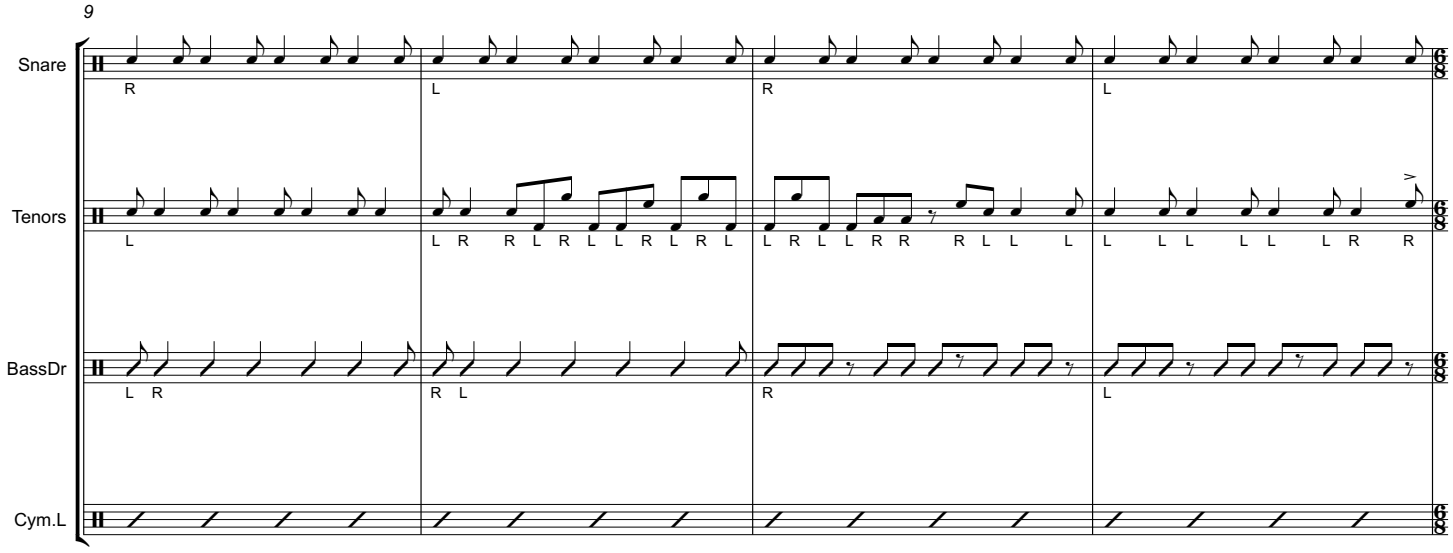
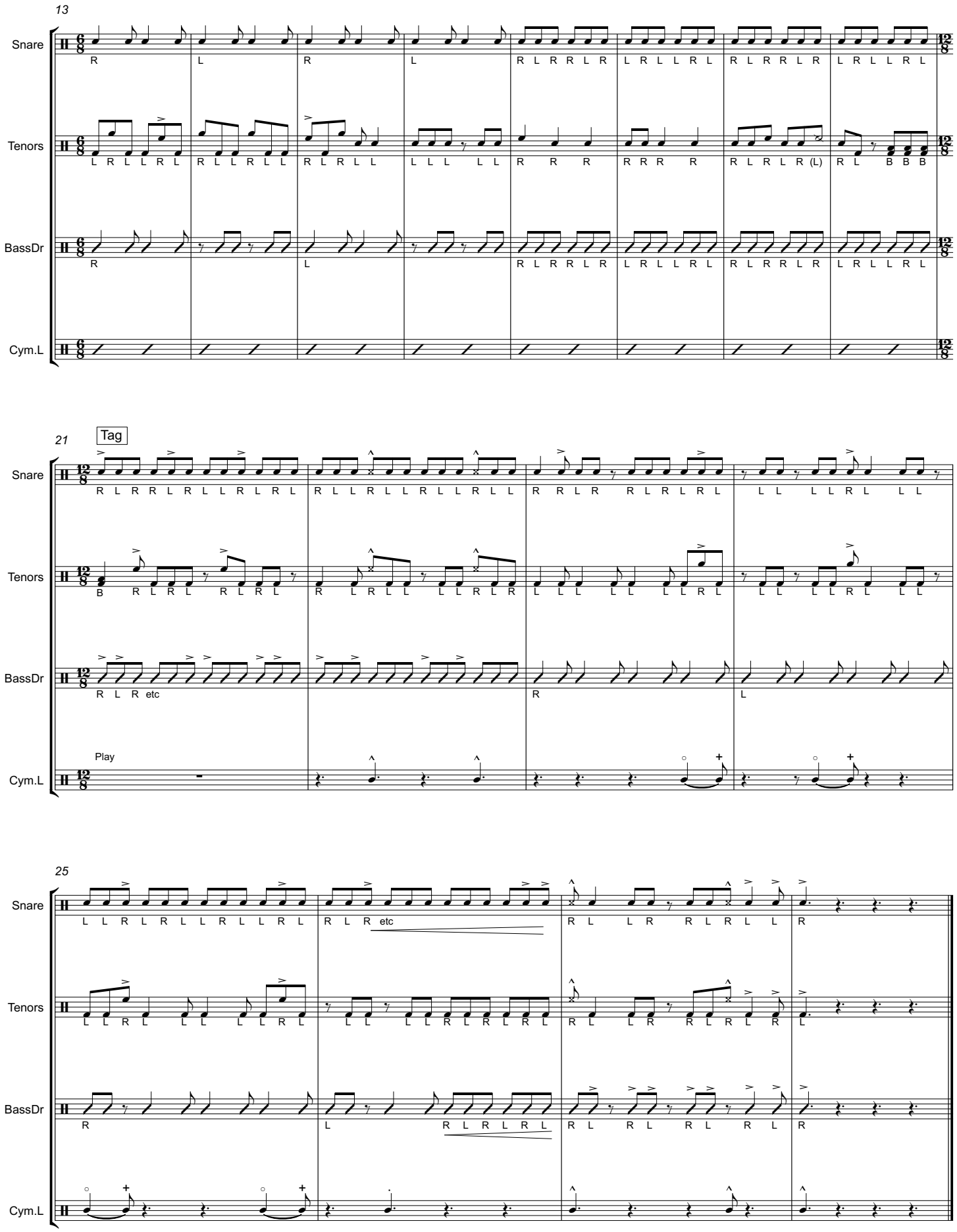

3
9
9
R L R L R L R L R L R L
L R L R L R L R L R L R
R R R L L L R R R L L L
L L L R R R L L L R R R
R L R L R L R L R L R L
L R L R L R L R L R L R
R R R L L L R R R L L L
L L L R R R L L L R R R
3
6
6
6
3
R L R L R L R L R L R L
L R L R L R L R L R L R
R R R L L L R R R L L L
L L L R R R L L L R R R
R R R L L L R R R L L L
L L L R R R L L L R R R
R R R L L L R R R L
L L L R R R L L L R

Immigrant Beat

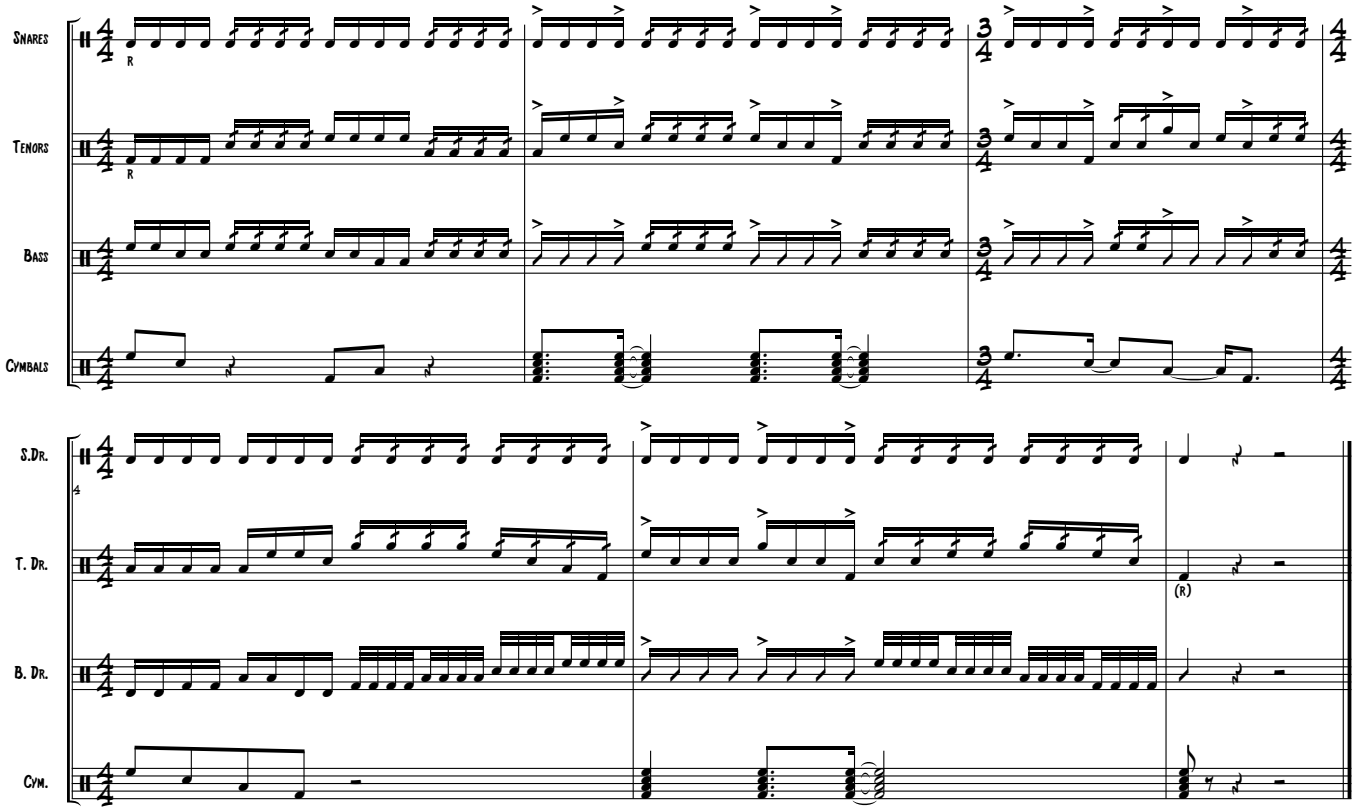




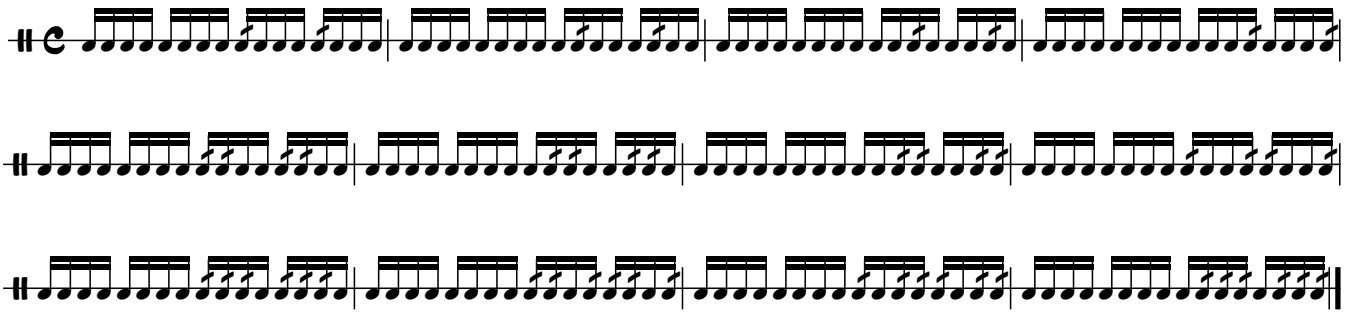



13
Snare
Tenors
BassDr
Cym.L
21
Tag
Play
etc
25

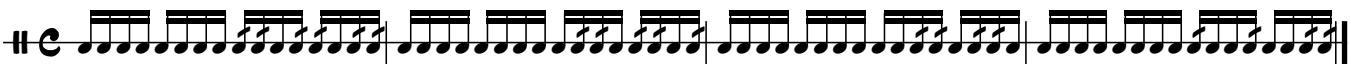
A 1-4



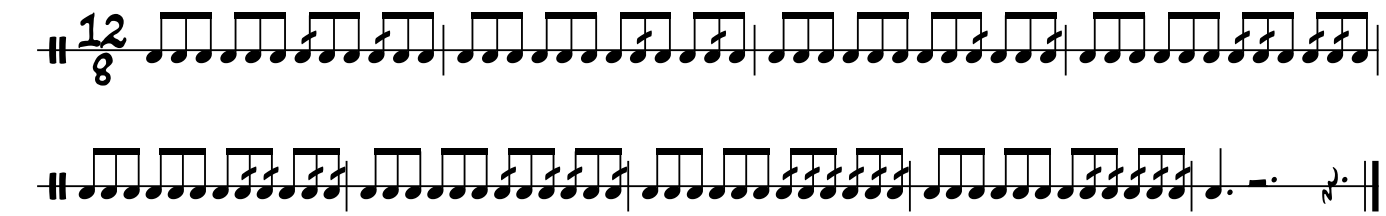
16th Note Diddle Breakdown



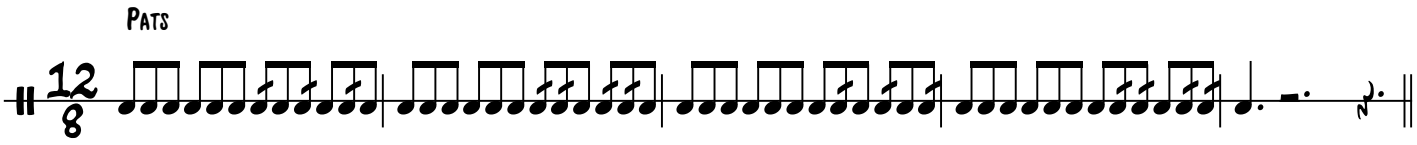
5-Stroke Roll Breakdown



12/8 Rolls

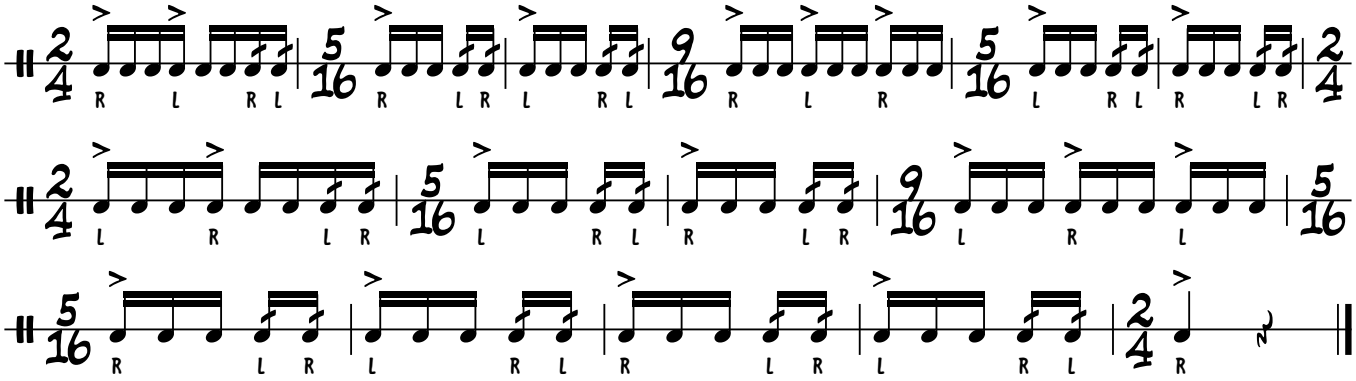


Pats

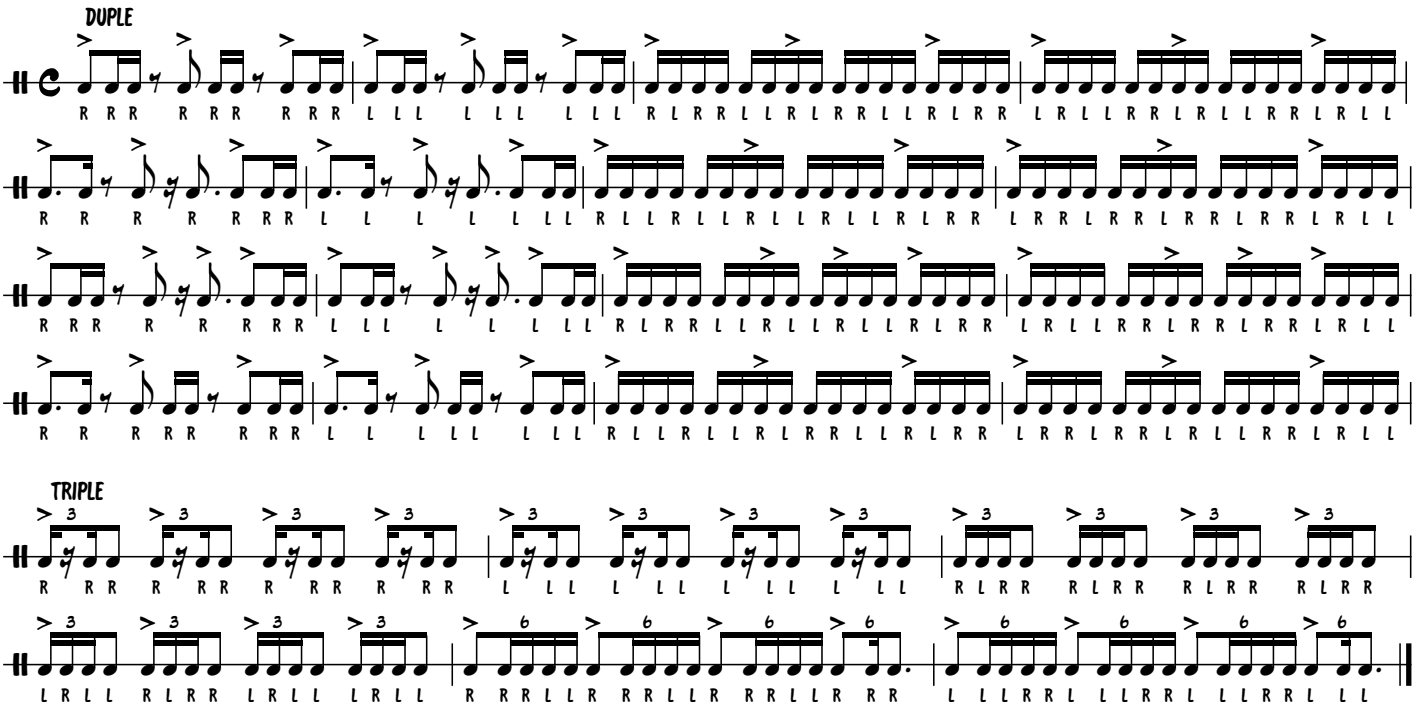


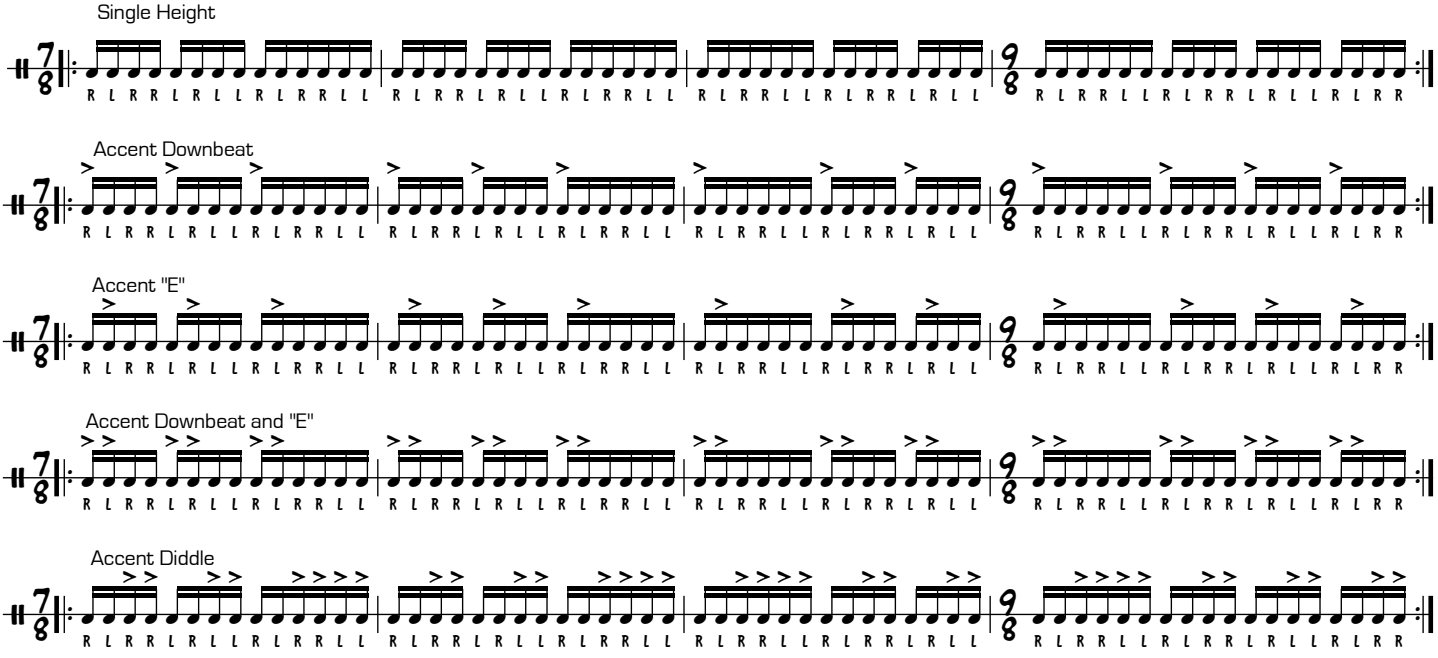
Two-Height Rolls

Switchback Rolls



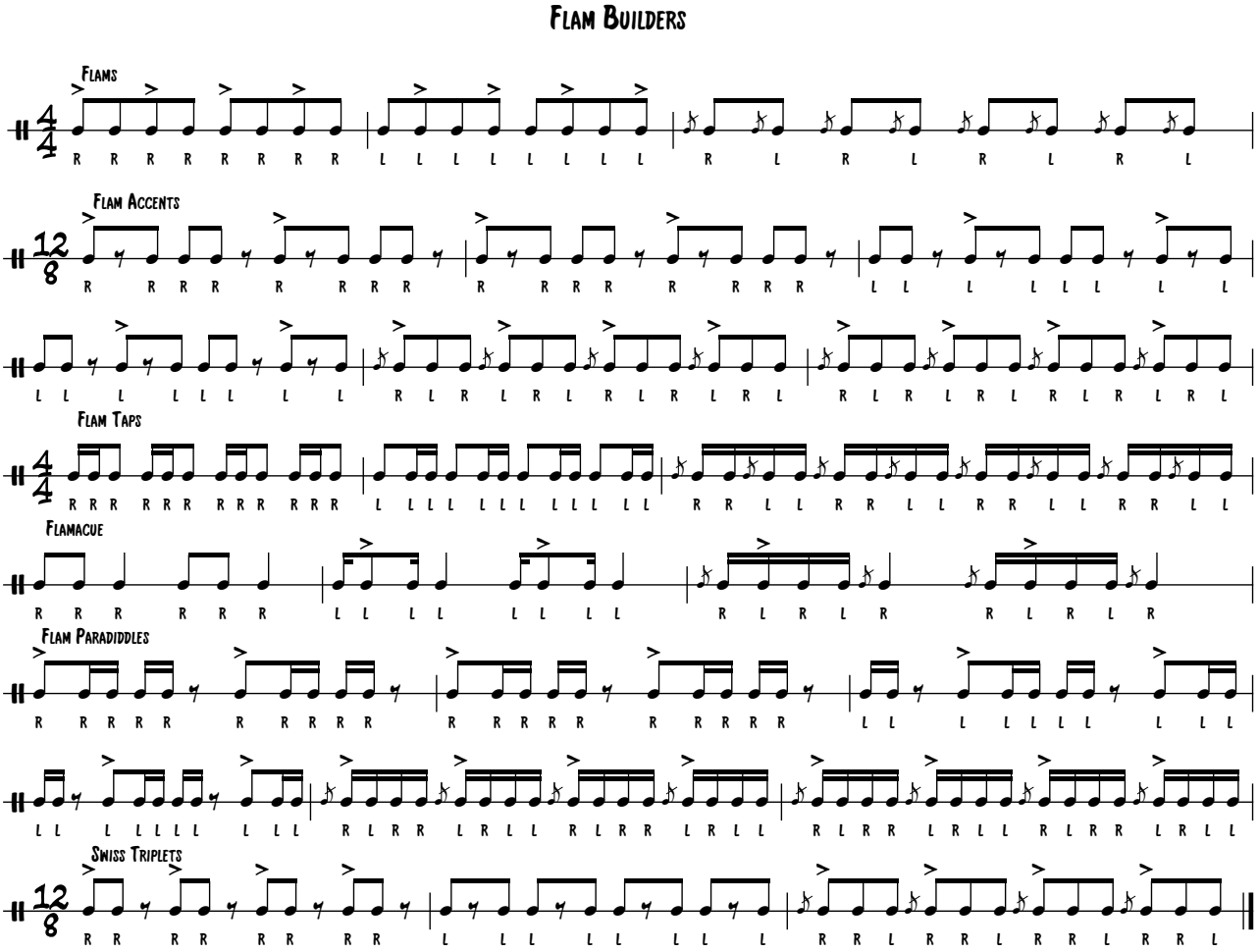
Paradiddles/Two-Height Diddles



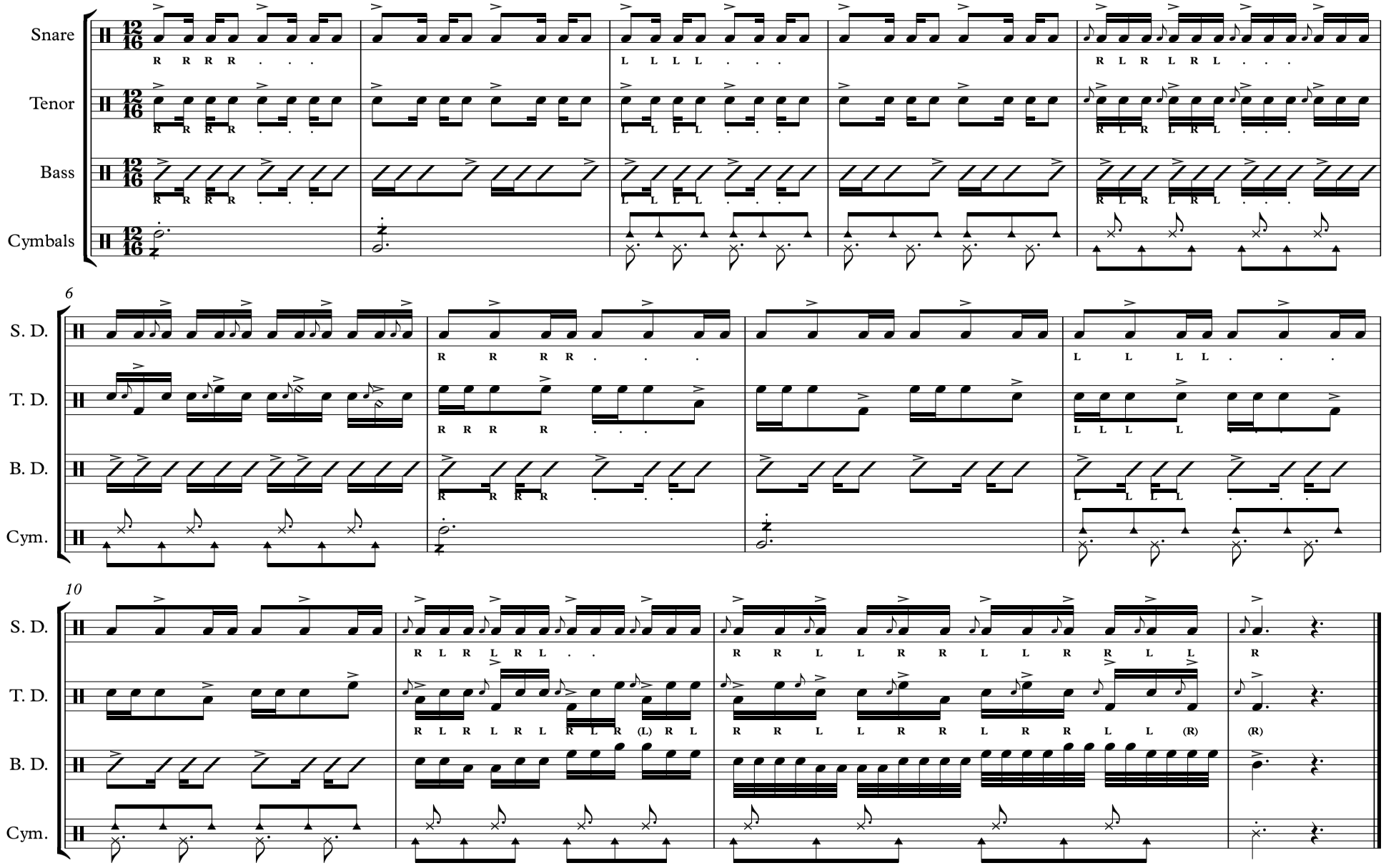


Flams

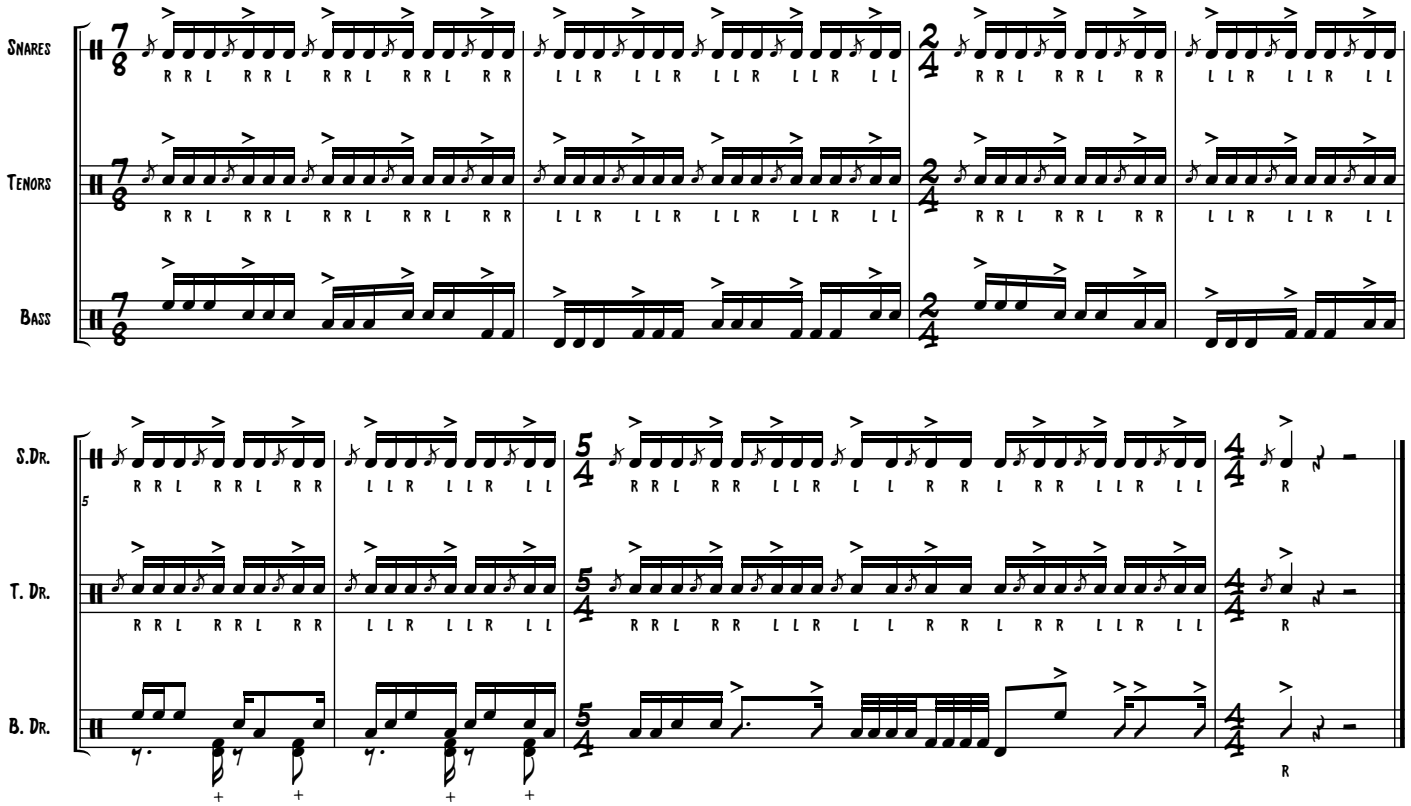
Flams add duration and texture to notes. The addition of the grace note makes the whole figure sound "fat." The properly executed flam has two parts: the Primary Stroke, and the Grace Note. The Primary Stroke is a Piston Stroke or a Down Stroke from a height suitable for the dynamic. The Grace Note is dropped from an inch or less. When these components are initiated simultaneously, the desired flam effect is achieved. The most common error in flam execution is to lift the Grace Note. No matter how high the Primary Stroke, the Grace Note should be dropped from one inch or less. Mastery of Up and Down strokes is important here so Accent to Tap exercises are good preparation. Practice the exercises slowly, then gradually speed them up but not at the expense of proper technique. New drills can be constructed for the Advanced Flam Patterns in much the same way as the Flam Builders. Practice with both right and left hand lead.



Flam Accent

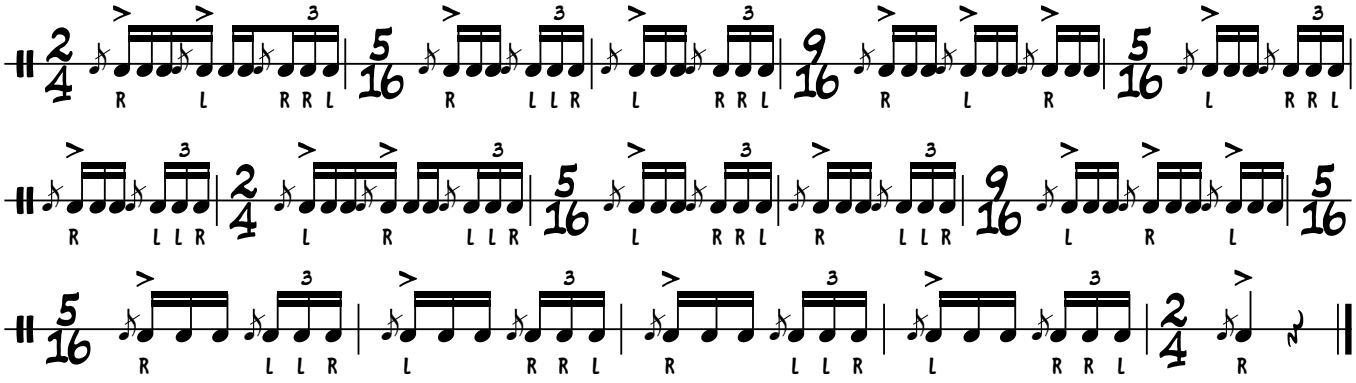


Swiss Turnaround



Bass Drums: Unison line will be same as snare and tenor part. Learn both unison and split.

Switchback Swiss



Stick Control

The basis of everything we do can be boiled down to this simple term: stick control. When all the ornaments and articulations are stripped away, we are left with basic patterns. The following are taken from George Lawrence Stone's *Stick Control* and John Wooten's *Drummer's Rudimental Reference Book*. Consider setting a metronome very slow then increasing the tempo slightly every minute. Play each pattern the at least 10 times through. Mix and match, make variations. The goal is even flow and agility but without thinking too much. This will prove to be very difficult for many: maintaining consistent sound quality amidst various hand changes.

Think you don't have time for these? Do this during your favorite tv program. You'd be surprised how many movies you can make it through while practicing. Let your mind go free and your muscle memory take over as you build a solid foundation.

Stick Control Games
In addition to playing these straight from the page, here are several ways to spice it up. Use your imagination though. The possibilities are endless!

- Play right hand notes against constant left, and vice versa
- Play each exercise using flams instead of single notes
- Accent every right hand note; then every left
- Flam every right hand note; then every left
- Accent the first and fifth notes of each measure.
- Flam the first and fifth notes of each measure.
- Diddle the first and fifth notes of each measure
- Swing the beat in each exercise
- Create tenor and bass splits

Single Beat Combinations

(*Read downward*)

1 R L R L R L R L R L R L R L R L

2 L R L R L R L R L R L R L R L R

3 R R L L R R L L R R L L R R L L

4 L L R R L L R R L L R R L L R R

5 R L R R L R L L R L R R L R L L

6 R L L R L R R L R L L R L R R L

7 R R L R L L R L R R L R L L R L

8 R L R L L R L R R L R L L R L R

9 R R R L R R R L R R R L R R R L

10 L L L R L L L R L L L R L L L R

11 R L L L R L L L R L L L R L L L

12 L R R R L R R R L R R R L R R R

13 R R R R L L L L R R R R L L L L

14 R L R L R R L L R L R L R R L L

15 L R L R L L R R L R L R L L R R

16 R L R L R L R R L R L R L R L L

17 R L R L R L L R L R L R L R R L

18 R L R L R R L R L R L R L L R L

19 R L R L R R R L R L R L R R R L

20 L R L R L L L R L R L R L L L R

21 R L R L R L L L R L R L R L L L

22 L R L R L R R R L R L R L R R R

23 R L R L R R R R L R L R L L L L

24 R R L L R L R R L L R R L R L L

The Cymbals

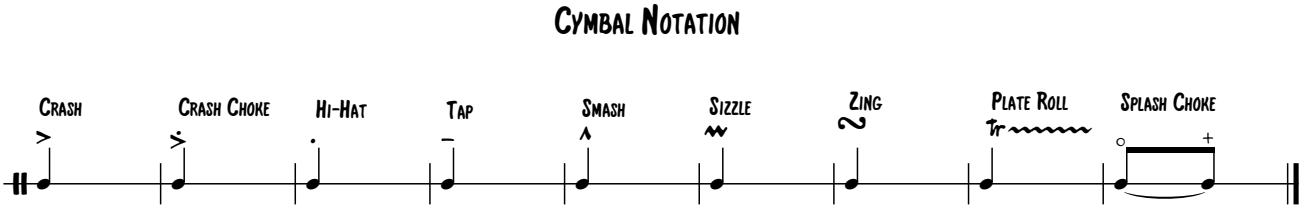
Although technically a field instrument, the cymbal section has been given its own chapter because of its unique and specialized nature. Cymbal technique is unlike that of any other instrument used in the band, and its mastery requires diligent practice and high skills of physicality and aural awareness. The cymbal has the added dimension of contributing as much visually as with its sound. Controlling the plates to this end is very important. This also calls upon the creativity of the cymbal section to the utmost degree.

Parts of the Cymbal

Players are individually responsible for the care and maintenance of their instruments. You should familiarize yourself with how to tie a good cymbal knot. The instruments need to be cleaned before every performance. When polishing a cymbal, always rub in a circular motion with the tone grooves so as not to wear them off. Should a cymbal develop a crack, stop playing it and notify the instructor immediately. Cracked cymbals can be fixed but continued playing after one develops can cause it to get too severe. Reasonable quantities of the supplies you need will be provided: cymbal straps, gloves, cymbal cleaner, etc., however it may be a good idea to obtain some of these items on your own.

Notation

Cymbal parts in marching ensembles are written in much the same way as bass drum parts, that is melodically. Rather than having one unison cymbal part, the notes are more often spread out in sequence. Depending on the number of players there may be some doubling, but generally players are responsible for one part of a whole. Due to this, of utmost importance to cymbalists is the ability to think and hear melodically. Mastery of timing concepts is imperative. Rather than learning only his or her individual part, the player should know the part as a whole and "plug-in" his or her notes as required. Good cymbal sections can accurately play their music even after switching parts. The notation will be with real note heads (no x's or diamonds). In general the cymbals should be allowed to ring unless a duration is indicated. This will be notated either as a choke or a tie to a rest.



Basic Crash Cymbal Technique

Physical Conditioning

Playing cymbals in a marching ensemble puts physical demands on the player above and beyond most instruments. Upper body strength and flexibility as well as good endurance are all necessary not only to perform the basic skills, but to control them with ease and sustain them through a lengthy performance or rehearsal. The cymbal section's warm-up should always begin with exercises designed to develop these physical attributes. Exercises without instruments should be done in a number of repetitions suited to each player. Exercises with instruments should be done to counts.

Exercises without instruments:

- Upper torso and arm stretches for flexibility
- Crunches for abdominal strength
- “Supermans” for back strength
- Push-ups for arm strength
- Running or jogging for endurance

Exercises with instruments:

- Front Lifts
- Side Lifts
- Circle Lifts

The Marching Cymbal Grip

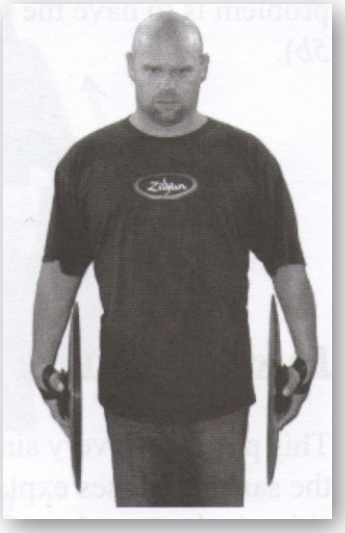
Marching cymbals are held differently from concert cymbals. The marching cymbal grip allows more control of the plates that is essential for visual uniformity. Here is a step-by-step method for forming the proper marching cymbal grip:

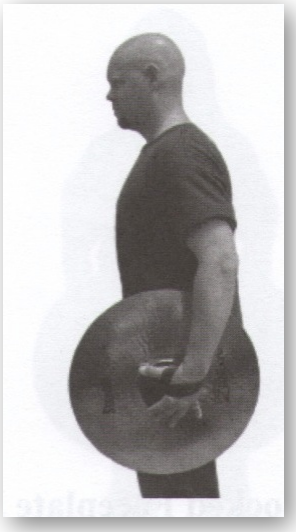
1. Hold the cymbal in a vertical position and put the entire hand through the strap up to the wrist with the thumb pointing up.
2. Point the thumb down turning the hand so the palm is facing away from the bell of the cymbal.
3. Rotate the entire hand downward pointing the thumb toward yourself and turn the palm toward the cymbal until it touches the bell. The strap should rest at the base of the thumb and forefinger.

SET POSITIONS

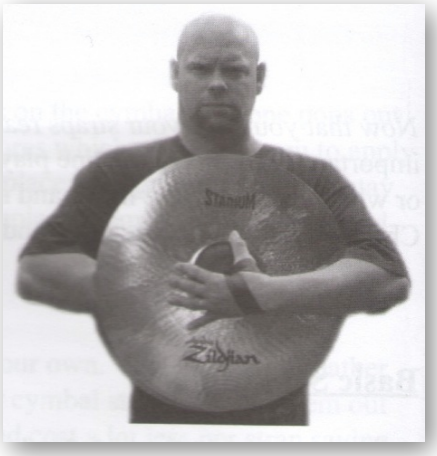
Symmetry across the line is important even before a single note is played. This not only helps achieve a uniform look, but sets individual posture and physical presence. These positions are used when standing at attention or when moving in drill not playing. There are three set positions we will use. A basic set, chest plate, and face plate.

Basic Set Position
This position is defined as: standing straight, hands by your side with the cymbals straight up and down parallel to the body, leaving a 2-inch gap between your hips and the cymbals. This position should look and feel strong and confident. Keeping an intense and ready look. There should be a slight ben in the elbow and the shoulders should be pulled back.





Chest Plate Position
For this position, you have the left cymbal over the right cymbal and they are both covering your chest. Your elbows will be away from your body so that you are forming an “A-Frame”. This position can be used when marching while not playing or a slow part of a show with no visuals. This is a much more secure position allowing greater uniformity across the line.



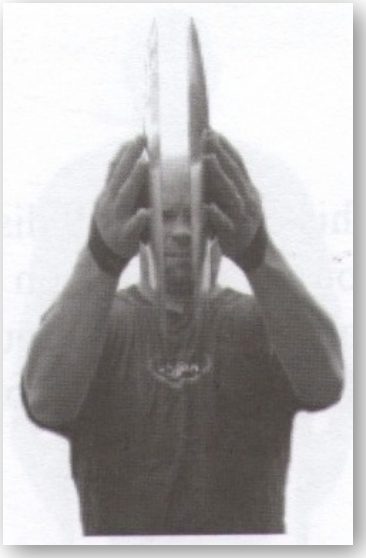
Face Plate Position
This position is very similar to Chest Plate and is used for the very same purposes explained in that section. The difference, as shown, is the top edge of the cymbals are positioned right below the eyes. It give you a mysterious look compared to the other set positions.

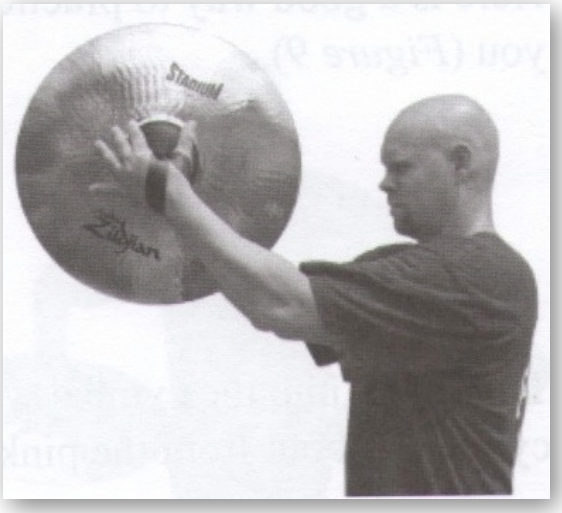
PLAYING POSITIONS

Having a solid set position is the first element in uniformity across the line and individual presence. The second element is the playing position. Correct playing positions will aid in technique and sound quality.

Think of this in terms of football perhaps. A kicker must have the ball properly positioned on the tee for kickoff. If the setup is poorly executed, chances are the actual kick will be less than desirable. The same holds true for our playing positions. We will use two positions depending on music and visual application; the vertical and horizontal.

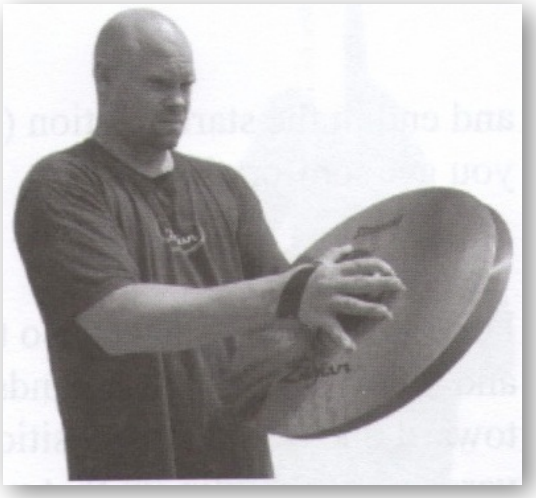
Vertical
This position is defined as having your cymbals in front of your face, straight up and down, perpendicular to the ground and parallel to each other having 1 to 2 inches of space





separation. The cymbals are raised to the point at which the bell of the cymbal is at eye-level.

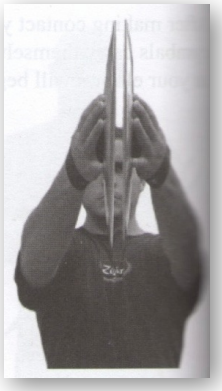
Horizontal
This position is defined as having the cymbals in front of your mid-section at a 45-degree angle with 1 to 2 inches of separation between the cymbals. The bells of the cymbals should be about 2 inches below and to the left of the sternum on your chest. The edge of the cymbals away from your body will be slightly elevated above the edge closest to your body.



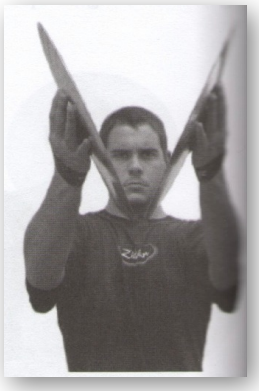
The Basic Crash

This basic crash motion illustrates all the principles necessary for good crash cymbal technique. Though many different crash motions will be used both for tonal and visual variety, they are all based on this foundation. Always be aware of the quality of sound being produced. Excellent technique and sound quality is largely a matter of grace and finesse rather than power. Here is a step-by-step method for the proper execution of the basic crash:

1. Start from the vertical playing position as discussed previously.

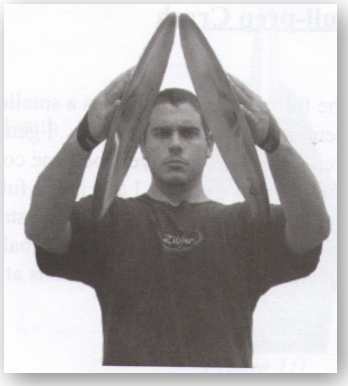


2. Open the gap at the top of the cymbals to for a “V” shape. From here, you will proceed to your contact point.

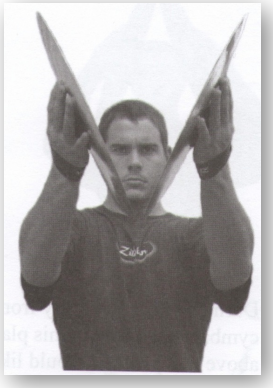


3. It will appear that you are making contact at the bottom of the cymbal first rather than the top due to the fluid motion of this technique. But you will actually make contact at the same time on almost all edges of the cymbals. Have one cymbal slightly higher than the other. This will leave a small gap which will allow air between the cymbals to escape and decrease your chances of inverting or catching an airpocket that will give you very poor sound quality.

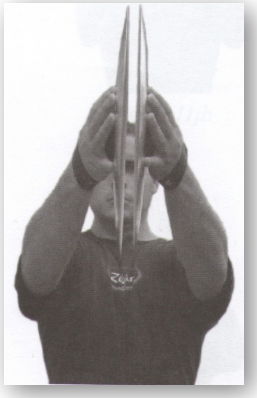
4. At the time of contact, you start the after-flow motion. The bottom of your cymbal follows your elbows away from the body into an “A” position.



5. This is followed by a fluid motion back inward forming another “V”



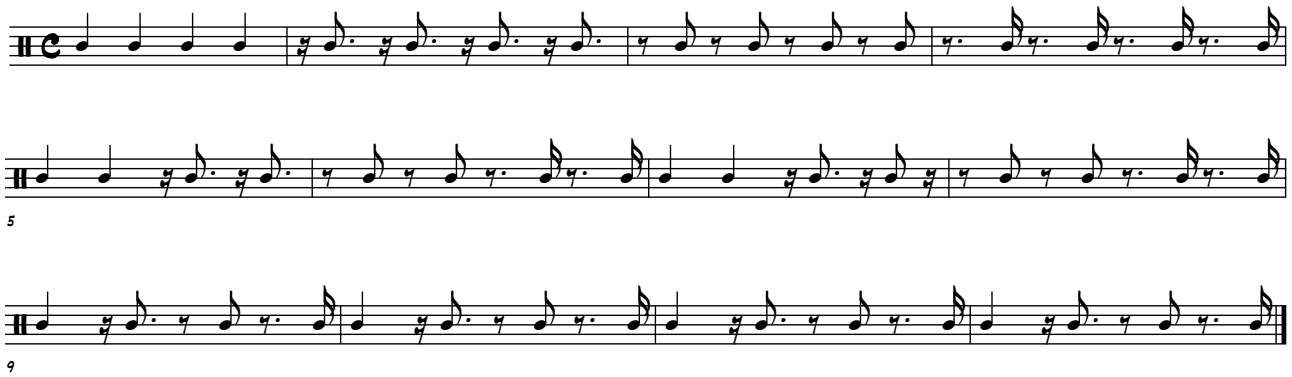
6. The “V” position will flow directly into the vertical playing position. The important concept from this entire progression is flow. Effortless and natural.



Timing Exercises

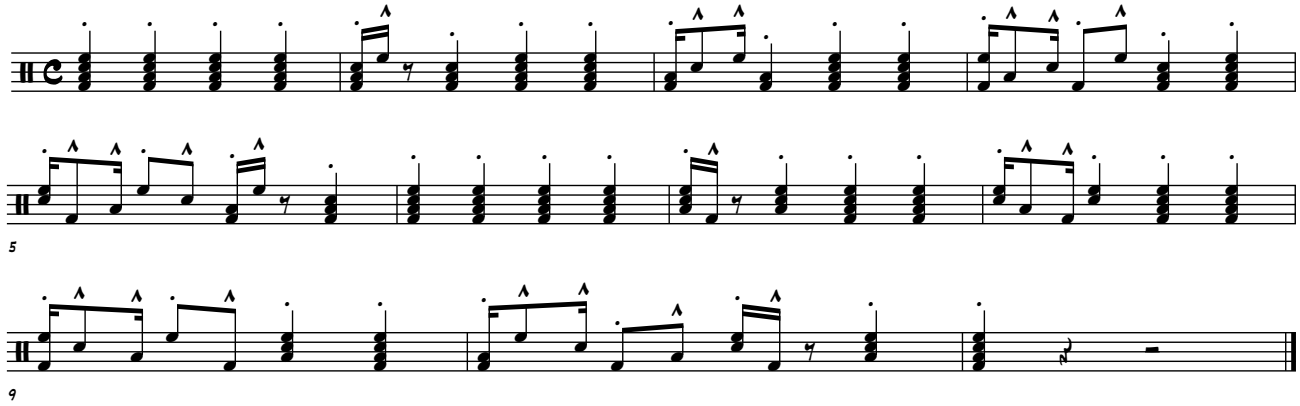
It is paramount for a cymbal line to move and interpret rhythms in a similar fashion. When split parts are involved, it helps to internalize the entire line rather than your individual notes. This will create better cohesion and flow–the entire group thinking as playing as if it were one person. These should be practiced with a metronome and music. Being able to feel groove and correct placement within the context of music will be beneficial.

4-2-1 Timing



This exercise incorporates unison downbeats with other 16th-note subdivisions. Players must also execute moving from the horizontal to vertical playing positions for the two different sounds. Various crashes and playing positions can be used.

Timing/Movement 1



The Front Ensemble

Orchestra Bells (Glockenspiel)

The orchestra bells or glockenspiel, has a high pure tone that projects well through any ensemble. The range is two and one half octaves from G3 to C6 and instrument has a transposition of two octaves. In other words the notes sound two octaves higher than written. It should be played with plastic mallets as a rule, occasionally brass may be used for a special effect. Due to the high register, natural sustaining quality of the metal bars, and delicate sound highly technical passages and rolls are rarely given to the bells. Take care to lighten up both the grip and stroke while playing bells as due to the complex overtone structure it is easy to overplay and get a harsh tone. In general, let the bars ring.

Chimes

Chimes will be suspended from a rack and used as necessary. They are played with plastic hammers on the crown at the top of each tube. Notes from a range of one and one half octaves from C4 to F5 will be used.

Xylophone

The xylophone has a high, brittle tone. It's range is three and one half octaves from F3 to C7 and it also transposes, sounding one octave higher than written. Plastic mallets should be the general choice, with softer mallets also used for special effects. The staccato nature and piercing tone of this instrument suit it to highly technical writing. The shortness of tone will require a faster roll speed than other instruments.

Crotales

Two octaves (C4 to C6) of crotales (tuned metal disks) will be mounted on the xylophone. They sound two octaves higher than written, and are played with plastic mallets. They have a high, singing tone similar to that of orchestra bells but with more warmth and sustain.

Vibraphone

The vibraphone has a mellow, ringing tone that nevertheless projects because of the metal bars. It has a three octave range from F3 to F6 and sounds as written. General purpose mallets would be medium hard to hard, cord wrapped in sets of two and four. Because of the natural sustain of the instrument, rolls are seldom used, and skill must be acquired to control this sustain. The principal tool for this is the sustain pedal, which in practice works much like a piano's sustain pedal. Mallet dampening is another more advanced method. Here the mallets are pressed into the bars, cutting off the ring. Many times this is necessary for clarity of line, so scale tones do not ring together. Using mallet dampening while the sustain pedal is depressed allows some notes to ring on while others are muffled creating harmonic textural effects.

Marimba
The marimba is a cousin of the xylophone. It typically has a wider range (four and one third octaves from A2 to C7) and sounds as written. They share many qualities in sound, however the marimba's is more versatile. It can have the brittle tone of a xylophone, but also the mellow quality of the vibes. It depends on the mallets and technique used. For this reason a wide variety of mallets are necessary to suit each musical situation. Sets of two and four, soft through hard, wrapped and unwrapped, are all useful.

Accessory Instruments
A wide variety of accessory instruments will be used based on the musical demands of the program. The most commonly used instruments are: suspended cymbals, bass drum, tam-tam, triangle, tambourine, wood blocks (jam blocks), cowbells, shakers, etc. Techniques for playing these instruments will be addressed in rehearsal.

Timpani
There will be a set of four timpani for use when the program calls for it. Only players approved to do so will play timpani. Timpani technique will be addressed on an individual basis.

Basic Keyboard Percussion Technique

Playing Spots
The proper playing spot on the naturals (white keys) is just in the center of the bar. Use the tops of the resonator tubes as a guide. This area produces the desired overtones aiding projection. The accidentals (black keys) will be struck in the center of the bar as well. The edge will be used only when speeds dictate better accuracy and movement. The spots where the bar cord passes through the bars are called nodes and should be avoided. When it is necessary to play with two mallets on an accidental, such as when sustaining, it is acceptable to position one of them near the center of the bar.

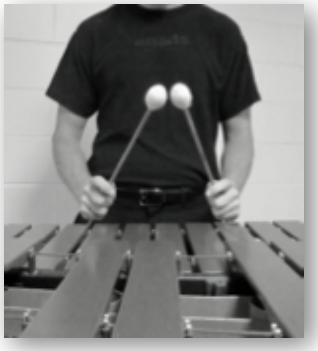
Technique Exercises
Exercises should be practiced with a metronome whenever possible. You can also practice scales along with your favorite songs. Have fun with it! Start slowly and increase tempo gradually. Accuracy and efficiency are more important than speed. Speed will come with patient repetitious practice. Practice with full, loud strokes at first, then try different dynamics, crescendi and decrescendi, etc. Exercises without specified transpositions should be played in all keys. Transpose chromatically upward. Play scale exercises to both major and minor, and apply major, minor, dominant seventh, and diminished seventh qualities to chord exercises. Single line exercises can be stacked into chords among the ensemble.

Two-Mallet Grip

The setup for two-mallet playing will be similar to that of the snare drum: 1 to 2 inches of the butt end of the stick behind the back of the hand, thumb placed parallel on the side, etc. There are some differences though moving forward which are outlined below.

- The front of the hand, which includes the index finger, is relaxed. Notice in the photo the relaxed, natural curve to the index finger and the space between the index finger and the middle finger.
- The back of the hand, which includes the pinky and ring fingers, is firm.
- About two inches of mallet shaft should stick out behind the hand. Find the best fulcrum spot for the mallet and avoid choking up too much or too far back.
- With the exception of very fast playing, the mallet should not move much within the hand during the stroke. The wrist will general all of the momentum. Unlike drums, mallet instruments to not provide a rebound, so we much generate our own using the wrist.
- The firmness in the back of the hand should generate weight into the bar. Think of your hands feeling heavy enabling you to produce a big, dark, full sound.

Stroke



- Wrists are positioned very low to the instrument and the mallet heads are high.
- Hands should angle in slightly. The tops of your hands are neither completely flat with your palms down, nor turned completely to the side with the thumbs facing up.
- Think of all strokes being initiated by the wrist and back of the hand. We will incorporate some arm movement later on. In order to produce maximum volume in a football stadium, arm movement will be needed. Always start though at the wrist
- When executing fast two-mallet passages, the fulcrum will transfer to the front of the hand, thumb and index finger. This will allow for greater agility. At fast tempos, lower your mallet heights and eliminate any extraneous movement not needed. Efficiency is the key here.

Keyboard Posture

Great percussion performance begins with great posture. Before you play a note, members of your audience make conscious and unconscious judgements of you based on the way you look behind your instrument. Our goal is to convey a sense of maturity and professionalism. Performers should make a noticeable impression on the viewer/ listener by projecting confidence, poise, and dignity.

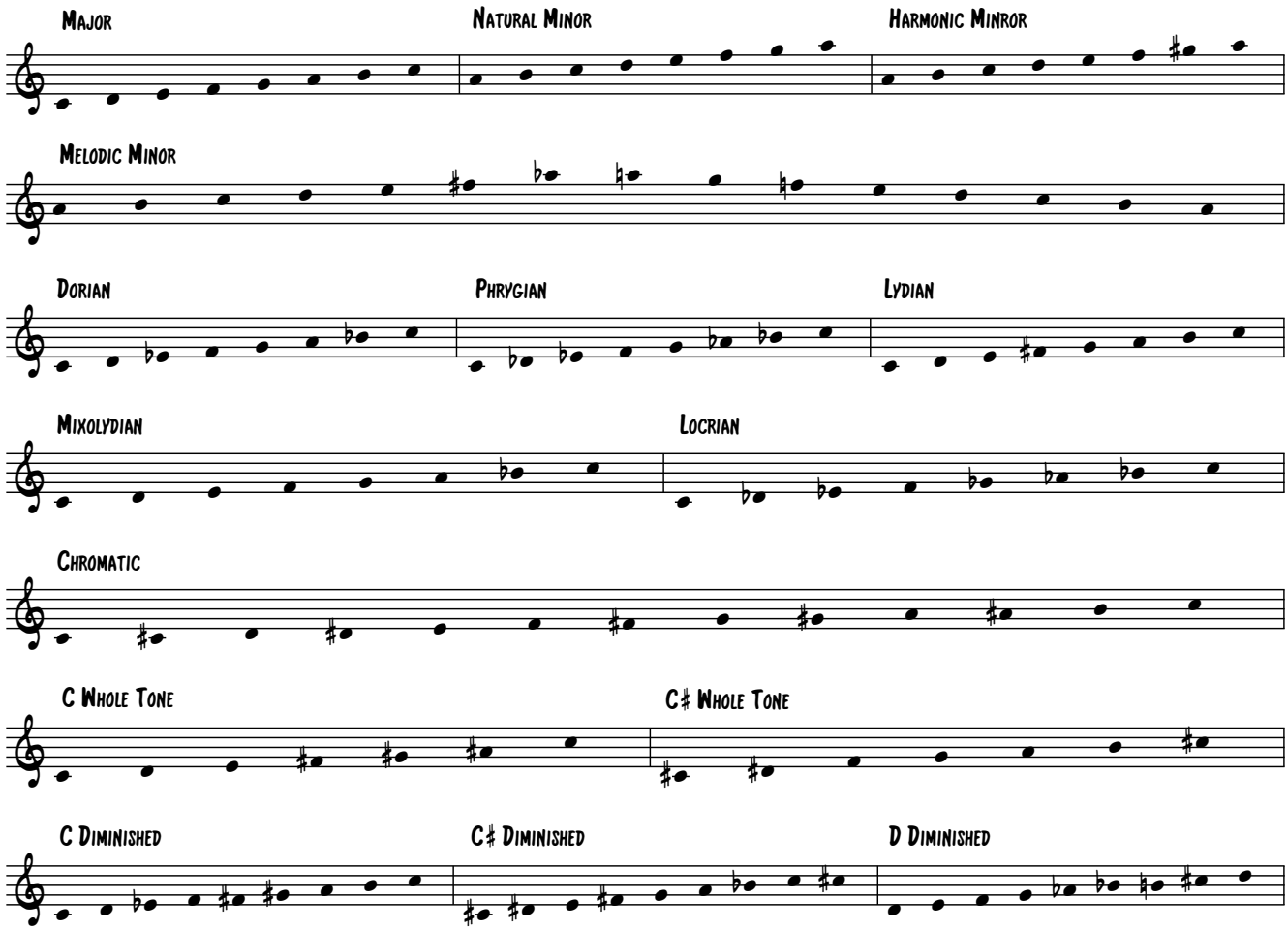
- Stand with your feet shoulder width apart
- Stand as tall as possible, imagining a string pulling you up from the top of your head
- Imagine a straight line extending from your ears to your shoulders to your hips on down to your heels
- Your upper body should be upright, never hunched over
- Shoulders should be slightly back and relaxed. Opening up the check and creating a “big look” to your stance and body carriage
- Keep your head up and look down at the keyboard through your nose
- Upper arms should stay relaxed and hang down from the shoulders naturally and without tension
- Although the distance between your body and the keyboard will vary based on the musical passage, in general you should stand in such a way that moving between the upper and lower manuals is easy and fluid

Setting Up The Mallets and “Looking In”
Set up for each exercise, phrase of music or start of a piece with your mallets directly above the notes the hands are about to play. This is very important in facilitating starting music by looking towards the inside of the pit rather than at your own instrument. Set up directly over the notes you want to strike, look into to the center of thee pit, and strike your notes without looking back. Trust that if you are over the proper notes and you fire straight down, you will (with time) rarely miss notes. This process takes practice and patience but it is worth it. A missed note on a rhythmically accurate attack is far better than late or early attacks.

Even when practicing alone, practice the act of “looking in.” Get comfortable with what it feels like. Successful execution of this ensemble activity will greatly enhance the musical, physical, and performance level.

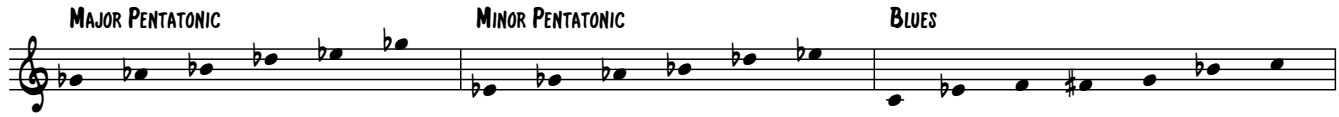
Scales and Modes

All scales and modes, as show below, are based off of differing intervals of half and whole-note steps. You can also think of these in relation to what scale tones, in it's major key, have been altered, ie. Lydian is a major scale with the 4th raised a half step.

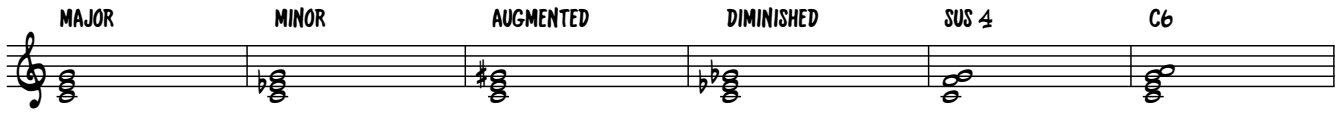


Pentatonic and Blues Scales

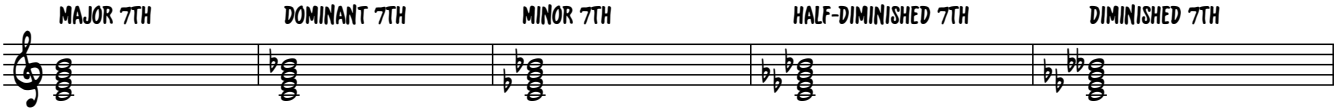
Pentatonic scales are most easily demonstrated on the black keys of the keyboard. Blues scales are altered pentatonic scales including the 'blue note' or lowered third.



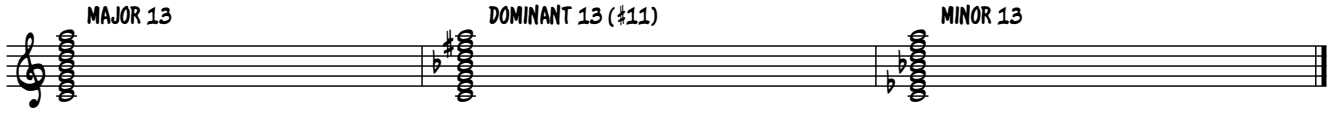
Triads
Triads are the most basic of chords, and are built from the first, third, and fifth scale



degrees. The suspended four chord has become a common sound in popular music. The triad with an added sixth still functions as a triad, even with the addition of the color tone. They can also be played in inversions.



Seventh Chords
Seventh chords are a further extension of triadic harmony. The most important tones are the third and the seventh. They can also be played in inversions. Diminished seventh chords are symmetrical. There are three sounding chords whose inversions each serve four keys.



Extended Harmony
Chords can be stacked in thirds beyond the seventh to form up to a thirteenth chord. Beyond this the root is repeated. There are three commonly used thirteenth chords, each having the same function as the seventh chord from which it was built. The raised eleventh in the major and dominant thirteenths is to avoid a clash with the third.

Scales and Check Patterns

Rhythmic consistency is the backbone of any playing, regardless of instrument. Mallet instruments also have the unique addition of scalar patterns, which make up a large majority of their musical material. The check patterns should be a daily and regular part of your practice. They cover every combination of duple and triple combinations (three note, two note, and single note.) All front ensemble members should also incorporate Timing 101 from the battery section. Good timing is good timing no matter what section you are in.

Use the pattern in the exercise or play them on a single note. **You should be fully proficient in these leading with both the right and left hands**.

Practice the check patterns at all dynamic levels and tempi.

Four Mallet Technique

Occasionally on marimba and vibraphone it is necessary to use four mallet technique. This allows for fuller harmonic textures and more advanced melodic figures. Four mallet ability is not required to get or stay in the Pit but it is hoped that the keyboard players will want to gain some knowledge in this area to supplement and expand both their capabilities and those of the section as a whole. There are two basic systems of playing with four mallets that will be used. Players may become proficient in either or both as they are not exclusive of one another. Indeed they are complimentary, the strengths of each covering the weaknesses of the other. As these systems are too complex for detailed presentation here, only brief descriptions are given. For more detailed information, consult the bibliography and the instructor for assistance.

The Burton System
Jazz vibist Gary Burton developed this system in the early 1960's. It uses a firm grip in which the mallets cross in the hand, and a stroke similar to that used for drumming. Its advantages are relative ease in learning, inherent strength in grip and stroke, and it is very good for vibraphone mallet dampening. Its disadvantages are clumsy interval changes, and limited mallet independence. To form the Burton Grip, start with a normal two-mallet grip. Insert the second mallet (which will be the outside mallet) in each hand between the first and second fingers, and between the inside mallet and the palm. Intervals are changed by moving the inside mallet with the pinkie and ring finger on the end of the mallet, and the forefinger and thumb on the other.

The Stevens System

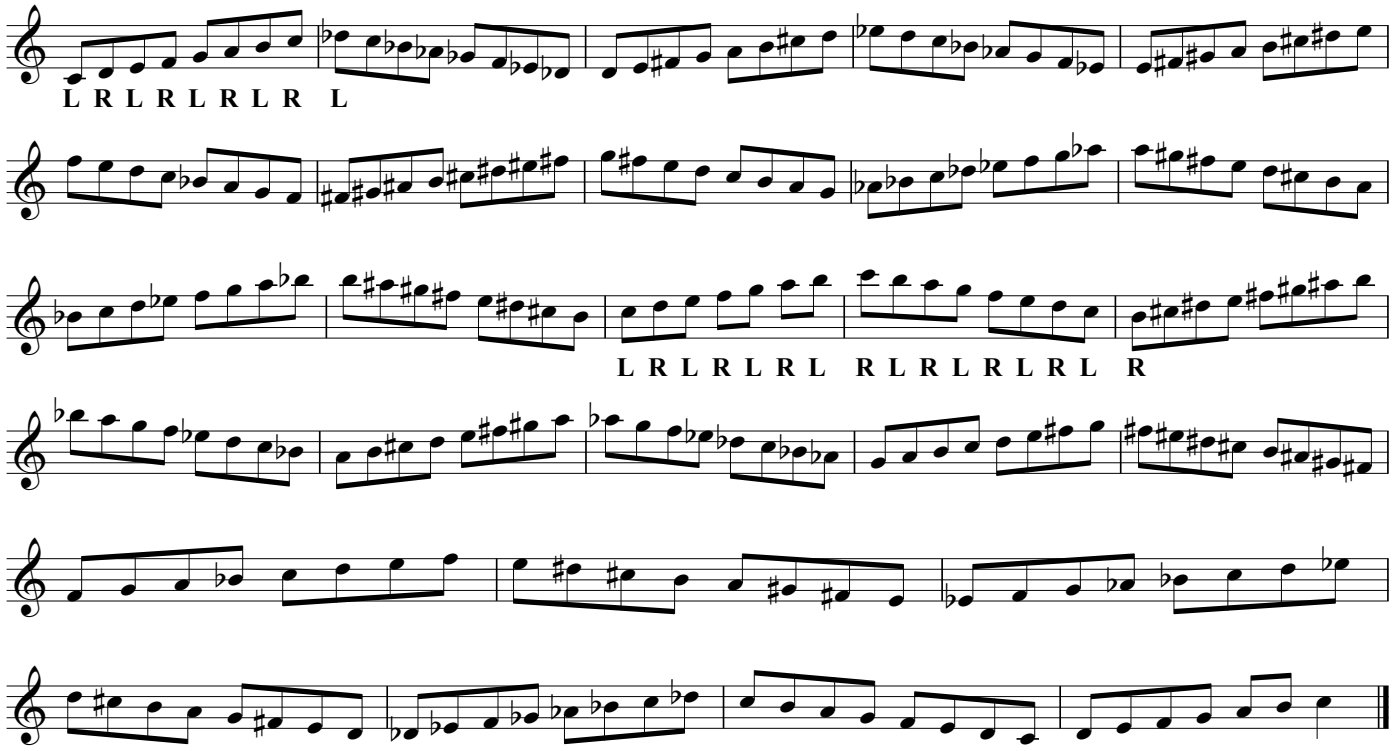
Leigh Howard Stevens first developed this system in the early 1970's for his style of "classical" marimba playing. The mallets do not cross in the hand using the fingers more and giving them greater independence. Also, the hand position is vertical allowing for a rocking back and forth motion of the mallets as well as the up and down. Its advantages are freedom of motion, mallet independence, and smooth interval changes in a wide range. Its disadvantages are that it's difficult to learn due to great amount of technical detail, and it's not as strong until well developed. As this system is too complex for complete discussion here, individual attention from the instructor is necessary for those interested.

Stroke Types
There are four basic stroke types for four-mallet performance. They are Double Verticals (both mallets in one hand striking at the same time), Single Independents (each mallet striking separately), Single Alternating (both mallets in one hand alternating strokes), and Double Laterals (sequential striking of both mallets in one hand).

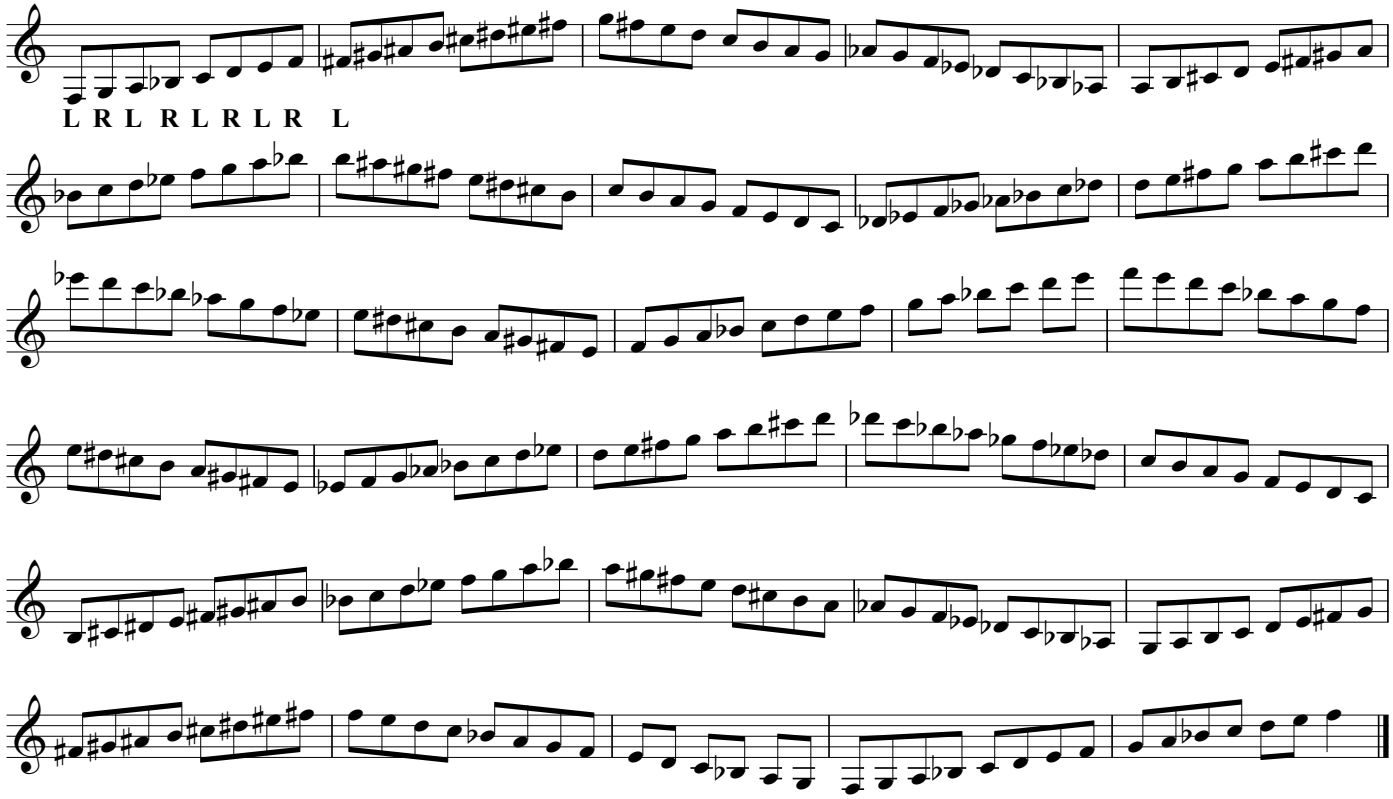
Double Vertical strokes are done in a similar fashion to a regular two-mallet stroke. Using the off mallet as an axis, and rotating the stroke around it performs single Independent strokes (one mallet at a time). By rocking the hand back and forth, Single Alternating strokes are produced. Double Lateral strokes are the equivalent of a double-stroke on a drum, where to notes are produced by one stroke. They are accomplished by scooping the wrist in the direction of the stroke.

Each stroke type should be mastered alone before continuing on to the exercises. In all further discussion and in the exercises, the mallets will be numbered from left to right, low to high (1-2-3-4). Practice these very slowly at first; accuracy is more important than speed. As before, transpose through the twelve keys.

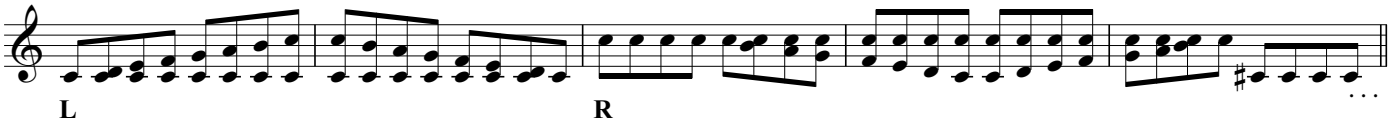
One Octave My Favorite



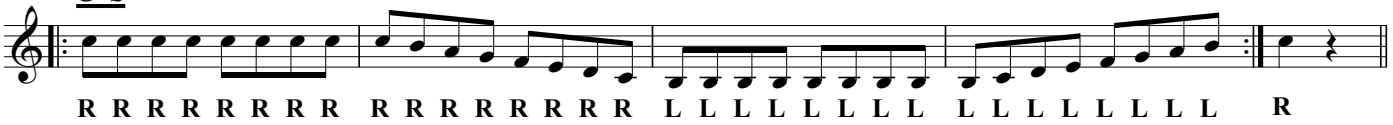
Two Octave My Favorite



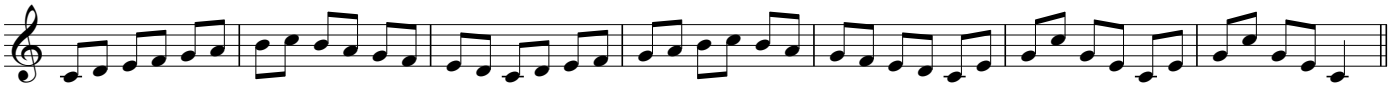
Lockjaw



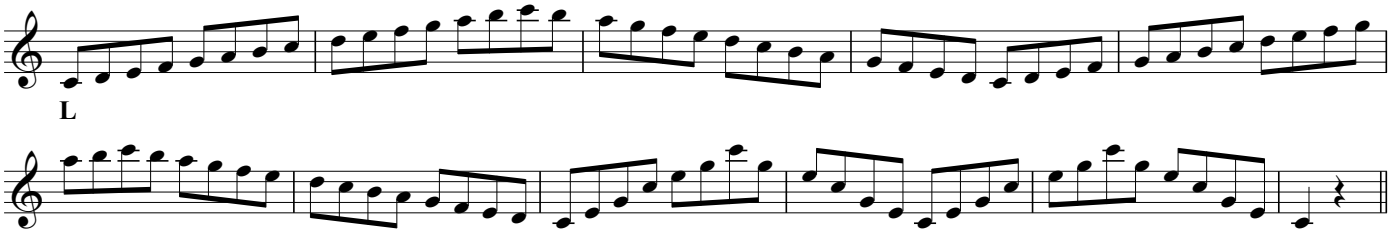
8's



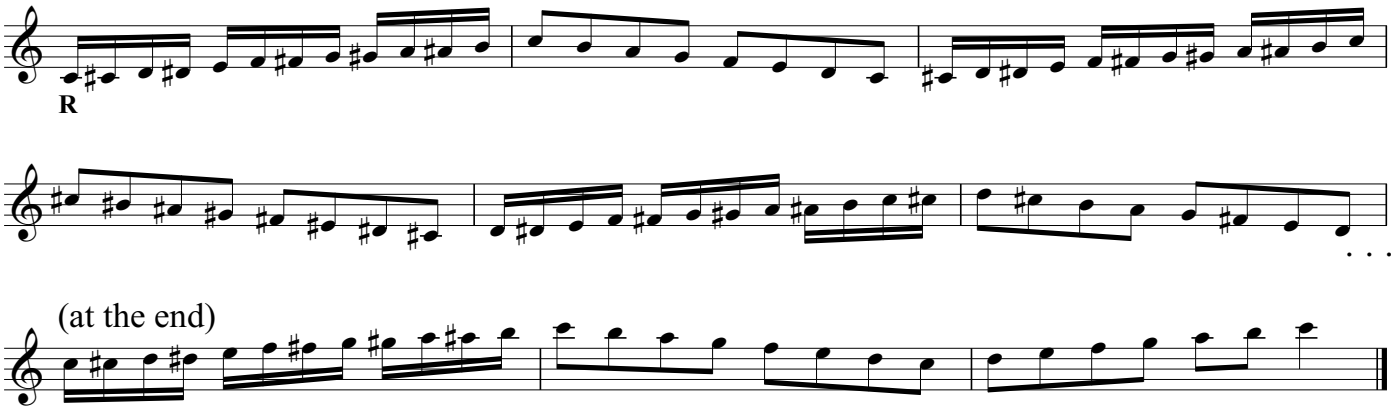
One Octave Scales & Arpeggios



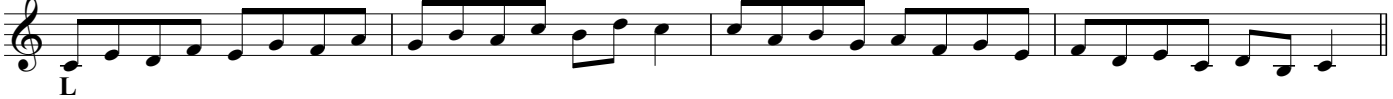
Two Octave Scales & Arpeggios



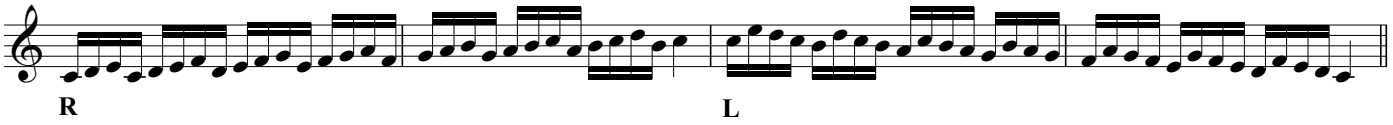
Chromatic Up/Scale Down



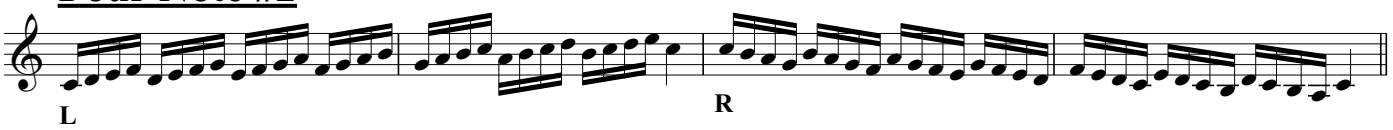
Thirds



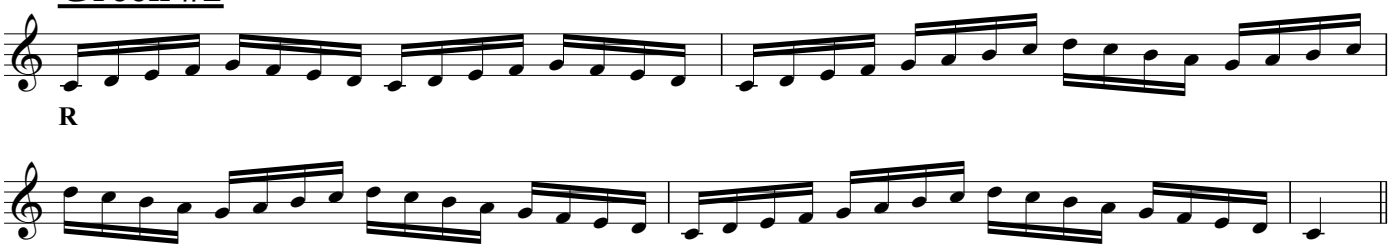
Four Note #1/Green #1



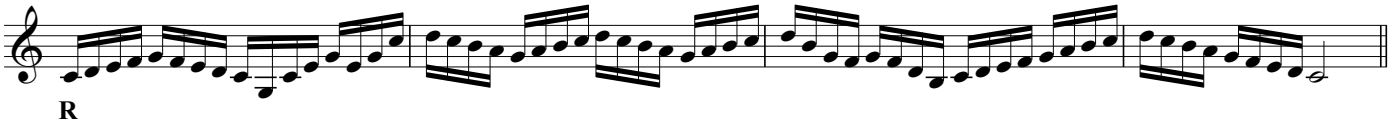
Four Note #2



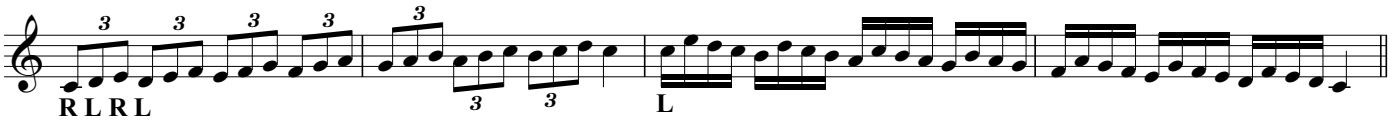
Green #2



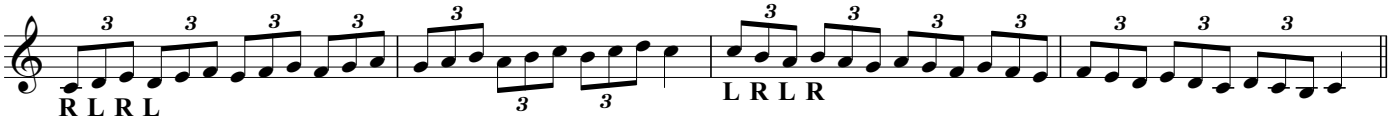
Green #3



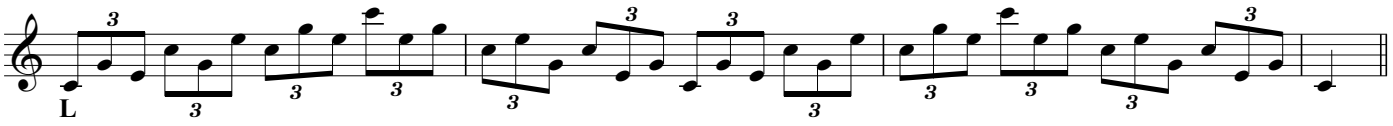
Green #4



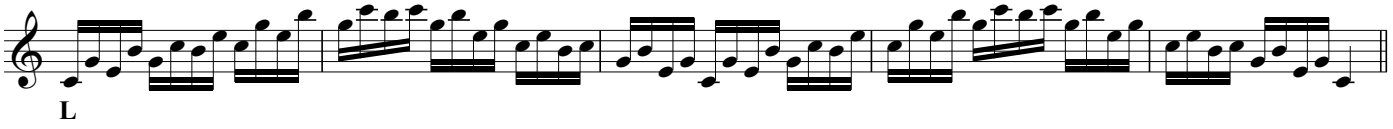
Triplet Green



Triplet Arpeggios

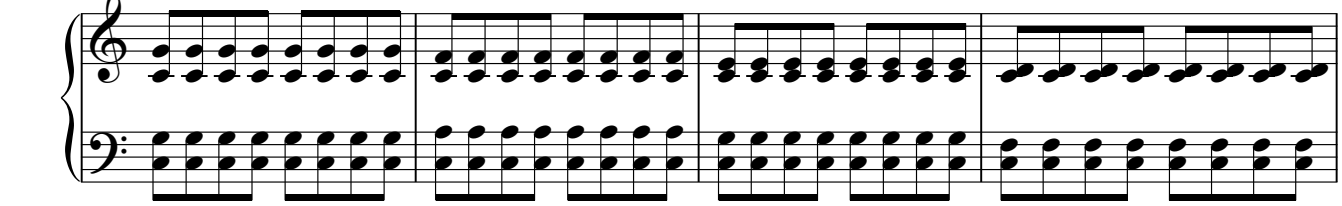


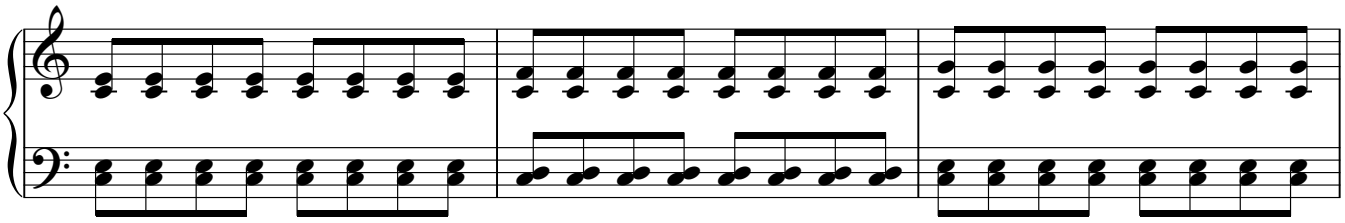
Duple 7th Arpeggios

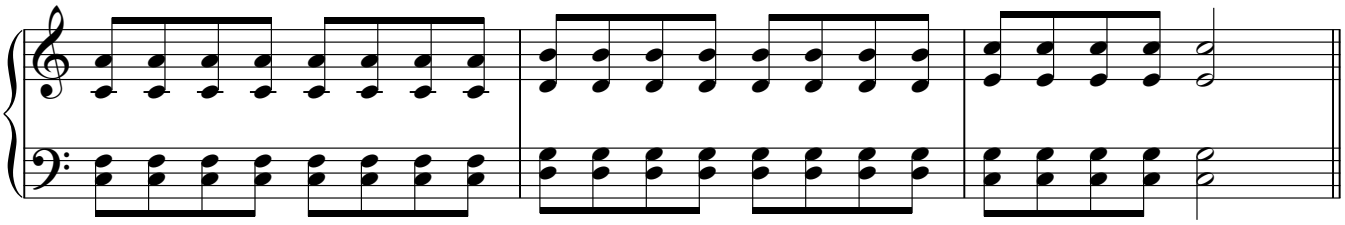


London Bridge

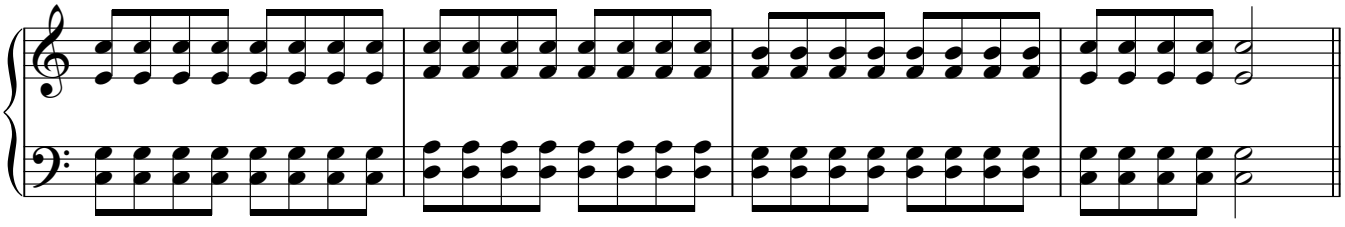
(Double Verticals)





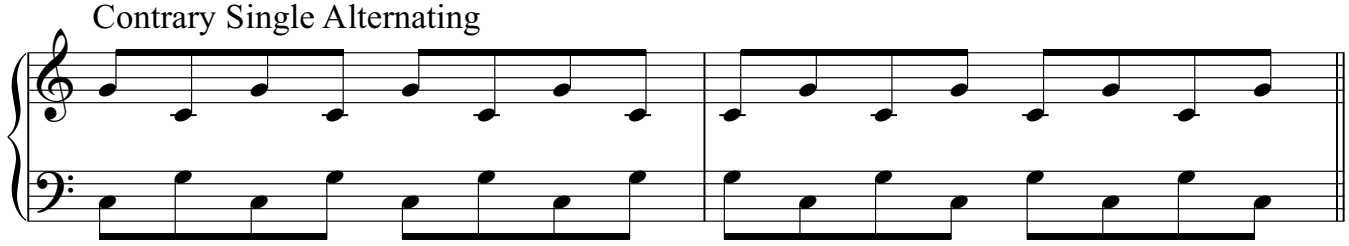


I - ii7 - V7 - I



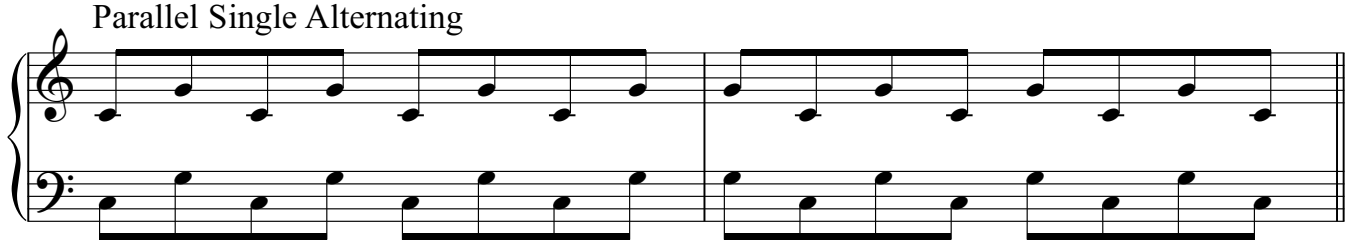
London Bridge Permutations

Contrary Single Alternating



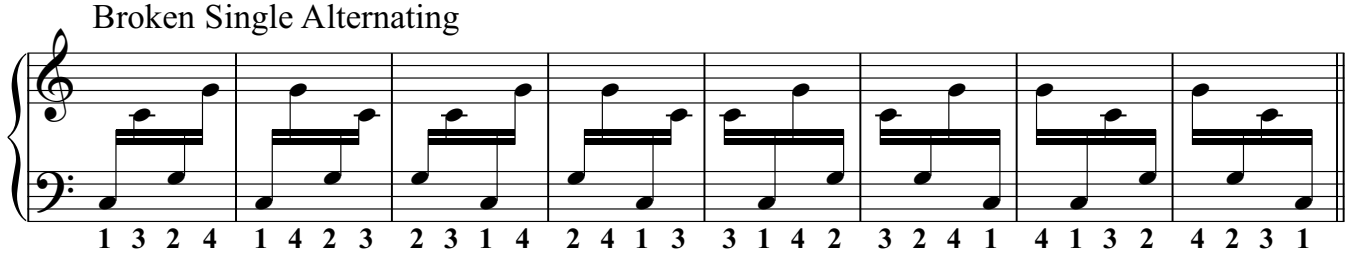
Out/In In/Out

Parallel Single Alternating

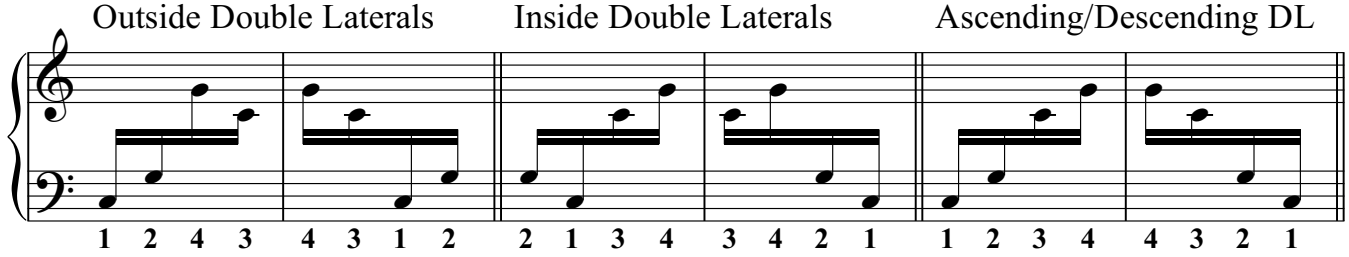


Left/Right Right/Left

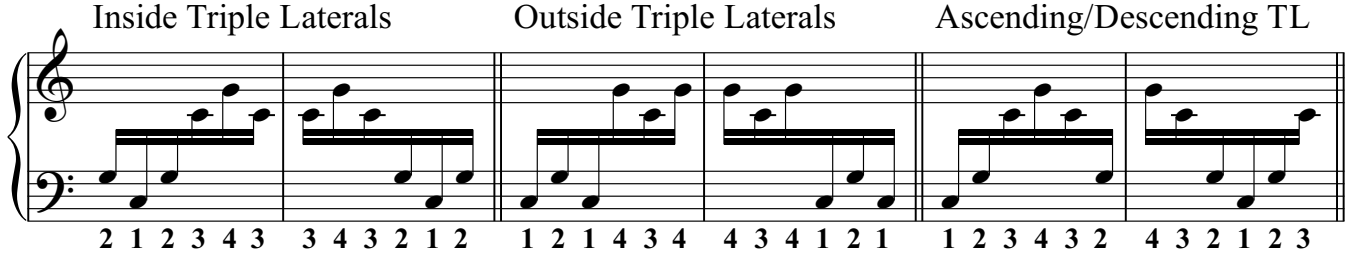
Broken Single Alternating



Outside Double Laterals Inside Double Laterals Ascending/Descending DL

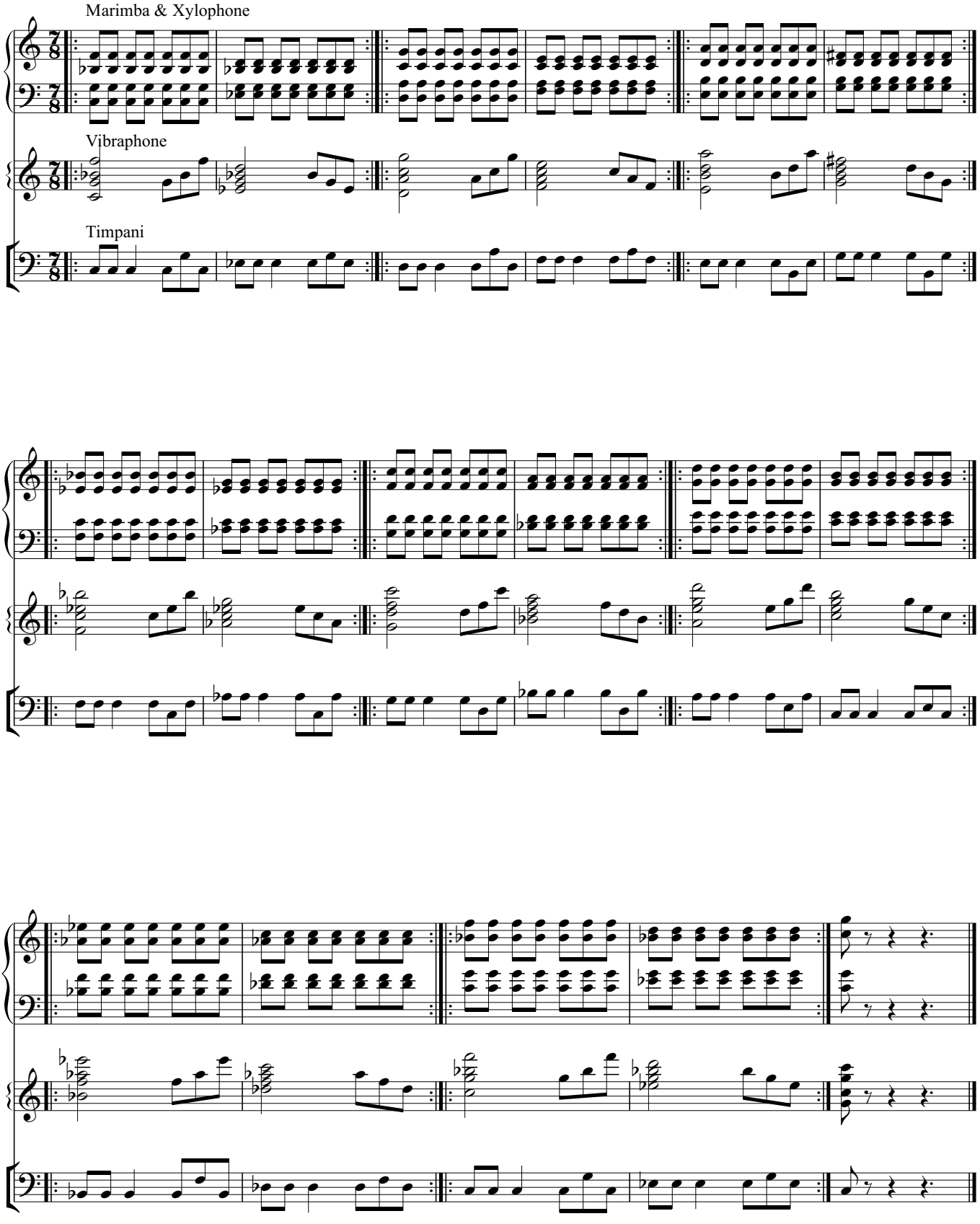


Inside Triple Laterals Outside Triple Laterals Ascending/Descending TL



7/8

Sandi Rennick



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