A Practical Method of Rhythmic Reading to Improve Comprehension and Performance

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Abstract

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The inspiration to create this method of rhythmic reading came from working with students in class and private instruction settings for nearly two decades and noticing a common trend: students of varying levels of advancement routinely lack a fundamental sense of steady beat and the ability to accurately interpret and perform rhythmic notation. These problems become more profound in sight-reading portions of classes and lessons.

This method is an attempt to provide instructors in either a private instruction or class setting a method by which they can help students develop rhythmic accuracy (separate from pitch), as well as cultivate a better sense of underlying pulse and a more complete understanding of meter. Rhythmic relationships and ratios are studied, as well as pulse/beat, meter (simple and compound with various beat notes), tempo, division, subdivision, dots, ties, and other related topics. Folk tunes and traditional rhymes are used to practice new concepts and help developing musicians master topics using familiar material.

This method has twelve units of advancing complexity, each featuring topics for discussion, rhythmic drills for individual practice, two-handed practice exercises, counting tips, worksheets, and ensembles for group practice. A variety of performance suggestions inspire teachers to create fun and innovative learning experiences in diverse pedagogical settings. The method is well-suited for students as they progress past elementary levels of musicianship; completion of all twelve units will provide a thorough foundation for the more complex rhythms and metric nuances found in intermediate and advanced literature.

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INTRODUCTION

While working with transfer students, music major non-pianists, private instruction piano students, and students performing in competitions and adjudications, I've noticed a deficiency in rhythmic training which manifests itself by rhythmic errors, lack of underlying pulse, and a lack of steady tempo. Better comprehension and interpretation of rhythmic notation is a constant need in music education. The fostering and development of a sense of underlying pulse, and the comprehension and implementation of all varieties of meter can solve many of these commonly observed rhythmic issues in student performances.

Having worked as an instructor of both Music Theory and Class Piano for several years, I've observed students thoroughly enjoying and appreciating pages in their respective textbooks which were devoted to pure rhythm – no pitch. In class piano, these well-used pages are few and far between, often only about six pages in any given 300-page text. As a music theory teacher, I've seen too many music majors come to the first week of class not knowing the difference between compound and simple time, and lacking the ability to successfully read rhythm without it first being performed by the teacher. Playing by ear is a helpful skill, but only in combination with a sound and functional ability to read music notation.

This project is created with the following objectives in mind:

- Provide an overview of the most important concepts and contributors to teaching rhythm, including the methods of Jaques-Dalcroze, Kodály, and Orff;
- Provide analogies to familiar folk songs and nursery rhymes to help teachers and students more fully comprehend meter and time signature;

- Provide an overview of rhythm/meter pedagogical resources in the current literature, including strengths and weaknesses;
- Provide a graded course to help teach rhythmic reading which will include unit objectives, drills, two-handed exercises, written exercises, and ensembles for each unit.

Acknowledgements

I would like to express my most sincere gratitude to Craig Sheppard for his unfailing support and his constant example of the highest artistry in performance and in teaching.

I would like to thank Robin L. McCabe and Donna Young Shin for supporting me through the dissertation process, and Brian P. Flaherty for being a member of my committee. I would like to thank Patricia Michaelian for her compassion and artistic guidance.

I would like to thank my parents, David and Carol Oliver, for instilling in me a love and appreciation of music and for enthusiastically encouraging me in my musical endeavors.

Finally, I would like to thank my husband, Nathan Christian, for creating an environment that enabled me to succeed. I could not have finished without his unwavering and constant support, and his encouragement on days when I needed it the most.

Dedication

To my family,

Nathan Christian

Freddy Byington

Bridget Byington

and

Mathis Christian

CHAPTER ONE

1.1 Rhythm: an introduction

All music is composed of combinations of sound and silence. Merriam-Webster's dictionary defines *rhythm* as follows: "an ordered recurrent alternation of strong and weak elements in the flow of sound and silence in speech." An elaboration of the definition in a musical context follows: "the aspect of music comprising all the elements (as accent, meter, and tempo) that relate to forward movement."[1] Music is often described as having horizontal and vertical components. Rhythm represents the horizontal element: the length of sounds or silences as they occur over an underlying basic pulse or heartbeat. The vertical element of music is the pitch - the highness or lowness of the musical tones. This dissertation will focus on the broad subject of rhythm and how best to teach it for maximum student comprehension and performance.

Rhythm is perhaps the most basic building block of music. It can exist on its own through drumming percussive instruments or simply by using our own bodies to create sounds, like clapping hands and stomping feet. Rhythm is independent of melodic pitches; melody, however, needs rhythm for shape and form. Because it can exist even without melody, it can be argued that rhythm is the most fundamental, core component of music.

The inspiration for this project came from working with several populations of music students. Primarily I work with youth from late elementary grades through high school in

[1] "Rhythm," *Merriam-Webster Dictionary*, accessed October 7, 2014, http//:www.merriam-webster.com/dictionary/rhythm.

individual instruction settings, and with college students in music theory/ear-training and class piano courses. Over the years I have noticed some general trends across all groups of learners. In observing private instruction students, either those transferring into my studio or those that I work with in adjudication events, it seems apparent that sometimes instruction from teacher to student becomes (probably inadvertently) the completion of one specific piece followed by another, but with a lack of connection of concepts and overall arc of learning. This often occurs when students rely too much on learning by ear and listening to their teacher play sections rather than independently dissecting the notes and rhythms on the page. As a result, the student struggles to apply rhythmic concepts of one piece to the next, barely able to read notation within a specific piece being adjudicated. Students learn basic rhythms in early lessons, but specific combinations of rhythms that are more challenging for a student to grasp are often taught by ear, without the student making a notation/sound connection. Students then cannot process or reproduce that same rhythm in a different piece with different pitches. If teaching challenging rhythms only by ear becomes standard practice, students end up being taught how to play specific pieces rather than developing a whole approach to playing piano and reading music. It is much more effective when students are taught concepts through a variety of practice experiences so that they can ultimately reproduce old rhythms in new literature as they sight-read and advance through the repertoire.

Early musical instruction in the United States takes variety of forms. Some parents enroll children in private music lessons from a very early age – this is probably most common in piano and violin study. Many public schools have a curriculum of music instruction with students beginning to learn a band or orchestral instrument starting in the 4^{th} or 5^{th} grade. Many of these young musicians have an opportunity to take extracurricular private instruction in their chosen

instrument during this time (late elementary through high school grades). Whether on an individual instruction or a school-based music education path, many teaching approaches are influenced by the ideas of Carl Orff, Zoltán Kodály and Émile Jaques-Dalcroze. The philosophies and methodologies of these great pedagogues, along with my personal experiential research from teaching individuals and groups for the last twenty years, combined to influence and shape this dissertation – "A Practical Method of Rhythmic Reading to Improve Comprehension and Performance."

1.2 Pedagogical contributions of Carl Orff, Zoltán Kodály, and Émile Jaques-Dalcroze

Carl Orff (1895-1982) was a composer and educator who developed a creative method of teaching children (*Orff-Schulwerk*) that uses percussive hand/body motions, instruments (such as xylophones, glockenspiels, wood blocks, claves, finger cymbals), dancing and movement, all combined with a strong focus on singing. The ultimate goal of Orff's approach is to teach music by having young students experience instruction as playtime. Teachers create experiential learning opportunities through engaging, fun activities in dynamic and playful environments, with each student having an individual job (playing their own instrument) as the group works together to sing songs, chants and rounds, and act out storylines.[2]

As a second-grader interested in taking piano lessons, I was required by my music studio to take a 12-week Orff course before starting private instruction piano. I vividly remember these classes. Sometimes when I am teaching my own students, the rhymes and tunes from the Orff sessions come back to me. Elements that left a lasting impression were the focus on underlying pulse, through layers of ostinato rhythmic patterns performed on a variety of instruments, and the simple effectiveness of verbalizing rhythms. Orff's method uses rhythms that children already know from nursery rhymes. Students sing, clap and play the rhyme, then add melody through pitches typically derived from a pentatonic scale. Notation is provided in charts, posters, or manuscript to support the reading/playing connection. An important component of this method is that the teachers start from the absolute most basic fundamentals (the underlying beat – often quarter notes in 4/4 time), then layer variants of the beat (perhaps rest/clap/rest/clap on the pulses in a basic 4/4 time accompaniment, or drone fifths on a half-note/quarter ostinato rhythm

[2] "What is Orff Schulwerk?" *American Orff-Schulwerk Association*, accessed October 14, 2014, http://aosa.org/about/what-is-orff-schulwerk/.

in 3/4 time.) These restatements of underlying pulse help the students deeply and effectively feel the core rhythmic foundation. Additional layering includes the melody (typically pentatonic), and a fourth and/or fifth layer of sound featuring a decorative restatement of the basic pulse. This final layer could be some sort of wood block or triangle playing a late-measure rhythm, such as two-eighths on the fourth beat of 4/4, or a single quarter on the third beat in 3/4 time. Alternatively it could be longer values of fifths on the metalophone, creating a ringing ostinato.[3]

I was reminded of these early Orff classes when my own children reached elementary school and had seasonal singing assemblies. The music teacher at their school did a great job teaching the children to sing with beautiful tone and pitch. Often the younger grades sang pentatonic tunes, especially starting with the descending minor third. This has been found to be a universal melodic interval in children's songs and can be seen in the song "Rain, Rain, Go Away."[4] At each assembly, the music teacher pre-selects a handful of students to perform ostinato patterns on a variety of xylophones and metalophones at the front of the group. It is always obvious that the chosen students delight in being selected to perform on one of those intriguing instruments. When I see how much the students enjoy this type of layering, I always wonder why these supplies and approaches are not more often used in private and class instruction. Looking back at my Orff class as an 8-year old, I remember the textures and sounds being so full and satisfying, as if I were part of a wonderful orchestra (which I was, in a way.) These recollections, combined with more current observations of the effectiveness of the Orff theories, have made me realize that basic components (especially underlying ostinato beat

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[3] Carl Orff and Gunild Keetman, *Music for Children – I: Pentatonic,* Eng. Adapt. Doreen Hall and Arnold Walter (Mainz: B. Schott's Söhne, 1956), 16.

[4] Arnold Walter, introduction to *Music for Children – I: Pentatonic,* by Carl Orff and Gunild Keetman (Mainz: B. Schott's Söhne, 1956), v-vii.

patterns) of the method could be both utilized and beneficial in private instruction settings (even if just teacher/student duo) as well as group instruction. My method uses layering, with a focus on metric accent as a fundamental component to exercises for both individuals (with teacher) and groups.

One of the most practical characteristics of the Orff system is that although there are five books with examples and exercises, the method itself is more of a style or manner in which to teach. There is a wealth of literature in the style, starting with the five books in the *Orff-Schulwerk* series, along with vast supplies of supplemental materials by others trained in the method. However, as long as the basic concepts are in place – ostinato patterns to feel the underlying beats, verbalizations of rhythms in the melody, supplemental layers to help support the beat and metric pattern – a teacher can create their own Orff-style curriculum with any tunes and rhymes desired. Lessons can be catered to the learner and adjusted to the size, average age, and level of advancement of the group. The Orff method is a great way to teach and learn metric accent, with some layers supporting the basic pulse, others providing divisions or subdivisions, and still others outlining melodies (or verbal chants). A solid sense of internal pulse can be successfully cultivated from the Orff system of teaching.

Another important composer and pedagogue, Hungarian Zoltan Kodály, shared several teaching philosophies in common with Carl Orff. Kodály supported teaching music through games, movement, and instruments, along with a core component of singing. He championed the idea that every citizen is not only capable, but has the right to learn music, and advocated for more teacher training to elevate overall music literacy throughout Hungary.[5] Like Orff, he believed that folk music provided the perfect vehicle to teach singing and rhythm, as these songs

[5] "The Kodály Concept," *Organization of American Kodály Educators*, Accessed October 16, 2014, http://www.oake.org/about-us/the-kodaly-concept.

were already familiar and thus could be used to create the notation/sound connection necessary to read music. In describing ideal teaching environments, Kodály believed that the young musician should have thorough training in singing, sight-reading, and dictation. To give lessons in instrumental instruction void of this context is "to build upon sand."[6] He was passionate about a broad music education for students, including many facets of ear training, dictation, and singing to develop musicianship and reading. He believed in thorough training of young musicians such that the pitch, rhythm, tone quality, breath, and overall sound of their musical output would be exceptional. He set unprecedented standards and expectations from teachers and students alike. Kodály stated the following:

> "We should read music in the same way that an educated adult will read a book: in silence, but imagining the sound."[7]

This simple yet profound idea, a guiding principle in his efforts as a teacher, demonstrates why Kodaly was so revered as a pedagogue.

Émile Jaques-Dalcroze discovered new ways to think about the relationship between music and movement. His research and findings predate the work of Orff and Kodály, and his influence is present in their work. Jaques-Dalcroze contemplated the visceral and physiological response to music that some artists imbued in their performances as compared to musicians whose approach was more technical or mechanical. He noticed small body motions in the more responsive musicians – the students whose performances seemed to permeate more rhythmic vitality and understanding: the nod of a head, slight swaying of shoulders, tapping feet.[8] He was

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[6] Zoltán Kodály, *The Selected Writings of Zoltán Kodály*, trans. Lily Halápy and Fred Macnicol (London: Boosey & Hawkes, 1974), 196.

[7] Ibid, 204.

[8] Anne Farber and Kathy Thomsen, "What is Dalcroze?," *Dalcroze Society of America*, accessed October 15, 2014, http://www.dalcrozeusa.org/about-us/history.

inspired to explore ways in which movement could increase energy, emotion, and vigor in musical performances; he named the work "eurythmics," derived from the Greek root syllables "eu" and "rhythmos," meaning "good flow."[9]

An essential characteristic to the Dalcroze approach is musicians being taught to be more conscious of pulse and rhythm through larger body motions which reflect the pulse, and smaller body motions reflecting details of the individual pieces. To Jaques-Dalcroze, the small motions of pianists using their fingers to perform rhythms in various pieces lacked the larger, more fundamental sense of whole-body responsiveness to rhythm. He encouraged his students to do larger motions at first – walking, stomping, swaying around the room. Lesser motions like clapping and tapping to melodies and fluctuating rhythms were added to the large motions which represented the fundamental beat, unchanging. Teachers using this method improvise music of various mood, tempo, meter and dynamics; students are trained to think of their body as an instrument, creating responses through large and small motions. Nothing is predetermined or choreographed; the intention of the method is that each musician feels an innate and completely individual response to the music. Motions reflect dynamics, textures, phrasing. The goal of the method is to help student musicians become keenly aware of the fundamental rhythm in their music, and have it translate as a more vital, significant underpinning to their musical experiences.[10]

I have found in my own teaching that these large body motions like stomping and swaying create a much more intrinsic experience for young musicians. I was first made aware of this approach to teaching while enrolled in some piano pedagogy courses in which the class of

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[9] Ibid.

[10] Stanley Sadie, ed., *The New Grove Dictionary of Music and Musicians* (London: Macmillan Publishers Limited, 1995) , vol. 9, 554-5.

college students was trained to teach young pianists using Frances Clark's method, *The Music Tree: A Time to Begin.* In this book, even the most simple strands of quarter notes are always taught with chanting rhymes, both familiar as well as some newly composed for the book. Young students are encouraged in the instructions to chant and clap, or even better (with the Dalcroze influence), chant while leaning over and swinging arms to the rhythm.[11] *The Music Tree* uses other concepts from Dalcroze Eurhythmics, including stamping feet to the beat. This works especially well with 2/4 or 4/4 time; adjustments can be made to express 3/4 time, such as stomping the right foot and lightly tapping the left foot for beats two and three, and then doing the same motions starting with the left foot for the next measure. The result is foot/body motions in this manner: RIGHT-left-left/LEFT–right-right. Students should sway and put their weight heavily on the side of the body that is stamping the downbeat of each measure.

These giants of music education, Orff, Kodály, and Jaques-Dalcroze, were innovative and creative in their methods of developing better musicianship in students of all ages, and their contributions to music education are profound. I've incorporated many of their ideas into this method, including the focus on cultivating a sense fundamental beat. Once that heartbeat is ascertained, groupings and variants of rhythmic patterns can be more skillfully executed. Additionally, I use the rhythms of familiar tunes and rhymes as the rhythmic motives for many of the duets and ensembles. The work of Kodály and Orff establishes the importance and success of relating rhythmic concepts to literature that is already familiar.

[11] Frances Clark, Louise Goss, and Sam Holland, *The Music Tree: A Time to Begin* (Miami: Sunny Birchard, Inc., 2000), 20, 37, 44, 57.

1.3 Teaching in individual and group settings.

With several years of experience teaching both individual and group lessons, I have noticed benefits to each setting. When giving one-on-one lessons, the student has the teacher's complete attention. The teacher can make immediate adjustments and restatements based on the student's responses to instruction. Pacing is catered to the individual needs of the student and is constantly being assessed and adjusted by the teacher. Students sometimes learn in bursts, followed by plateaus where they do more processing and mastery of skills; private instruction can be sensitive to the ebb and flow of the student's learning process in very individual ways.

Group teaching provides a different set of benefits to learners. There are always differences of abilities within groups of students, whether dealing with music theory students working on rhythmic dictation skills in the ear training component of their classes, or class piano students working on coordination between the hands as they master different rhythmic exercises. Some students might be better at dotted rhythms in simple time, others might have a clear adeptness of compound time. These differences in skill sets can be helpful while working on rhythmic drills of all types: single line exercises, duets, and ensembles. With solo lines of rhythm, the class can perform the drill together with multiple repetitions. The stronger performers can be leaders to help demonstrate a good aural example of how various drills sound. Classes can be divided in half, and students can do a back-and-forth echo of each other with different drills. This conversational approach, whether between groups of students or just a call and response between teacher and students, can incorporate dynamics to help develop listening skills. Repetition helps those who struggle acquire a more complete image of how various rhythmic patterns should sound.[12] Finally, while performing aloud in groups or as a class is

[12] Christopher Fisher, *Teaching Piano in Groups* (New York: Oxford University Press, 2010), 11.

indispensable, it is the teacher's responsibility to make sure that each student understands the concepts of rhythmic notation used in the activities being performed aloud. My method recognizes the benefits of learning by ear, but always only in combination with a solid foundation of written notation comprehension.

Even more advantageous in group settings are the duet and ensemble drills. One of the more core concepts of the Orff method is that one layer of sound will always provide the basic beat. In a class setting, one group of students can provide a resonant drumming pulse, either stomping feet on the ground, clapping hands or legs, or a combination of those sounds. On top of this basic beat, students can practice the various parts of the rhythmic drills, all the while feeling the constant and resounding pulse. When practicing the duets, parts can be rotated on the repeats, so that every group gets a chance to perform all of the possible measures of rhythm. Some Orff ensembles have one layer of sound providing the basic beat, and another layer providing the division; the division is usually a more distinct, crisp instrument sound such as claves or woodblocks. When introducing concepts such as dotted quarter plus eighth notes in 3/4 or 4/4 time, having both the basic pulse and the division sounding can be very helpful. The group or person performing the basic pulse should be sure to put a slight emphasis on the downbeat to help the students internalize metric accents; the student providing the crisp and clear division of the beat helps the rest of the class hear and understand the relationship between larger and smaller notes, such as the relationship of three eighth notes being equal to a dotted quarter.

The differences in skills within a group can be used to an advantage when clustering students together. As an example, the ensembles in this method have up to three parts. When dividing a class into the three required groups, each cluster of students can have one of the stronger performers in the group as an unspoken leader. This stronger student acts as a tutor

within the classroom setting – a very effective use of time. Furthermore, when duets are being performed, they can first be practiced in groups of two students. Again, if needed, careful consideration can be made in pairing students such that a stronger student can help a student still struggling with newer concepts. Alternative activities can provide opportunities for the stronger students to be highly challenged, either by more advanced pairs being asked to perform more difficult examples, or by the duets having more of a student/teacher configuration; one part would be more basic, and the other more challenging.

The duets in this dissertation, as well as some adjacent parts in the ensembles, can be used by interested students as more of a piano-style exercise to be performed with both hands simultaneously. In the duets, the right hand can perform the upper part, and the left hand the lower part. Likewise, in the ensembles, students can attempt to practice two adjacent parts for extra variety of experience with the provided drills.

Finally, a practical benefit to the duet and ensemble rhythmic drills is the development of reading multiple lines of music. For non-pianists, especially those interested in music education career paths, being able to successfully read simultaneous lines of notation is an indispensable component to their future work. Many singers and instrumentalists are accustomed to focusing on a single melodic line. Reading rhythmic ensembles will help students perform their individual parts as they compare, relate (in observing alignment), and listen for the other lines of rhythm being performed concurrently. From my experience teaching non-pianist music majors, this is a valuable skill that is regularly in need of practice.

1.4 Presentation of concepts - simple and compound concurrently; definitions of dotted values

A primary source of misconceptions in rhythmic comprehension among music students is the incomplete definition of a quarter note. Most students will recite by rote that a "quarter note equals one beat" or "gets one beat" at all times and in all situations. This type of definition is provided in the vast majority of piano methods and is a commonly taught in both private studio instruction and school band or orchestra programs. It is understandable that this statement is so frequently uttered – the majority music for kids is in 4/4 or 3/4 time, hence this definition is true in most of the young musician's musical world. The problem with the statement is that later, when introduced to compound time and other time signatures, students struggle to get a sense of the rhythmic look and feel of different beat notes and divisions of the beat. To remedy this, I have prepared the topic of meter as the one of the primary instructional themes. Starting early with duple meter, I have students learn and experience simple and compound divisions simultaneously. I also use a variety of beat notes so that students can grasp the meaning of time signatures more completely.

Another common problem in music instruction, (be it from methods or from instructors), is the idea that dotted notes equal "one and a half" of the original note. This definition does not hold true in compound meters, where dotted notes can be one full beat; thus, confusion abounds. A goal of my method is to focus more on the relationship or ratio between notes. I present dotted rhythms as being worth three of the division of the original note. (I often use the description "three of the next smaller note value.") Dotted whole notes are worth three half notes; dotted half notes are worth three quarter notes; dotted quarter notes are worth three eighth notes. These statements are true in both simple and compound time and can then help the learner move freely between a variety of time signatures and metric patterns. Furthermore, as my method often

includes layers with the beat note and division note as motor rhythms performed under the featured rhythm pattern, students will make the sound connection of this statement: “three of the next smaller note value.” As they hold the dotted notes in their exercises, they will simultaneously hear three of the next smaller value being performed under their part.

1.5 Teaching meter – simple vs. compound – steady beat

As mentioned in the introduction, one of the main sources of inspiration for this work came from hearing students in classes, lessons, and adjudications routinely cutting off measures, lengthening measures, or failing to keep a steady tempo when textures changed in their pieces. As an example, consider a common piano piece in 3/4 time, such as Wolfgang Amadeus Mozart's "Minuet in F."[13] Each of the first two 4-bar phrases ends with a half note followed by a quarter note. So many times when students get to those measures, they add an extra beat so that the end result is the half note, the quarter note, and then an added quarter rest pulse. It sounds as if there was a measure of 4/4 inserted at the cadence points. Another type of rhythmic error can be seen when students suddenly speed up the values due to changes in the rhythm of the accompaniment. Muzio Clementi's *Sonatina in C, Op. 36, No. 1* includes a beautifully lyrical second movement in 3/4 time, "Andante."[14] Throughout the first 11 bars of the piece there is a consistent triplet rhythm sounding in the left hand. In the 12th measure the quickest rhythm slows down to a quarter note. It is so common for students to rush those quarter notes; most fail to feel a consistent simple triple meter underlying the first eleven bars, which would in turn help provide accuracy at measure 12. Students forget the relationship between rhythmic patterns, such as the concept that the quarter notes in m. 12 should each be as long as the duration of the full triplets in m. 1-11. Another common example of inconsistent tempo due to changes in accompaniment can be seen in student performances of Mozart's *Sonata in C, K. 545*, I:

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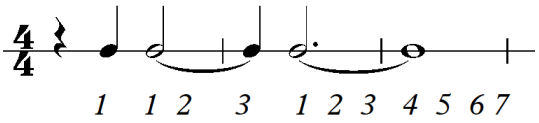
[13] Wolfgang A. Mozart, "Minuet in F," in *Easy Classics to Moderns,* edited by Denes Agay, (New York: Consolidated Music Publishers, 1956), 69.

[14] Muzio Clementi, *Sonatina in C Major, Op. 36, No. 1,* II: "Andante", in *Easy Classics to Moderns,* edited by Denes Agay, (New York: Consolidated Music Publishers, 1956), 69.

Allegro.[15] So often, student performers arrive at the false recapitulation at m. 42, after constant running sixteenths in the development, and they can't adjust back to the eighth note motor rhythm. The addition or subtraction of pulses and other related errors by students are so common that I've pondered the subject for several years and have come to some conclusions.

One night when I was helping my son with his practicing for band class, I noticed that he was incorrectly counting a line of music that appeared to be quite simple. I asked him to count the three measures that had the error, and to my surprise, this was his answer:



First, he said nothing on the initial quarter rest. He continued by counting a tie with the correct number of beats but without any relation to the time signature and placement within the meter. He then proceeded to count another tied note, again with the accurate number of beats, but completely disassociated from the 4/4 time signature. Furthermore, he paused between the two tied notes for one silent pulse. Because he didn't verbally count anything during the pause, he didn't realize he had added the pulse. Interestingly, his unintentional pause made sense in some small way because it made the second tied note start on the secondary strong beat of the measure – beat three – a natural metric accent.

These types of errors, though containing some accuracy (the total counts within the tied notes were correct), are so common among young students. Beginning musicians learn note values (quarter = 1, half note = 2) in a very concrete way that does not account for any changes in beat notes within time signatures (half notes as beat notes, for example) or awareness of the

[15] Wolfgang A. Mozart, *Sonata in C, K. 545*, *I: Allegro*. (Munich: G. Henle Verlag, 1992), 266-269.

larger pattern of underlying beats and metric division. It is an incomplete learning process; the missing component is a strong sense of meter and steady underlying pulse.

I frequently encounter students counting aloud "one" for quarter notes, "one-two" for half notes, and so on, with little or no attention as to where the quarters and half-notes fall within the measure, just as my son did with his band music. Due to this absence of awareness of time signature, pieces being performed by these students lack the underlying metric accent which can provide the foundation for a sense of cohesion within the piece. If a student is really thinking of the meter of a piece and keeping track of the underlying metric groupings of basic beats, measures would rarely be lengthened or cut-off prematurely, and changes in accompaniment rhythm would not render a lost steady beat. Students would be able to feel and know when or where the next downbeat will occur because they are sensing and understanding the meter on a very visceral level.

To address the need for increased student practice and subsequent understanding of counting rhythm within meter, the philosophies of Jaques-Dalcroze, Orff, and Kodály have been incorporated into this method for learning rhythm. The exercises and ensembles have practice suggestions which utilize large body movements to feel basic pulse, and the exercises are inspired by familiar folk tunes to help students immediately grasp the ideas being presented. The difference between duple, triple, and quadruple meter, as well as the differentiation of simple and compound division of beats are intended to be fully experienced through singing common rhymes and traditional songs.

Before moving forward with pulse/meter/time-signature topics, some definitions are necessary. All music has basic pulse. The basic pulse of a piece can be best described as the heartbeat of the music. When listening or playing music, the basic pulse is the underlying beat to

which a listener or performer would tap his/her foot. Once the basic pulse (beat) is established, natural groupings of pulses can typically be ascertained. Music tends to fall into natural groupings, or meters, of two beats (duple), three beats (triple), or four beats (quadruple.) Beat "one," or the *downbeat,* has an accented strength to it and helps determine meter. Thus when hearing a song in duple, the listener would have a sense of the following: **1**-2/**1**-2/**1**-2/**1**-2. A piece in triple meter would have natural groupings like this: **1**-2-3/**1**-2-3/**1**-2-3. Quadruple meter would have a strong beat on **1**, and a secondary strong beat on **3,** like this: **1**-2-**3**-4/**1**-2-**3**-4. There is one more essential characteristic used when describing meter. When the basic beats divide into two parts, the meter is called "simple." When basic beats divide into three parts, the meter is called "compound."

It's best for students to first hear what different meters sound like so as to gain an overall aural image of the patterns. An effective way to demonstrate these basic grouping and division concepts is to start with an experience. Because we walk in duple meter, our body naturally understands it; comparing simple duple and compound duple is an effective way to start the discussion of meter. Here is an exercise that helps students feel the difference between the two division types; students grasp it quite quickly because large body motions are used. Students stomp the right foot followed by the left foot in a very moderate tempo. After the group is in sync, add a clap to show the division of the stomped beats into two parts. In simple duple, the pattern will be stomp-clap/stomp-clap, and in compound duple the pattern will be stomp-clap-clap/stomp-clap-clap. The stomping feet should be quite resonant, with lighter sounds on the claps. If there is space, stomp/clap around the room while singing common songs in each meter. Alternatively, the teacher can improvise music in simple duple, followed by improvisations in simple compound, while students do the stomp/clap combinations appropriate for the music that

they hear. Always remember, these types of exercises and practice techniques can be modified based on the group. As an example, I don't typically have college students move around the room, but I do have them stand up and perform the stomp/clap motions while standing in place. They tend to participate fully and give very robust foot stomps on the basic beats.

After mastering the difference between simple and compound duple, the same types of body motions can be used for simple and compound triple, with a few alterations. As I like to explain to my classes, duple and quadruple time fit perfectly into our natural ability to walk, but triple time is more like *dancing*. We don't walk in triple so we have to somehow adjust foot movements for the third pulse. I usually have students stand and use one foot to tap a basic pulse, with an emphasis on the first of every three pulses. So their stomping sounds like this: **1**-2-3/**1**-2-3/**1**-2-3. I also demonstrate a body motion on the downbeat – a movement where I lean into the motion on beat 1, combined with a slight nodding of my head; they copy my example and feel the emphasis on the downbeats. After setting a somewhat slow tempo and making sure that everyone feels the emphasis on the downbeat, students add clapping for simple triple, then shift into clapping for compound triple.

With quadruple time I try to make one more adjustment to represent the lengthened bar. I have the students use a little bit more space by having them walk forward four small steps (sometimes the classrooms are crowded) and then walk backward four steps, back to the starting point. Once we do the walking, always with a moderately slow tempo, we add simple division clapping to demonstrate simple quadruple, and then compound clapping to demonstrate compound quadruple. There is always a strong emphasis on the downbeat, and a secondary emphasis on beat three - never as strong as the downbeat, but slightly stronger than beats two and four. When these patterns are felt in the body, using basic motions like stomping and clapping,

the actual process of learning time signatures with numbers and beat notes seems to come with much more facility for students. Over the years I've assembled a list of familiar tunes that can be performed at the piano while students do the stomping/clapping exercises in the various meters discussed above. Words are familiar for several of the examples, and students can feel free to sing along while practicing the beat patterns.

Here are some examples of folk, traditional, or popular songs categorized by meter:

Simple duple:

- The ABC Song
- Twinkle, Twinkle, Little Star

Simple triple:

- My Country 'Tis of Thee
- The Star Spangled Banner
- Happy Birthday
- Amazing Grace

Simple Quadruple:

- Mary Had a Little Lamb
- I've Been Workin' on the Railroad
- Michael Row the Boat Ashore
- Alouette
- You Are My Sunshine

Compound Duple:

- Row, Row, Row Your Boat
- Hickory Dickory Dock
- Pop! Goes the Weasel
- Jack and Jill
- Take Me Out to the Ballgame

Compound Triple –

- Jesu, Joy of Man's Desiring
- Morning has Broken

- Clair de Lune

Compound Quadruple –

- Memory (from the Broadway musical *Cats*)
- Oh, Holy Night

Not every student will know all of these examples, but the pieces are nevertheless good representatives of the various meters and can give the students an archetypal aural example of how a particular meter type should sound. Alternatively, instructors can simply improvise rhythmically on any basic chord progression in the various meters. Sometimes keeping the harmonic changes constant and manipulating only the rhythmic divisions/groupings allows students to hone in on that singular component of what they are hearing. Both of these practice suggestions can be very effective ear-training for discernment of meter.

A final recommendation on helping students to foster a consistent pulse is to have them practice conducting their pieces while singing the basic contour of the melody (or basic contour of the rhythm, if it is a more rhythmic composition). I always teach simple conducting patterns to my students and subsequently ask them to sing and conduct their pieces, or sections of pieces. This is very effective in helping students develop a sense of underlying pulse and is a commonly recommended practice technique. I typically start with "The ABC Song" for conducting duple, "Happy Birthday" for conducting triple, and "Mary Had a Little Lamb" for quadruple. "Happy Birthday" provides an opportunity to discuss upbeats, a concept that will be practiced in Section 2.9 of the method. Another benefit of becoming confident in conducting is that it helps students manipulate the stretching or pushing of beats during expressive or *rubato* sections of pieces. This is more applicable to intermediate or advanced students, but even young beginners can practice conducting a *ritardando* in a very artistic manner. If students can conduct the way they want the music to sound, they are more likely to have successful performances with nuanced rhythm.

1.6 Poetic meter; diagramming common rhymes

Understanding the basics of poetic meter can provide another avenue to help students predict groupings of rhythms and metric accents in simple and compound division. While teaching an ear training class several years ago, I remember spontaneously coming up with a system of short-hand for students to use while attempting their rhythmic dictation drills. I set up a line in 4/4 time containing four empty measures and very lightly drew slashes and dashes above the measures. Forward slashes were placed on numbered beats with hyphens between them representing the division of the beat. It looked something like this:

4 / - / - / - / - / - / - / - / - / - / - / - / - / - / - / -
4 1 2 3 4 / 1 2 3 4 / 1 2 3 4 / 1 2 3 4 //

I performed rhythmic dictation drills and had students mark where they heard sounds within the meter, always counting along with the time signature as they listened to the examples. They were instructed to mark the original dashes and hyphens in light pencil, and then mark heavily with a pen or highlighter over the pencil marks, in the exact places they heard notes, as they listened to the rhythm example. So, if they heard a note on beat "one," beat "two – and," and then beat "three," (and not beat four), those slashes and dashes would be marked in a different color and then translated into the following notation: 

Soon after the class period in which I first suggested the improvised short-hand markings, I had a flashback to English classes during high school. Our instructor trained us to be very proficient at diagramming poetry: labeling accented and unaccented syllables with slashes and dashes representing stronger and weaker sounds, finding the poetic feet (small, repeated

sequences of meter), and labeling the poetic meter.[16] This recollection made me realize that the short-hand system that suddenly came to my mind during rhythmic dictation was really from these poetry exercises long ago. I hoped that a similar type of study could help students understand meter and the expectation of beat groupings that it provides. I started experimenting with common rhymes, writing them out, having students determine accents markings (strong = "/", weak = "-"), and then translating those markings into rhythmic notation in a time signature. This type of presentation provided an opportunity for poetry lovers to make new connections to patterns in music. The terms trochaic (two part group – accented/unaccented) and dactylic (three part group – accented/unaccented/unaccented) fit well into the discussion of duple meter, simple vs. compound, with trochaic representing the simple duple model and dactylic fitting compound duple. [17]

An example of this type of exercise can be experienced by using the children's rhyme "Baa, Baa, Black Sheep." When presenting to a class or student, I review simple duple meter (two large beats, each dividing into two smaller parts) and have the lyrics spaced out on a handout with enough room to work. Students practice the feel of duple, put bar lines in and stress marks above the lyrics, and then translate the lyrics into rhythm. The very first step in these situations should always be recognition of the basic meter. An effective way to do this is to have a portion of the class, maybe one-third, chant "*one*-two-*one*-two" as a duple background. A reminder should be given to put a slight emphasis on beat "one." After the basic pulse is established with this smaller group, the rest of the class can join in with chanting the words to the

[16] Sean M. Conrey. "Poetic Feet and Line Length," *The Purdue OWL*, April 3, 2013, https://owl.english.purdue.edu/owl/resource/570/03/.

[17] Ibid.

poem, clapping on every uttered syllable. The chanting group should move their body in some way to the "one-two-one-two."

Baa, Baa, black sheep, have you any wool?
Yes, sir, yes, sir, three bags full;
One for the master, one for the dame,
One for the little boy who lives down the lane.

Students are asked to determine which words sounded for the length of one beat, which sounded for more than one beat ("wool"), and which used the division of the beat ("have you an-y"), and would then complete the worksheet with accents and divisions of beats marked in short-hand. The worksheet would be double-spaced to leave room for the markings.

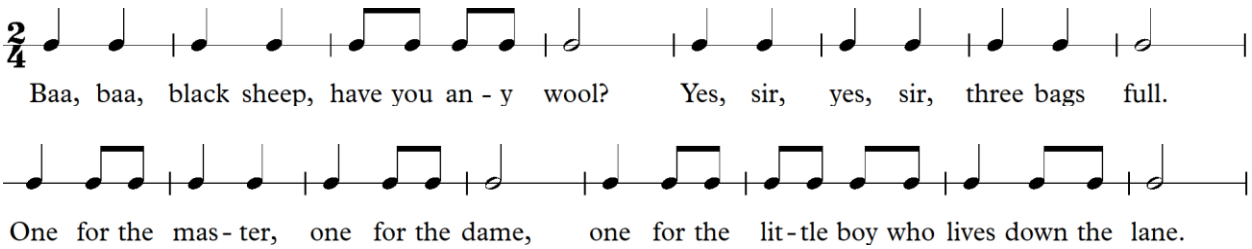
2/4 / / / / / - / - / *(hold)*
Baa, baa, black sheep, have you any wool?

/ / / / / / / *(hold)*
Yes, sir, yes, sir, three bags full.

/ / - / / / / - / *(hold)*
One for the master, one for the dame,

/ / - / - / - / / - / *(hold)*
One for the little boy who lives down the lane.

The transcribed rhythm notation would be as follows:



Compound duple can be taught with the rhyme "Hickory, Dickory, Dock" in the same manner. Again, the first step is to have students feel the meter with larger body motions. A small group of students would chant "one-two-one-two" at a moderate tempo as the background pulse. Perhaps they could stomp when saying the numbers, and lightly tap legs or clap hands on the two subsequent subdivisions, like this: "*one*-(tap)-(tap)-*two*-(tap)-(tap)-*one*-(tap)-(tap)-*two*-(tap)-(tap)." The rest of the class would chant the rhyme over the underlying beat being chanted.

Hickory, dickory, dock,
The mouse ran up the clock.
The clock struck one, the mouse ran down,
Hickory, dickory, dock.

Students would then fill out the worksheet with bar lines and accented/unaccented markings. This time, students keep track of all possible beats and divisions, so that notation can be very accurate. Slashes and dashes in parenthesis represent held beats and divisions.

6 / - - / - - / (- - / -) -
8 *Hickory, dickory, dock, the*

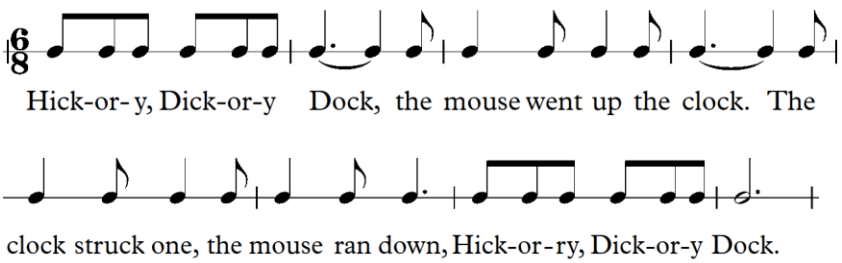
/ (-) - /(-) - / (- - / -) -
Mouse ran up the clock. The

/ (-) - / (-) - / (-) - / (- -)
Clock struck one, the mouse ran down,

/ - - / - - / (- - / - -)
hickory, dickory, dock.

The spacing of the word "the" at the end of both the first and second lines looks strange on the worksheet format, but placement is intentional. Each line represents four beats, (with one

beat represented by "/ - - "), and the word "the" falls on the last division of the fourth beat in each line. The rhythm would be as follows:



Exercises such as these help students put new meaning to material that they've known most of their lives. Children's songs are commonly in 6/8 or 2/4 time, so practicing and learning these rhythms and groupings is an effective way to internalize new concepts, (meter, time signature), using tools that are very familiar to the learners.

1.7 The necessity of this method

Having worked for two decades in both higher education music major classrooms and as a studio piano teacher of every age and level, I have come to realize that many rhythm problems are common to a variety of music students. I believe that a practical manual of rhythmic instruction, focusing on a wide assortment of rhythmic topics and usable in many pedagogical settings, will fill a void in available literature. My intention with this method is that it can service a broad population of musicians in training. The method will accommodate group settings, as it includes single line drills, duets to be performed in student pairs or by teacher and student(s), and ensembles based on familiar tunes. The method was also created with studio teachers of any instrument or voice part in mind. Private instruction teachers can use the single line drills as well as the duets during lessons so that a few minutes each week can be spent with a focus on pure rhythm. Studio teachers who hold monthly group lessons can use the ensembles, and any ensemble experience can be enhanced by the use of rhythm instruments, such as hand drums, tambourines, finger cymbals, and claves.

Many ear training textbooks currently on the market have some drills in rhythm, but a private instruction music teacher wouldn't necessarily want to purchase an expensive, bulky college text for their studio, and would certainly be hesitant to require that of their students. The most common ear-training textbooks fall into one of two categories: 1) the book has rhythm drills but lacks instruction or explanations; or, 2) the book includes rhythmic instruction, summarizing all of the basic rhythmic concepts in just a few pages, with very few or an absence of practice drills.

Some books written solely on the topic of rhythm are in the current literature and are described in Section 1.7. Overall, the books found do not meet my objectives of having a variety of learning opportunities with a focus on developing a sense of meter and understanding time signatures. One book taught students to see rhythmic notation in terms of "play" and "don't play." Quarter notes would equate to the word "play," and half notes would require the word "play" on the first beat and "don't play" on the second beat. This was one of the more egregious examples of poor rhythmic instruction. Most books or methods taught that the time signature 6/8 had 6 beats, a definition which misses the fundamental rhythmic concept of compound time; the 6, 9, or 12 on the top is the number of divisions in the measure, not the number of beats. Any time signature with 6 on top is in duple meter, with two strong beats per measure.

One benefit of having a book with multiple drills on a particular unit topic (dotted quarter followed by single eighth, for example) is that students can develop a mental database filled with the sounds and visual images of common rhythm patterns. If students see and practice rhythmic topics in a variety of combinations, more mastery and fluidity of reading will result. I enjoyed watching my own children learn to read during their kindergarten years. During that time period, I was impressed by how many mini-books the young children made during school every week. They cut and taped squares of paper, pre-printed with story lines using the consonant or syllable that was being studied in a particular week. By the end of the year, the students had a large, gallon-sized Ziploc bag filled with mini-books that they had been making and reading for the previous nine months. Being able to read aloud fluidly was one of the goals of the year for the kindergarteners. These mini-books helped students achieve that goal by giving young children a multitude of word combinations to be utilized during quiet reading as well as reading aloud in

groups. Likewise, the drills in this method will provide the abundant opportunities (individually and in groups) needed to develop rhythmic fluidity and mastery for developing musicians.

Students excel when multiple styles of learning can take place during study. Whether in rhythm portions of textbooks or method books, or in books written entirely about rhythm, most rhythm exercises in the current literature are single lines to be performed by one person or in unison as a group. One of my goals in this method is to provide a variety of exercises (solo lines, duets, ensembles), in combination with rhythm worksheets and written drills, so that many learning styles (aural, visual, and tactile) are represented.

Finally, my approach to presentation of information is slightly different than most common methods. I discuss simple duple first, followed immediately by compound duple. So many books, especially piano teaching methods, do not introduce 6/8 time until much later in the learning process; furthermore, they almost always state that 6/8 time has six beats. My approach has a focus on meter and division, and the underlying pulse for each meter/division type, with lots of stomping, tapping and clapping to help internalize rhythm patterns and metric accent. Verbalization is an effective learning tool and is used in each unit to help solidify new concepts with familiar tunes and rhymes. Finally, my presentation of information includes a wide variety of exercises from solos to ensembles and written drills; most books have only one type of exercise, and I believe the variety found in my method will help students achieve greater depth of understanding.

1.8 A survey of available resources

Many types of publications are available with information and instruction about rhythm. The three broad categories I have found are: 1) college textbooks with a rhythmic component; 2) piano method books; and 3) books written solely on the topic of rhythm.

As mentioned earlier in this work, many larger college textbooks include some pages with rhythmic studies. Most often these pages are few in number and offer only practice drills, without explanations of the topics being drilled. One of the most popular class piano textbooks, *Piano for the Developing Musician*, has about ten pages dedicated solely to rhythmic practice, including two popular rhythm ensembles.[18] These ensembles served as an inspiration for the ensemble component of the new method presented in this dissertation. Students seem to have fun while performing the ensembles aloud; there is always a great feeling in the room and good collaborative learning taking place. In the Hilley/Olson text, there is no narrative explanation of concepts in the rhythmic drill pages – simply practice suggestions such as hand motions assigned to different types of notes (snapping eighth notes, for example.) Some of the pages of exercises include two-part duets, drawn with up stems and down stems differentiating the two parts. Though the instructions mention playing the duets in student pairs, another beneficial utilization of the duets is that they can be practiced as two-handed exercises with the right hand playing the upper part and left hand playing the lower part.

Music theory textbooks typically cover a summary of basic rhythm concepts including meter, rhythmic values, tempo, pulse, and time signature. One aspect of *Fundamentals of*

[18] Martha Hilley and Lynne Freeman Olson, *Piano for the Developing Musician*, 6th ed., (Boston: Thomson Schirmer, 2006), 34-35, 54-55.

Music[19] by Earl Henry that I thought was very effective was that he routinely drew his exercises in two related time signatures, back to back, so that students could get a more clear picture of what the time signature represents. If he writes an example in 4/4, he will immediately follow it with the same example drawn in 4/2 or 4/8. This helps illustrate the idea of beat notes and division of beat very successfully. Henry's occasional use of common folk tunes is a helpful teaching tool. As mentioned earlier, music theory textbooks often have very few examples for practice; this book is a slight exception. There is an adequate variety of drills after each topic is explained.

Tonal Harmony, by Stefan Kostka and Dorothy Payne[20] similarly has a concise summary of rhythmic concepts, but a marked lack of practice drills. Presentation of simple and compound is done concurrently with a focus on interpreting time signatures and writing lines of rhythm with a variety of beat note values.

Theory books which have more of an ear-training focus contain very sparse instruction, though typically a sufficient number of solo drills. *Music for Ear Training*, by Michael Horvit, Timothy Koozin and Robert Nelson[21] has logical pacing and sequencing in the rhythmic dictation section of the book, but has no practice duets or ensembles to develop score reading. Compound meters are presented halfway through the book, instead of being introduced concurrently with simple division. I believe that comparing simple duple and compound duple in the early chapters of my method will help students differentiate more quickly between the two division types, both visually and aurally. My hope is that students will think about these

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[19] Earl Henry, *Fundamentals of Music; rudiments, musicianship, and composition*, 5th ed., (Upper Saddle River, NJ: Pearson Education, Inc., 2009), 1-23, 67-91, 123-153.

[20] Stephan Kostka and Dorothy Payne, *Tonal Harmony* (Boston: McGraw-Hill, 2008), 28-40.

[21] Michael Horvit, Timothy Koozin, and Robert Nelson, *Music for Ear Training* (Belmont, CA: Thomson Schirmer, 2005), 25-31, 57-63, 89-95, 117-123, 172-177.

concepts not only in their homework, but also in their daily life, as they listen to and perform music in a variety of settings.

Music for Sight Singing, by Thomas Benjamin, Michael Horvit, and Robert Nelson, has logical pacing of concepts in the rhythmic component of the book.[22] Each chapter begins with a few rhythmic drills, but the difficulty advances surprisingly rapidly. Additionally, compound meter is not introduced until the eighth chapter. My method will have a more gradual increase in difficulty, with ample practice opportunities before moving to more difficult concepts.

Music Theory for Non-Music Majors[23] has very little instruction on how rhythm is organized or executed. Written by Peter Spencer, this book has instruction on all other aspects of music theory, but is strangely lacking in presentation or explanation of rhythm topics. My method would be a useful supplement to any teacher working with this book.

Most piano methods offer basic introductions to rhythmic concepts. However, I have found that piano methods are generally the source of most of the incomplete, concrete definitions that subsequently cause students to struggle when they get to more complex music. Two examples of this are that 6/8 is routinely presented as six beats per measure, (with no mention of two large beats per measure), and that dotted quarter notes are worth "one and a half beats."[24] As mentioned earlier, a focus in my method is the layering effect, inspired by Carl Orff's philosophies, in which one group of students will tap the basic beat, another group will tap divisions of beats, and yet another will tap a "melodic" line of rhythm above that rhythmic

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[22] Thomas Benjamin, Michael Horvit and Robert Nelson, *Music for Sight Singing* (Belmont, CA: Thomson Schirmer, 2005), 2-3, 10-12, 28-31, 41-45, 58-60, 83-85, 122-124.

[23] Peter Spencer, *Music Theory for Non-Music Majors,* 2nd ed. (Upper Saddle River, NJ: Prentice Hall, Inc., 2001), 54-57.

[24] Willard Palmer, Morton Manus and Amanda Vick Lethco, *Adult All-in-One Course* (Van Nuys, CA: Alfred Publishing Co., Inc., 1996), 80.

foundation. Whether in simple or compound time, feeling the three smaller parts within the dotted note will help students get a more complete understanding of dotted rhythms, which will in turn help them be accurate when working in either simple or compound time.

Books written entirely on the subject of rhythm proved to be the most varied in approach, presentation, and best practices. I found some of the resources to be logical, with decent pacing and explanations, while others were less pedagogically sound in their approach to teaching rhythm. One source that had a lot of well-sequenced information was *Studying Rhythm*, by Anne Carothers Hall.[25] Hall wrote this useful booklet with a sufficient number of drills on each topic, including duets and some chants. She includes thirty-one chapters in a 164 page book, so each chapter is quite short and user-friendly. The book itself is small as well, only about 5" x 9"; students can move through topics at a fairly quick pace. Although she does not present simple duple and compound duple at the same time, the lessons on those topics are closer than in most method books. The book is a good source for music-majors as it has a more academic tone, but lacks ensembles and frequent use of familiar tunes/rhymes.

Another book written specifically on the topic of rhythm is *Read any Rhythm Instantly*, by Mark Phillips.[26] This work has some very unconventional techniques to teaching counting. While the author does stress a focus on determining the number of pulses per measure and being aware of that while playing, he discourages counting with numbers. His system recommends identifying the attacks, and then thinking or saying the word "play" or "don't play" based on whether the rhythm notation represented a beat to be struck. The example given in the first chapter shows a measure of 3/4 time with a half note followed by a quarter. His process would

[25] Anne Carothers Hall, *Studying Rhythm*, 3rd ed. (Upper Saddle River, NJ: Pearson Education Inc., 2005), 1-93.

[26] Mark Phillips, *Sight-Read Any Rhythm Instantly* (New York: Cherry Lane Music Company, 2002), 1-35.

have the player think "play – don't play – play." I find this method to be very risky, with the incorporation of too many extra thoughts (having to think of the term "don't play," for example.) Furthermore, he encourages thinking of four types of rhythms and then labeling all of the beats with one of four letters: 1) D for downbeat; 2) U for upbeat; 3) N for neither; and 4) B for both (two eighths on a downbeat, for example.) Again, this seems like superfluous work.

The focus on searching for the beats visually within the time signature is a usable recommendation. The author wants learners to be aware of the typical look of beats in a variety of time signatures. As an example of this thought process, in simple meter with a quarter note pulse, the beats will be divided into groupings of two eighths, four sixteenths, or will be multiples of the pulse like half notes and whole notes. In compound meter with an eighth as the division, beats will typically be three eighth notes, a quarter plus an eighth, an eighth plus a quarter, or a dotted quarter, with the most common multiple being a dotted half note for two beats. Being aware of those visual cues is practical advice that I've given my own students over the years, and it seems to help them find the beats. I mention these concepts in my method, especially when discussing the most common groupings of notes in 6/8, 9/8, and 12/8. I like Phillips' presentation of division of the beat in relatively close proximity; compound meter ("division of the beat into three parts") arrives fairly quickly, on page 18, with simple division just prior, on page 14.[27]

Some piano method publishers have separate books dedicated to rhythm. John Schaum has a set of three rhythm workbooks intended for younger students (pre-college). It has the typical presentation of 4/4, 3/4, and 2/4 time signatures with quarter notes defined as being worth

[27] Ibid., 12-20.

"one count."[28] Additionally, 6/8 time is described as having six beats per measure. As mentioned earlier, these two very common definitions are frequently seen in piano method books and can cause some problems in more complex rhythmic notation. The Bastien *Piano for Adults: A Beginning Course* uses similar language and definitions. Quarters are described as being worth "one beat," half notes are worth "two beats," and eighth notes are worth "1/2 of a beat."[29] Alfred Music Publishing Co.'s analogous book *Adult All-in-One Course* has very similar presentation of concepts. With quarter notes, students are taught to "count 'one'," and with half notes students are asked to "count '1 – 2'."[30] My method will strive to help students understand that counting is based on the time signature and will have exercises to understand and successfully count with a variety of beat notes.

[28] Wesley Schaum, *Rhythm Workbook,* Level 2. (Mequon, WI: Schaum Publications, 1995), 1-35.

[29] Jane Smisor Bastien, Lisa Bastien and Lori Bastien, *Piano For Adults: A Beginning Course*. (San Diego: Kjos Music Press, 1999) 8-17, 54-90, 124-130.

[30] Palmer, Manus and Lethco, *Alfred Adult All-In-One Course,* 13.

1.9 Copyright considerations and formatting information

I have created all of the rhythmic drills, duets, ensembles and worksheets in this method. Some of the exercises and ensembles are inspired by rhythms from familiar songs or traditional rhymes. In this unique rhythmic duet/ensemble setting, those that are inspired by previously existing works are still considered "new versions." Therefore, the content of this method is deemed copyrightable. Circular 14 of the Copyright Office of the United States Library of Congress states the following: "To be copyrightable, a derivative work must incorporate some or all of a preexisting 'work' and add new original copyrightable authorship to that work."[31]

I have labeled the drills that were drawn from existing sources such as works by J. S Bach and Scott Joplin. Familiar songs and anthems were also used for their recognizable motives in the duets and ensembles. All sources were public domain with the exception of the theme from *Raiders of the Lost Ark*, by John Williams. All other unmarked drills, duets, ensembles, and worksheets are original to this work.

I have formatted this dissertation as per the guidelines provided by the University of Washington in its "ProQuest Dissertation Guide."[32] I have prepared all musical examples with the music notation software Sibelius 7.5. When I publish my method for teaching rhythm, I will use Sibelius to create all components – musical examples as well as text. Sibelius is a versatile program that allows for a great deal of variety of musical notation, written fonts, placement on the page and addition of graphics. I am looking forward to the creative possibilities that Sibelius offers its users.

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[31] "Copyright in Derivative Works and Compilations," *U.S. Copyright Office*, last modified October 2013, http://copyright.gov/circs/circ14.pdf.

[32] http://www.grad.washington.edu/students/etd/proquest_dissertation_guide.pdf.

CHAPTER TWO

2.1 Introduction: teaching beat, tempo, durational symbols, dots and ties

When teaching students about rhythm, it is essential to begin with the fundamental terms and symbols with which rhythm is composed and performed. Because students come from a variety of different backgrounds and experiences, there are sometimes disparities in learning. Starting at the most elementary concepts and building from them will ensure that all potential information gaps are clarified. A good example of a learning error or gap is the commonly held definition of a quarter note being worth "one beat." While true in some time signatures, the definition is incomplete. This method of teaching rhythm begins with simple time (no division of beat) and presents time signatures with 4, 2, or 8 as the denominator so that students can grasp the concept of different beat notes. Rhythm trees are critical knowledge as they help illustrate the ratios between note values. Division of beat is presented with simple duple and compound duple concurrently, along with a more clear explanation of the meaning of numbers in time signatures. (In simple time signatures, the top note is the number of beats per measure and the lower number is a symbol to represent the note that gets the beat; in compound time signatures, the top number represents the number of divisions of the beat in each measure, and the lower number is a symbol for the type of note that gets the division.) The paragraphs that follow describe some basic concepts that can provide a foundation for teaching rhythm:

All music has a basic pulse. The basic pulse of a piece is best described as the heartbeat of the music. When listening to or playing music, the basic pulse is the underlying beat to which

a listener or performer would tap his/her foot. Once the basic pulse (beat) is established, natural groupings of pulses can typically be ascertained. Music tends to fall into natural groupings, or *meters*, of two beats (duple), three beats (triple), or four beats (quadruple.) Beat "one," or the ***downbeat*** has an accented strength and helps determine meter. Thus, when hearing a song in duple meter, the listener would have a sense of the following: **1**-2/**1**-2/**1**-2/**1**-2. A piece in triple meter would have natural groupings like this: **1**-2-3/**1**-2-3/**1**-2-3. Quadruple meter would have a strong beat on **1**, and a secondary strong beat on **3,** like this: **1**-2-**3**-4/**1**-2-**3**-4/**1**-2-**3**-4. Duple and quadruple can be quite similar sounding and are sometimes hard to distinguish. Quadruple tends to have a feeling of more length to the musical thoughts.

It is common in classical music to use Italian terms, and the word *tempo* is used to denote the speed of the basic pulse. A tempo marking of quarter (♩ = 100) refers to the number of pulses per minute (BPM). Further tempo indications include the following and denote the *feeling* that one should attach to the speed of the pulse:

Example 2.1a

Presto – very fast
Allegro – fast
Allegretto – moderately fast, "little allegro"
Moderato - moderate
Andante – moderately slow, "walking tempo"
Adagio – slow, leisurely
Largo – very slow, broad

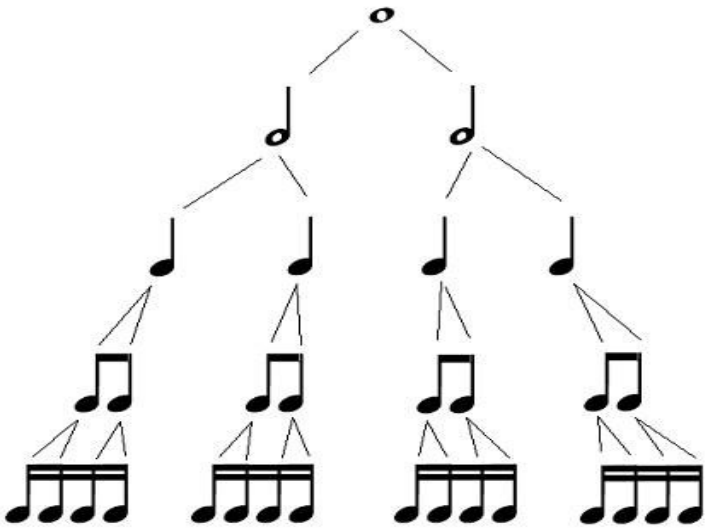
It is important to note that these Italian terms give a relative idea of the tempo, as well insight into the character or mood of a piece. Additionally, words such as *animoto* ("with life") or *cantabile* ("singing style") are frequently used alongside the markings in Example 2.1a.

In musical scores, bar lines divide notes and rests into equal groups of beats called *measures*. Two numbers stacked upon one another like a fraction at the beginning of a piece of music is called a *time signature*. Time signatures help the performer determine how many beats

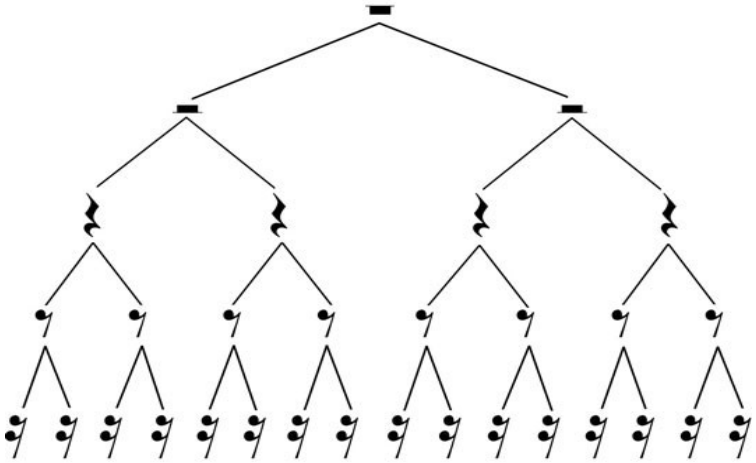
are in each measure as well as how the beats will be divided. As discussed earlier, beats can be in groupings of two (duple), three (triple), and quadruple (four.) Beats can be divided into two smaller parts, called simple meter, or three smaller parts, called compound meter.

It is vital for students to have a clear understanding of relationships between larger and smaller notes. Here is a rhythm tree for notes, followed by one for rests[33]. Names of values are derived from their relationship to whole notes (and whole rests.) The first diagram starts with a whole note, divided into two half notes, four quarter notes, eight eighth notes, and sixteen sixteenth notes. The names of the values are the same on the rhythm tree of rests, starting with a whole rest. Note that eighth notes have one beam; eighth rests have one flag. Similarly, sixteenth notes have two beams; sixteenth rests have two flags.

Example 2.1b



[33] "Rhythm Tutorial," *Mediapolis.k12*, accessed October 20, 2014, http://www.mediapolis.k12.ia.us/band/rhythm%20tutorial.htm.



Example 2.1c

A note about rests: Whole rests can fill a measure with silence in both 3/4 and 4/4 time.

To create values not expressed by these notes, ties and dots are used. Ties are curved lines that connect two adjacent notes of the same pitch. The first note is performed and held for the duration of both note values combined. For example, if a composer wishes for a note to be equivalent to the length of five quarter notes, a whole note can be tied to a quarter note, or a dotted half note can be tied to a half note. Time signature plays a part in the choices of rhythmic value and will be discussed in detail starting with Section 2.2. Dotted notes are notes lengthened by the addition of half their value. Dotted notes are always worth three of the next smaller value. A dotted half note is worth three quarter notes; a dotted half note is worth three eighth notes.

These basic terms and definitions will help students get started on their quest to master rhythmic notation and performance.

2.2 Simple time signatures with beat notes and their multiples

In simple meters, the top number can be a 2 (duple), 3 (triple), or 4 (quadruple); this number describes the number of pulses (basic beats) per measure. The lower number of a time signature in simple meter is a numeric symbol for the type of note that gets the pulse (the beat note.) If the lower number is a 4, the beat note is a quarter note. If the lower number is a 2 the beat note is a half note. Finally, if the lower number is an 8, the beat note is an eighth note. Here are some sample time signatures in simple meter:

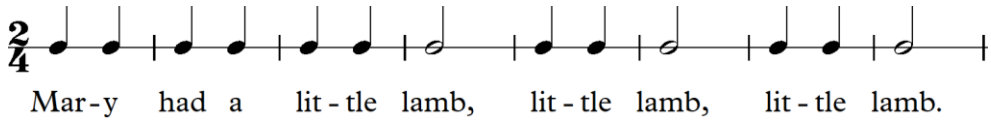
Example 2.2a

$$\frac{4}{4}\quad\frac{3}{8}\quad\frac{4}{2}\quad\frac{2}{4}\quad\frac{3}{2}\quad\frac{4}{8}\quad\frac{3}{4}$$

Duple meter has two pulses per measure and is akin to the left-right-left-right feel of walking. To students: Try standing up and walking in place at a moderate speed. Allow yourself to count "**1** – 2 – **1** – 2 – **1** – 2," giving slight emphasis on each beat "1." This is the feel of duple meter. Now, to understand how rhythmic notation works, walk in place and think of the song "Mary Had a Little Lamb." Relating the words to walking in place, each of the first syllables use one step, and the word "lamb" uses two steps. .

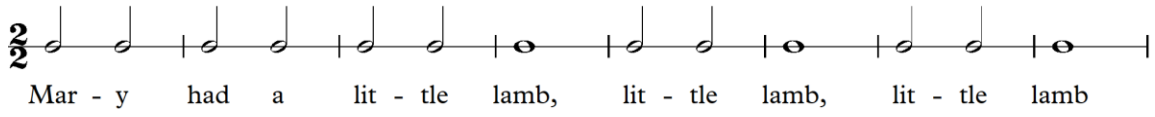
In a time signature of 2/4 there are two beats allowed per measure; because the time signature has a number 4 as the lower number, quarter notes get the numbered beat. The word "lamb" used two steps (beats) and thus is worth a half note, as a half note is equal to the duration of two quarter notes. Working with the first line of the song, notation in 2/4 would look like this:

Example 2.2b



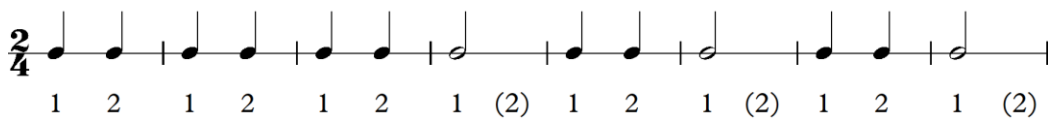
If the time signature was 2/2, it is now the half notes that get one beat. This is due to the number 2 being the lower number. Notation in 2/2 looks like this, with half notes each worth one pulse and whole notes worth two pulses.

Example 2.2c

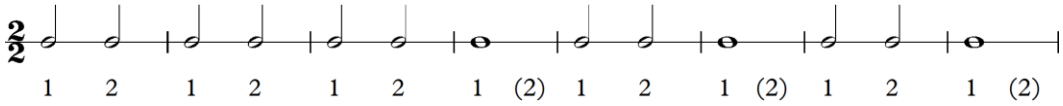


When studying rhythmic drills it is helpful to clap the rhythms, counting within the time signature. In the 2/4 example above, after clapping with the words to the song, clap while counting in duple meter. For notes that have more than one pulse, clap on the first beat, keeping hands together, then make a second movement (with hands still clasped) on multiple beats so that beats are felt with a body motion rather just a spoken word. (Teacher will demonstrate.) In the example above, the word "lamb" would receive a clap on the first beat and then a pulsing motion on the held second beat.

Here is *Example 2.2b*, now with counting provided under the rhythm – the beats in parenthesis are the held:



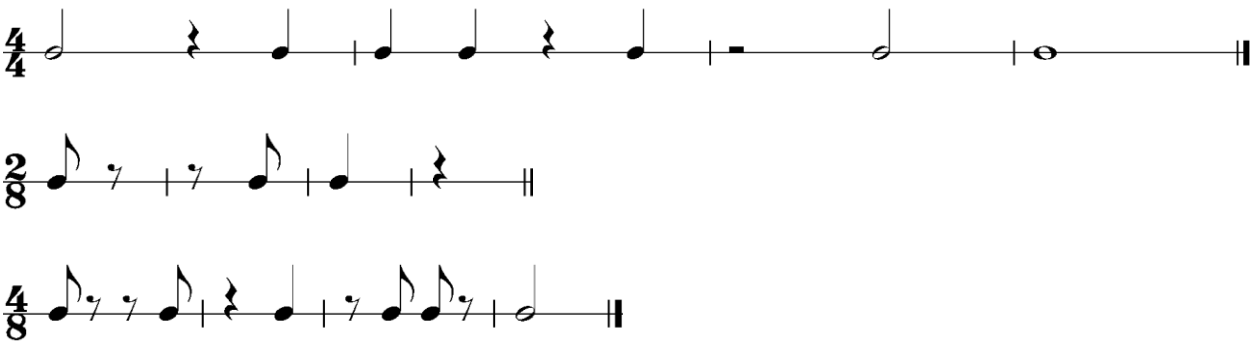
The counting is the same for *Example 2.2c:*

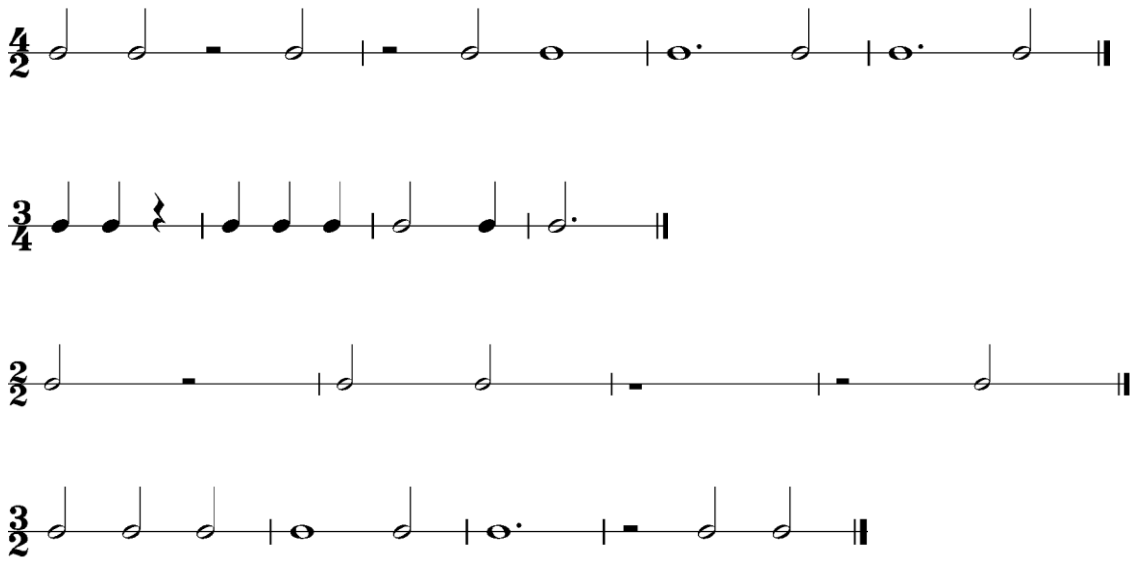


The exercises in Section 2.2 include a variety of simple meters. Remember, a dotted note is worth three of the next smaller note value. (A dotted whole note is worth three half notes; a dotted half note is worth three quarters, a dotted quarter note is worth three eighths.) For counting rests, position hands palms up and give a slight bounce with the wrist for each pulse of rest. If using these exercises in an individual instruction setting, the teacher can set a steady beat by tapping on a drum or on part of the piano to create a background metric pulse. Remember, beat "one" should always get a slight emphasis to develop awareness of metric accent. In a class setting, the students can be divided into two groups. The first group sets the background pulse, counting in the meter while drumming, stomping, or tapping a steady pulse while the second group can perform the given rhythm. After the first reading, the groups can switch jobs.

Exercises for Section 2.2

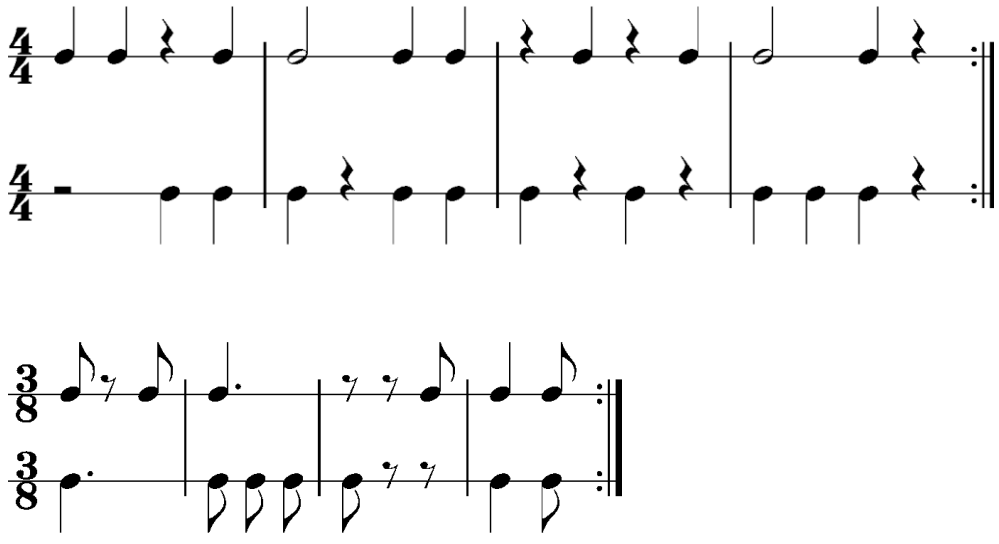
A. Clap and count the following rhythms*. Count within the time signature, not just the individual value of the note. (Guide: Example 2.2b and 2.2c.)*

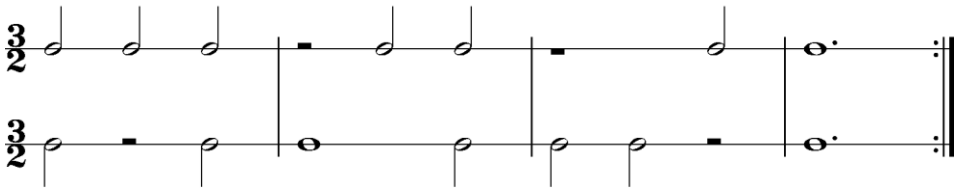


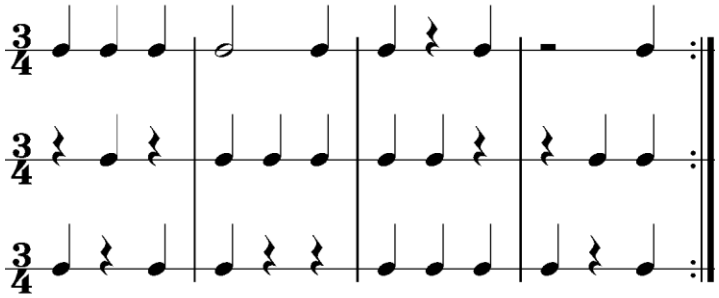


B. Duets and ensembles:

- *Duets can be performed teacher/student in private instruction settings. Classes can be divided into two groups (three groups for the ensembles).*
- *In all settings, repeat the exercise so that each group gets a chance to perform all parts.*
- *A suggestion for individual practice – use as a two-handed exercise with right hand performing upper line and left hand performing lower line.*

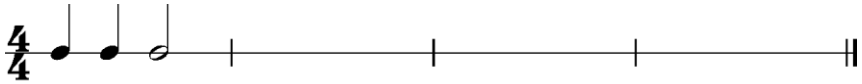


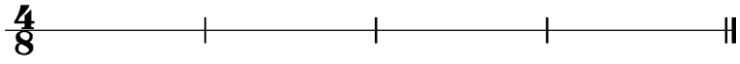




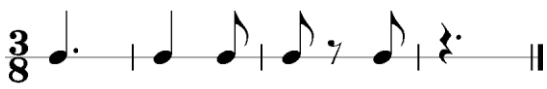
C. Written exercises:

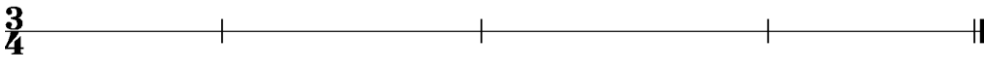
- *Redraw the following rhythm in 4/4 and then 4/8. The first measure of the 4/4 example has been started as a guide.*

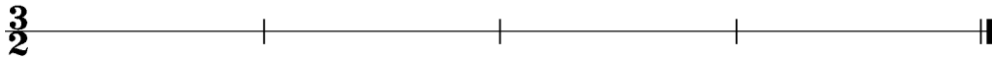




- *Redraw the following rhythm in 3/4 and then 3/2.*







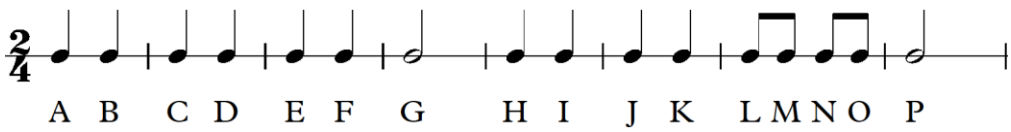
2.3 Division of beats – simple meter in a variety of time signatures

Beats can divide into two smaller parts or three smaller parts. When basic beats divide into two parts it is called simple time; compound time is when basic beats divide into three parts. Good examples of this concept can be found in some common children's tunes. At a moderate tempo, the "ABC Song" is felt in duple meter – with each of the first letters (A-B-C-D-E-F) representing a basic pulse duration. Moving through the song, the letters "G and P are worth two pulses, and the letters L-M-N-O are divisions of the beat into two equal parts – they are twice as fast as the pulse. The "ABC Song" is in simple division – the main beats divide into two smaller parts. (Section 2.3 will explore children's rhymes that use compound meter.)

Teaching suggestion: To gain a more whole-body sense of simple duple rhythm, including both main beats and division of beat, stand up and stomp back and forth (left – right – left – right) at a moderate speed, counting the numbers "**1** – 2 – **1** – 2" as you step. After the heavy, steady footstep pattern is established, clap in between the footsteps, saying the word "and" as you clap. This pattern (left – clap – right – clap/ left – clap – right – clap) is a body movement manifestation of simple duple meter with division. Counting should be "**1** + 2 + **1** + 2 +" as you stomp the beats and clap the divisions.

In *Example 2.3a,* "The ABC Song" is notated in simple duple time: two beats per measure, with each beat dividing into two equal parts. In 2/4 time, quarter notes are the beat notes, half-notes are worth two pulses, and eighth notes are the division of the beat.

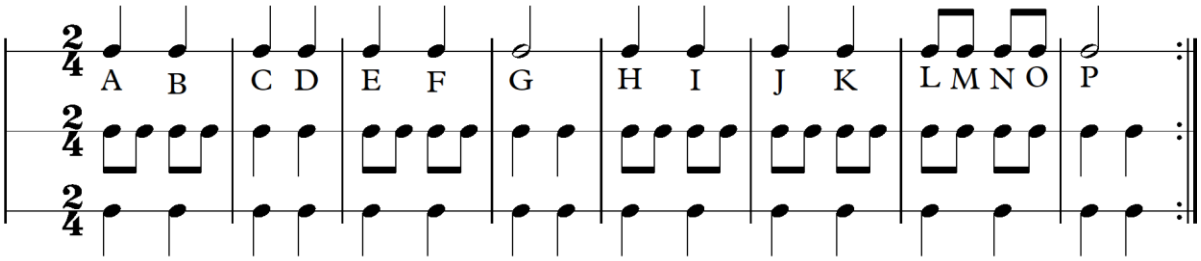
Example 2.3a



In Orff teaching methods, classes are divided into groups of students performing different layers of sound. Typically one group of students will perform a basic steady beat to provide a foundation to the rhythm. When the melody of the main tune includes divisions of the beat, often another group of students will tap out steady divisions, or a rhythmic ostinato pattern which uses the division within the pattern. The layer with divisions of the beat typically has some sort of ostinato pattern which may vary slightly throughout the piece. In part two below, the ostinato set by measure 1-2 has a slight variation on measure 5-6.

Here is an example of the beat and division layering, using "The ABC Song" in 2/4.

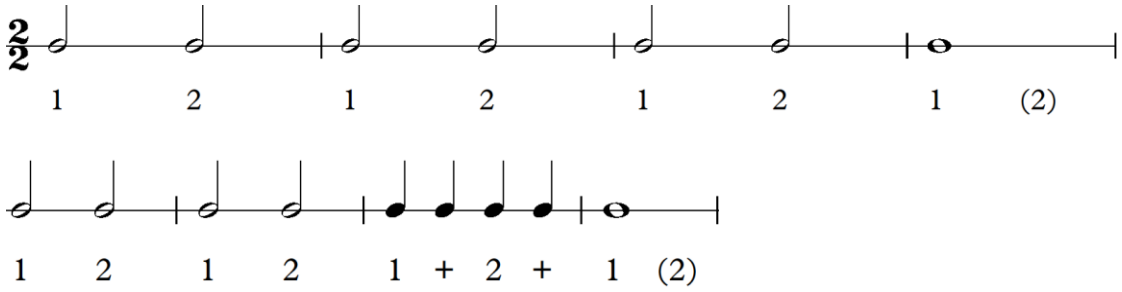
Example 2.3b -



It can be helpful to have the background beat (Part 3, above) and division patterns (Part 2, above) perform a few repetitions of their measures as an introduction, prior to starting Part 1. In the ensemble example above, Part 3 could do four measures of steady pulses, followed by Part 2 entering with four measures of the ostinato found on measures 1-4. After the beat is established by the introductory measures, all three parts can execute the written example starting from the first measure, and repeating three times so that each group gets a chance to perform all parts. These types of strategies are characteristic of the Orff method. It is a teaching style based on principles and techniques which allow the teacher to adjust and create the best teaching experiences for the specific group of learners present at any given lesson.

Example 2.3c shows the rhythm of "The ABC Song" drawn in 2/2 time with counting provided under the measures. In 2/2 time, half notes are the beat notes, whole notes are worth two pulses, and each beat divides into two quarter notes.

Example 2.3c

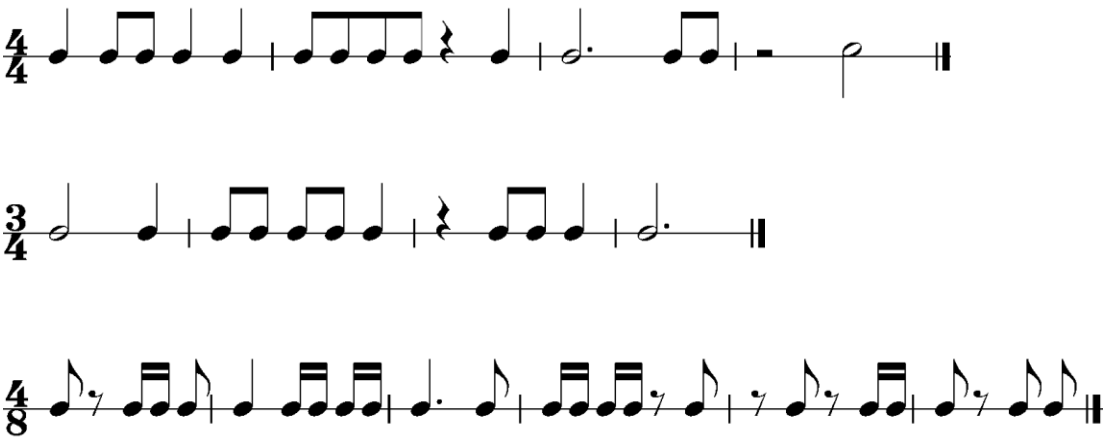


Reminder: When simple time signatures have a 4 as the lower number, the beat notes are quarter notes and the divisions of the beat are eighth notes. Lower numbers of 2 on simple time signatures represent beat notes of half notes with quarter notes being the division of the beat. If a simple time signature has a lower number of 8, eighth notes are the beat note and sixteenth notes are the division of the beat.

Exercises for Section 2.3

A. Clap and count the following rhythms in simple meter. *Count within the time signature (number of beats per measure), using the word "and" for divisions of the beat. Remember: If the beat note is eighth notes, divisions are sixteenth notes.*

A note to teachers: All single line drills can be made into ensemble exercises by utilizing the methods outlined in Example 2.3b above. Classes can be divided into groups, with one group performing a steady pulse, another group performing the division of the beat or a pattern with the division having a prominent role, and the third group can perform the drill. As always, repeat enough times to ensure that every group performs all possible parts.

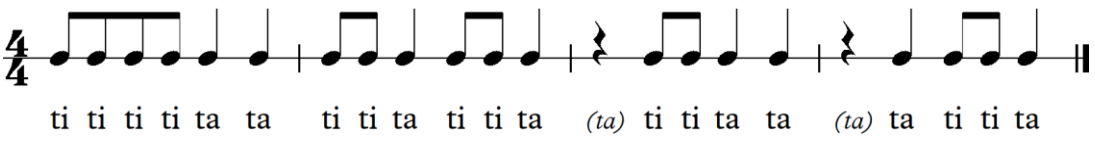


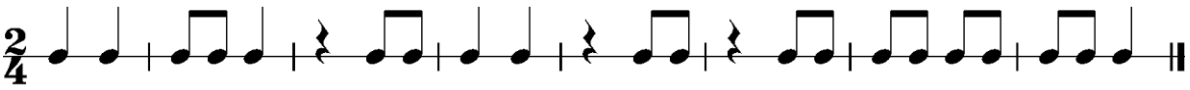
The Orff method uses simple syllables to verbalize rhythm. Quarter notes are given the syllable "ta," and groups of two eighth notes are given the syllables "ti-ti." The following example has Orff syllables written below the notes. First, clap and say the Orff syllables; then clap and count the rhythm in the given time signatures. Again, whether as a duet with the teacher or by dividing a class setting into two groups, it's always beneficial to have a background audible beat pattern. Using a variety of ways to practice rhythm helps develop mastery. Counting is important, but verbalizing using easy syllables is also a very effective way to practice.

In the 4/4 example, half of the class can stomp or clap while chanting:

"**1** + 2 + **3** + 4 +/ **1** + 2 + **3** + 4 +."

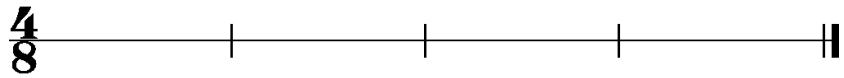
Likewise, in 2/4 the background chant would be "**1** + 2 +/ **1** + 2 +."



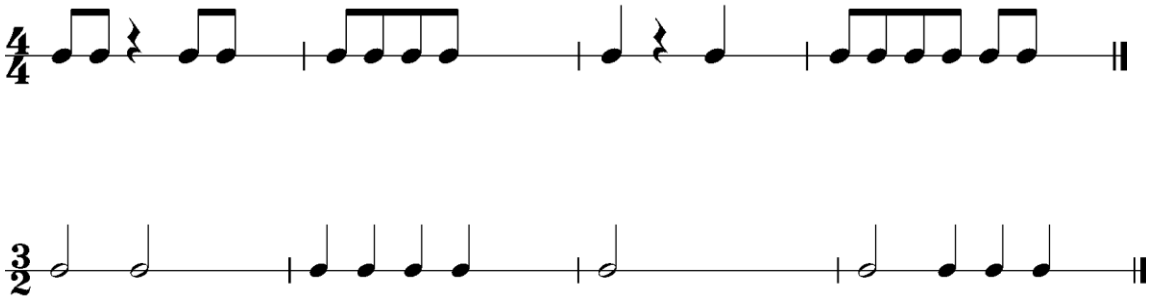


B. Written exercises:

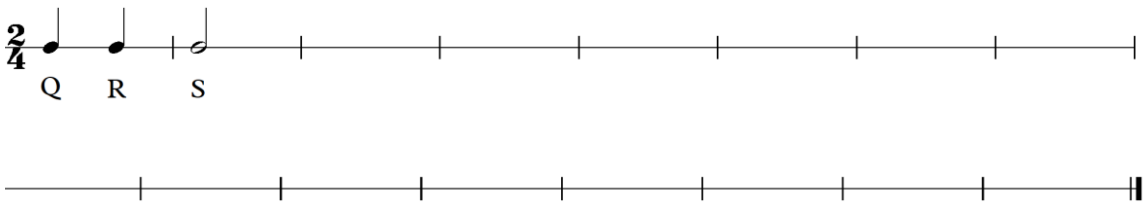
- *Redraw the 4/4 example above in 4/8. Remember – in time signatures with an 8 as the lower number, divisions of the beat will be sixteenth notes.*



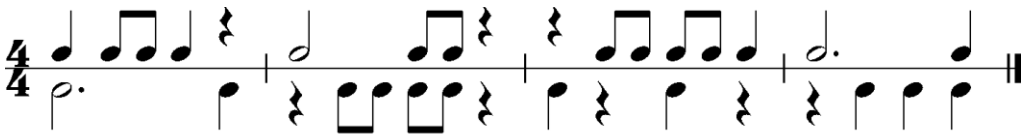
- *Each measure below is incomplete. Add the <u>ONE</u> note (or the ONE rest) that makes the measure add up to the correct amount of beats. (The missing note/rest is the last component of each measure.)*

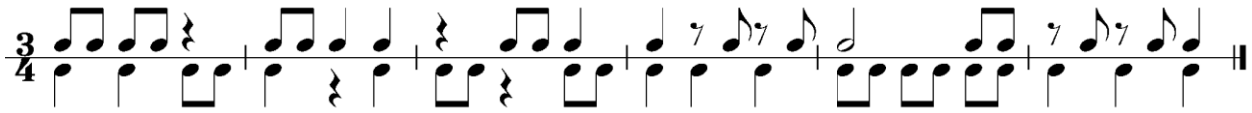


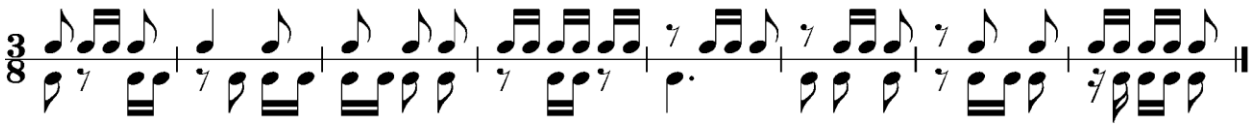
- *Example 2.3a is the first part of "The ABC Song" drawn in 2/4. Continue notating the rhythm through to the end of the song, including the lyrics "now I know my ABCs. Next time won't you sing with me." There should be 16 more measures. Draw either the lyrics or the counting under each measure. The first measure has been completed for you as a guide (with lyrics.)*

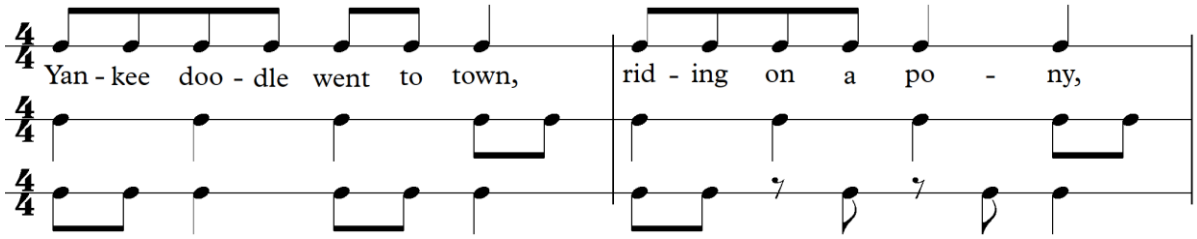


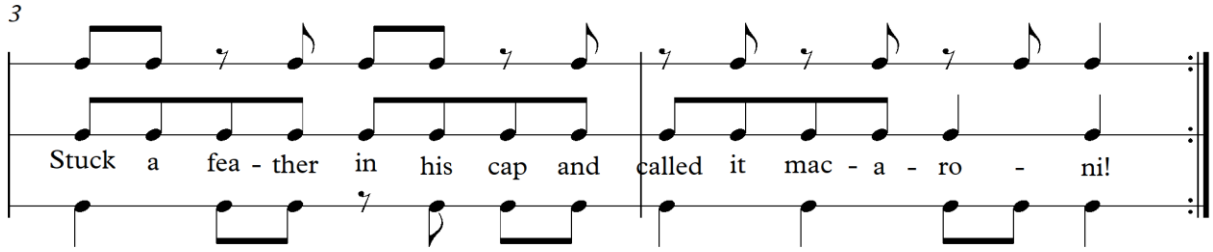
C. Duets and Ensemble: *As always, duets can be performed by an individual as a two-handed drill. When performing with two or more groups/individuals, always repeat enough times that every person/group performs each line of rhythm.*











2.4 Division of beats – introduction to compound meter starting with 6/8 time

Music written in compound meter still has pulse groupings of 2, 3, or 4, pulses per measure, but in compound time signatures the basic pulse divides into three smaller parts. An example of this can be heard in the children's song "Row, Row, Row Your Boat." Before chanting this familiar tune, think of a strong and relatively slow "**1** – 2 – **1** – 2," with feet stomping left to right; include a slight swaying of the body back and forth. After the basic pulse is established, add clapping of the division – this time it will be:

"**1** – clap – clap – **2** – clap – clap – / **1** – clap – clap – **2** – clap – clap."

(Teacher will demonstrate.)

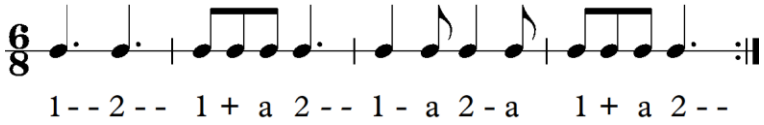
In the song "Row, Row, Row Your Boat," the first two words are the length of the pulse, and later the words "merrily, merrily, merrily" exemplify the pulse being divided into three equal parts. Time signatures in compound meters are very different from those in simple meter. In compound time, the beat notes are always divisible by three. The time signature's upper number represents the number of divisions in a measure, and the lower number tells the type of beat that gets the division. It is helpful to start examination and practice of compound time with its most common time signature – 6/8. This time signature has 6 divisions of the beat, the divisions being eighth notes. The performer counts two strong beats: "**1** - - 2 - - **1** - - 2 - -." The two strong beats in compound time are divided into three smaller parts. It is common to count the three divisions of the beat as "1 + a 2 + a."

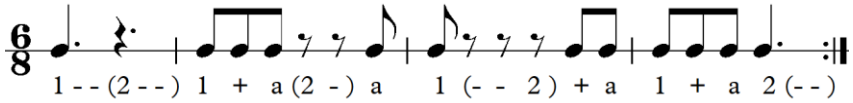
In 6/8 time, the beat note is a dotted quarter, not the eighth note. There are two dotted quarter values per measure, the first created by the 1st, 2nd and 3rd eighth note division, and the second dotted quarter value created by the 4th, 5th, and 6th eighth note divisions. Common

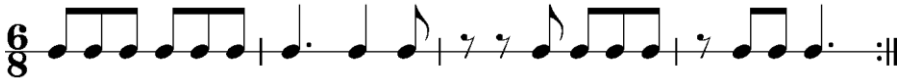
groupings of notes in 6/8 time are those combinations of notes that are equal to a dotted quarter note. Thus, most typical combinations of notes will be three eighth notes beamed together, a quarter note with a single eighth note, a single eighth note followed by a quarter, and a dotted quarter note. Here are some examples in 6/8 time with counting under the measures.

Exercises for Section 2.4

A. Practice counting and clapping aloud.
(Dashes between numbers represent held divisions.)

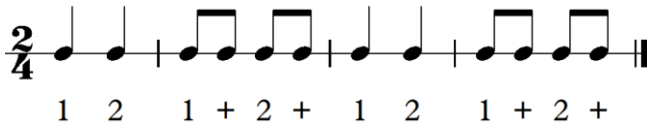




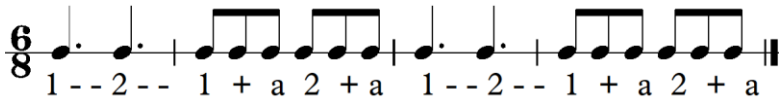


Examine the difference between simple duple and compound duple. In the simple duple time signature 2/4, the beat note is a quarter note, and the beat divides into two eighth notes. (*Example 2.4a)* In compound duple time signature 6/8, the beat note is a dotted quarter note, and the beat divides into three eighth notes. (*Example 2.4b)* Both time signatures have two beats per measure.

Example 2.4a



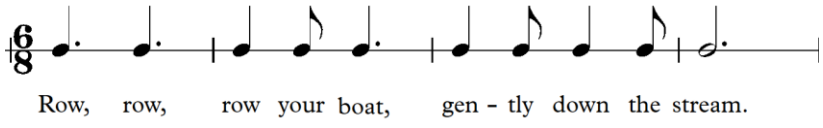
Example 2.4b

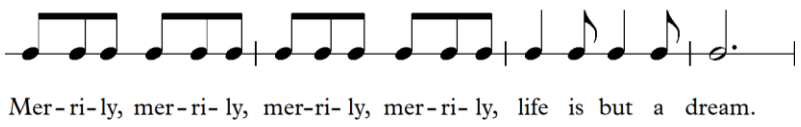


Returning to the song "Row, Row, Row Your Boat," think through the lilting sound of the lyrics. Swaying back and forth with a "**1** – 2 – **1** – 2" feel, determine the rhythm of the song, remembering that each large beat divides into three smaller parts. Remember: the most common combinations in 6/8 are the dotted quarter note (full pulse note), three eighth notes beamed together (the full pulse note divided into three parts), and the quarter note followed by an eighth note (which would have sound on the first and third divisions of the pulse.)

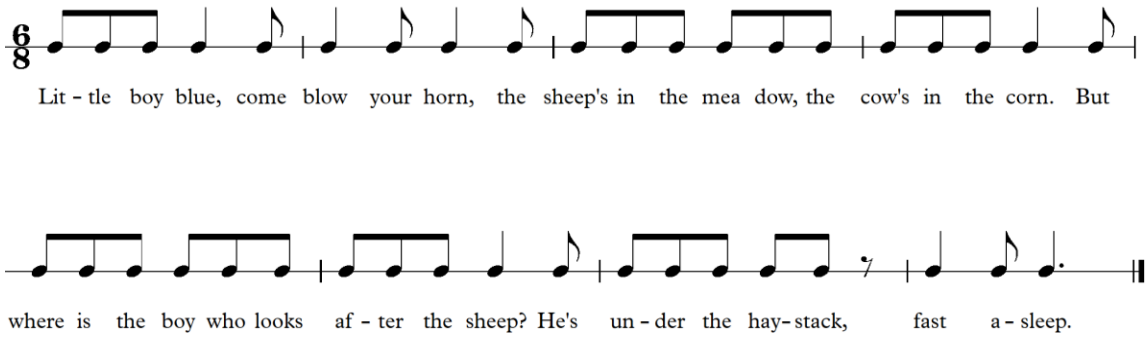
Here is the rhythm of the song, notated in 6/8 time *(Example 2.4c)*, followed by another traditional nursery rhyme in compound duple meter, "Little Boy Blue." *(Example 2.4d)*
Clap and chant the rhyme, then clap and count in 6/8 ("1 + a 2 + a.") Remember to feel an emphasis on the dotted quarter value and a slight stress on beat 1.

Example 2.4c



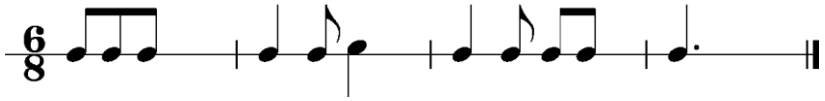


Example 2.4d

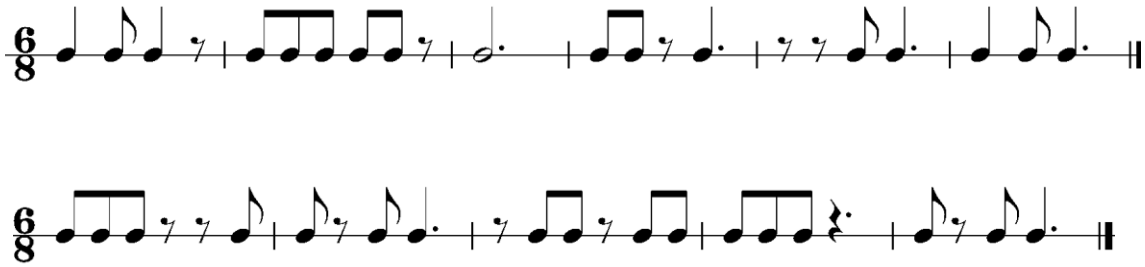


B. Written exercises:

- *Fill in ONE note (or rest) to complete each measure.*



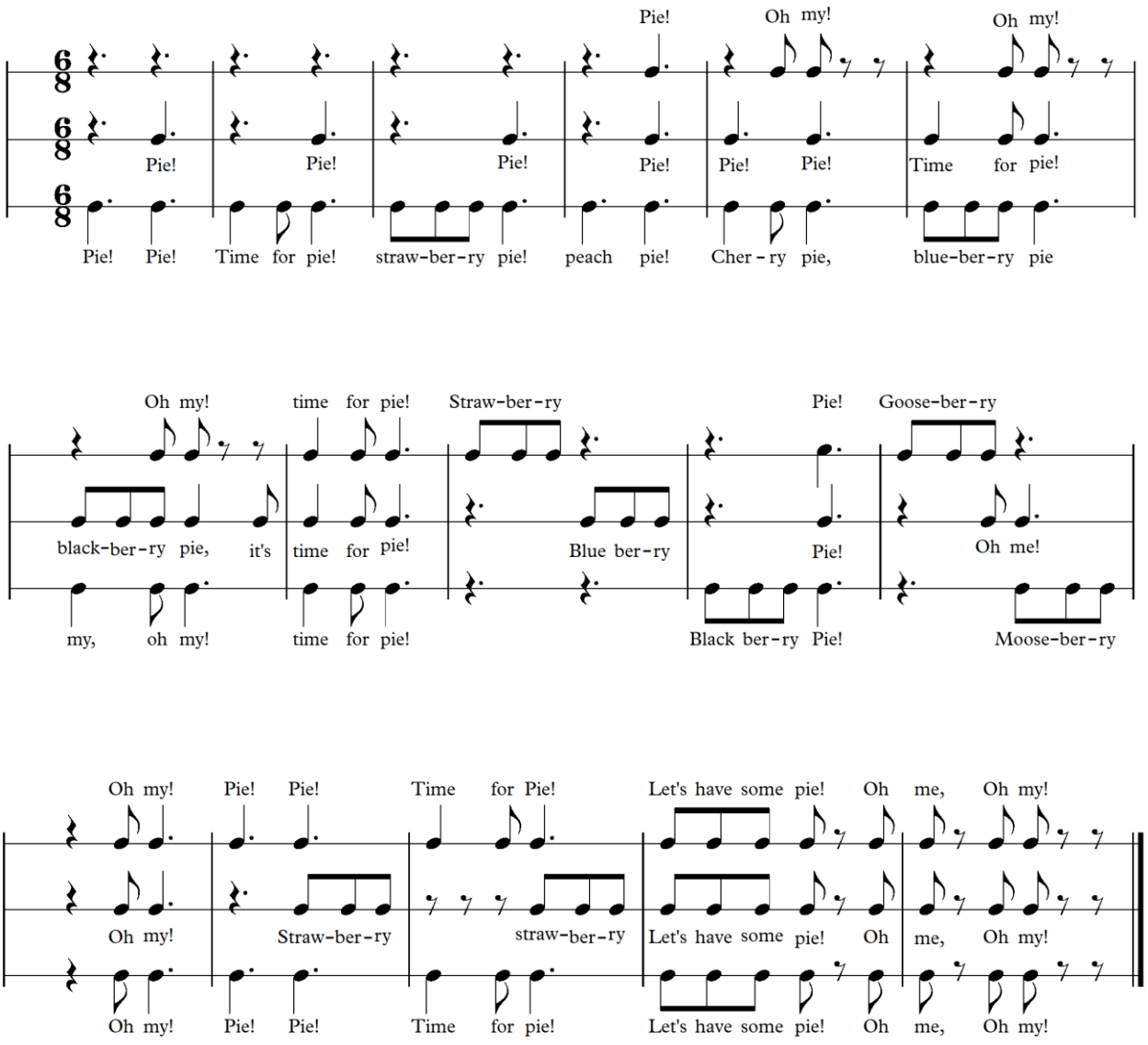
- *Draw in counts under the measures. (I + a 2 + a)*



Reminder: in simple time, the lower number of the time signature is a symbol for the beat note. Beat notes in compound time are dotted values (because they break down into three parts). There is no number (like the denominator of a fraction) that can represent a dotted note value. Instead, compound time signature lower numbers represent a symbol for the note that gets the *division* of the beat. As mentioned previously, the most common compound time signature is

6/8. Many method books inaccurately define this time signature as being worth six beats. A 6/8 time signature is a type of duple meter; two large beats per measure (dotted quarters) which then break down into three eighth notes each.

C. Ensemble in 6/8 time: "Strawberry Pie!" (original rhythm ensemble by J. Oliver)



2.5 Summary of time signatures; practice examples in 9/8 and 12/8

As discussed in Section 2.2, the top number of a time signature in simple meter represents the number of beats per measure; the lower number is a numeric symbol representing the type of note that gets the beat. For compound time signatures, the number of beats per measure can be found by dividing the top number by three. If the top number is 6, there are 2 large beats per measure – duple meter; if the top number is 9 there are three large beats per measure – triple meter; with a top number of 12 there are four large beats per measure – quadruple meter. Beat notes in compound meters are always dotted (because they are divisible by three) and can be found by adding together the value of three divisions of the beat (divisions are represented numerically by the lower number on the time signature). For example, if the lower number is an 8, the beat note is a dotted quarter (worth three eighth notes). If the lower number is a 4, the beat note is a dotted half note (worth three quarter notes) and if the lower number is a 16, the beat note is a dotted eighth (worth three eighth notes).

In Carl Orff and Gunild Kettman's Orff-Schulwerk *Music for Children Book I*, time signatures are replaced with a modified symbol which provides a visual guide to the meter of the piece[34]. This modified symbol is extremely helpful in expressing the meaning of time signatures. It is subsequently used in Frances Clark's piano method *The Music Tree: A Time to Begin*,[35] and it gives young students much greater success in understanding how to count measures of rhythm. Here is a listing of these modified time signatures and their meaning – although not all are used

[34] Orff, *Music for Children Book I*, 3-54.

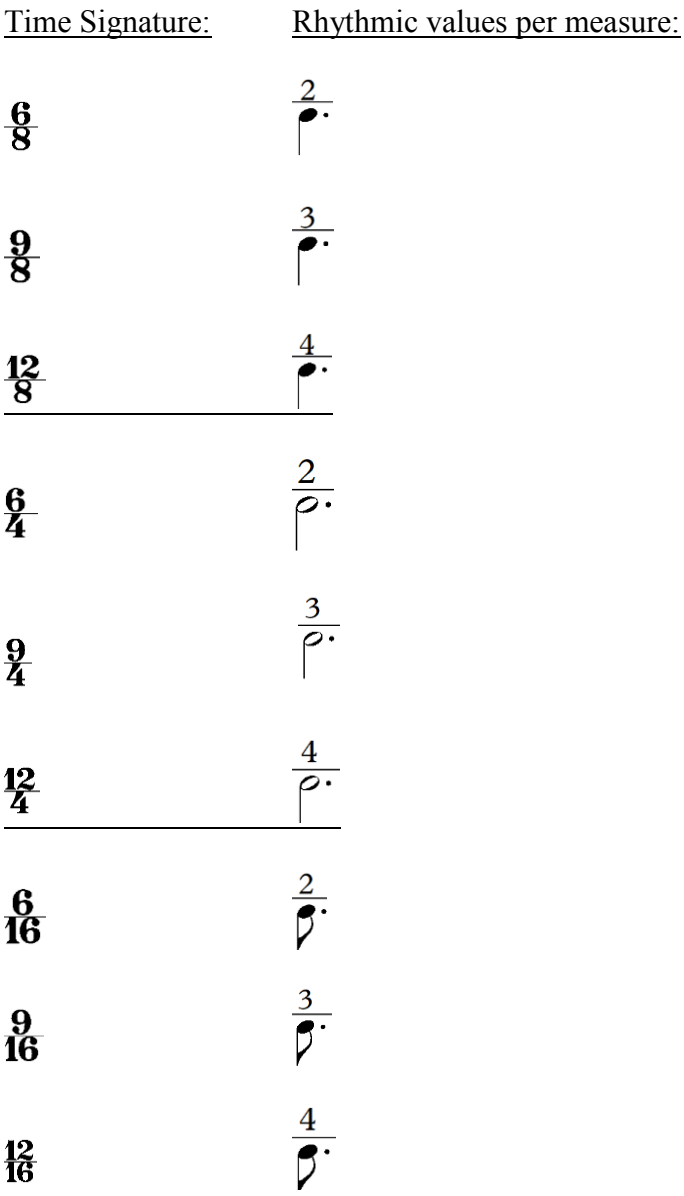
[35] Frances Clark, Louise Goss and Sam Holland, *The Music Tree: A Time to Begin,* Rev. ed., (Miami: Sunny Birchard, Inc., 2000), 4-72.

in the book, this list provides what the symbol would be even for the less frequently used time signatures:

Example 2.5a – Simple meters

Time Signature	Rhythmic values per measure:
$\frac{2}{4}$	$\frac{2}{\text{♩}}$
$\frac{3}{4}$	$\frac{3}{\text{♩}}$
$\frac{4}{4}$	$\frac{4}{\text{♩}}$
$\frac{2}{8}$	$\frac{2}{\text{♪}}$
$\frac{3}{8}$	$\frac{3}{\text{♪}}$
$\frac{4}{8}$	$\frac{4}{\text{♪}}$
$\frac{2}{2}$	$\frac{2}{\text{𝅗𝅥}}$
$\frac{3}{2}$	$\frac{3}{\text{𝅗𝅥}}$
$\frac{4}{2}$	$\frac{4}{\text{𝅗𝅥}}$

Example 2.5b – Compound time signatures



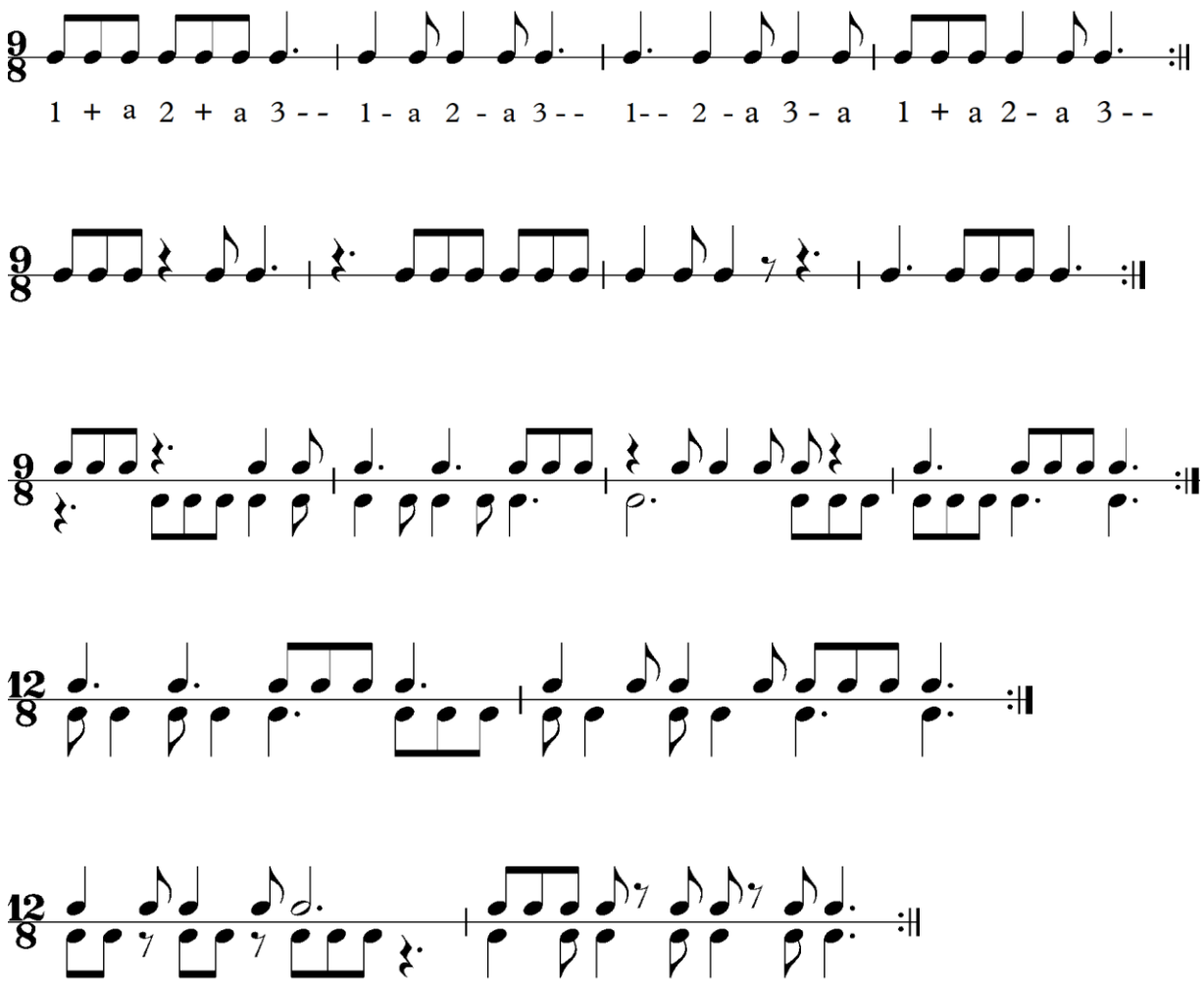
In Section 2.4, compound meter was introduced with an examination of 6/8 time. In the same way that 6/8 time has two strong beats per measure (dotted quarter values), 9/8 time has 3 strong beats per measure (3 dotted quarter values), and 12/8 has four strong beats per measure (4 dotted quarter values). When preparing to practice rhythms in compound time signatures, set a

slow and steady pulse, counting the basic duple, triple, or quadruple meter. Once the meter is established, add the subdivisions, like this:

- "**1** + a 2 + a / **1** + a 2 + a" for duple meter
- "**1** + a 2 + a 3 + a / **1** + a 2 + a 3 + a" for triple meter
- "**1** + a 2 + a **3** + a 4 + a/ **1** + a 2 + a **3** + a 4 + a" for quadruple meter

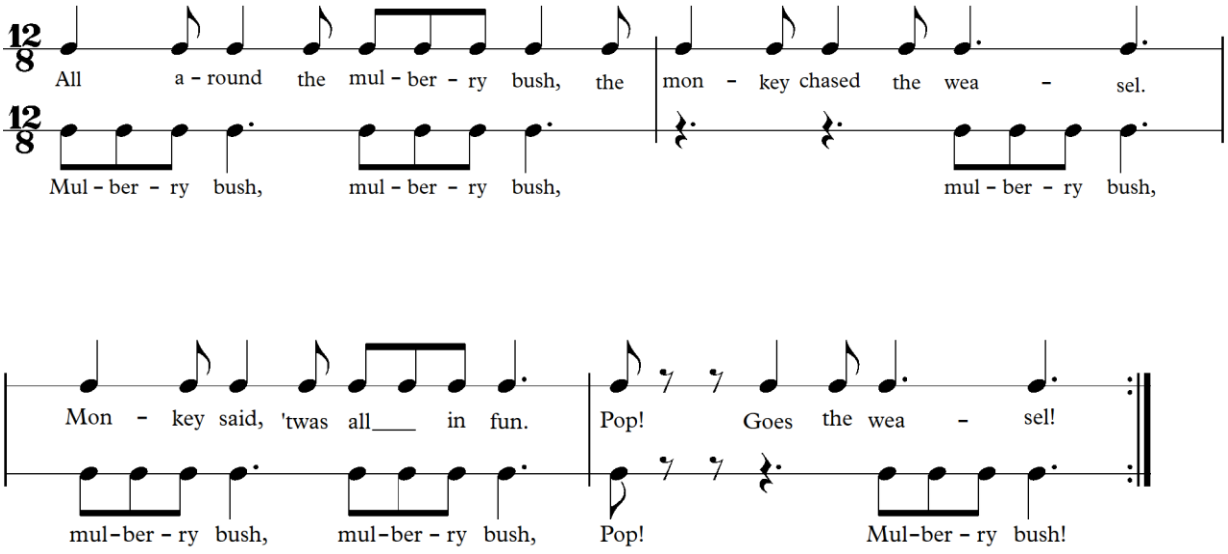
Exercises for 2.5

A. Clap and count the following rhythmic drills. *("-" = held division of the beat)*



Reminder: In compound time signatures, rhythm should be drawn to reflect the meter. Groupings are determined by beat note. For example, in 6/8 time, combinations of eighths are grouped in dotted quarter values. So this:  and not this: 

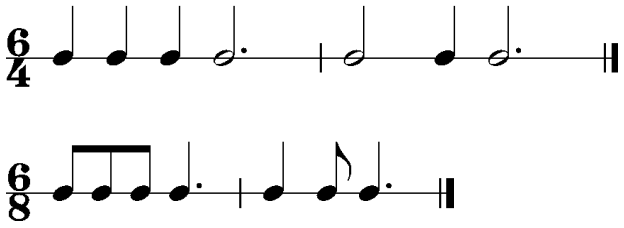
B. Ensemble – Mulberry Bush! (Original rhythm duet by J. Oliver)



2.6 More compound time signatures

As discussed in Sections 2.4 and 2.5, the top number of a compound time signature is the number of divisions per measure; the number of pulses per measure is determined by dividing the top number by three. The lower number of a compound time signature represents the type of note that gets the division. Most compound time signatures have 8 as the lower number, but it is also possible to see a 4 or a 16. When the lower number is a 4, quarter notes are the division of the beat and dotted half notes are the beat note. Here are some pairs of examples: the first pair shows 6/4 compared to 6/8; the second shows 9/4 compared to 9/8. When clapping and counting aloud, tap/stomp/sway to the beat. Alternatively, if being practiced in a group lesson, divide class into groups and add layers as outlined in Example 2.2b. *(The pairs should sound the same when performed.)*

Example 2.6a



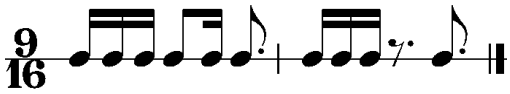
Example 2.6b

Some compound time signatures have a 16 as the lower note. This means that sixteenth notes are the division of the beat, and dotted eighth notes are the beat note. Here are two examples, one in 9/16 and one in 12/16. Notice that the divisions are grouped into dotted eighth values.

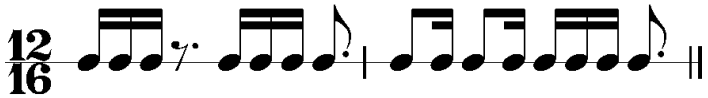
Exercises for 2.6

A. Written exercises: Draw in the counts under the measures.

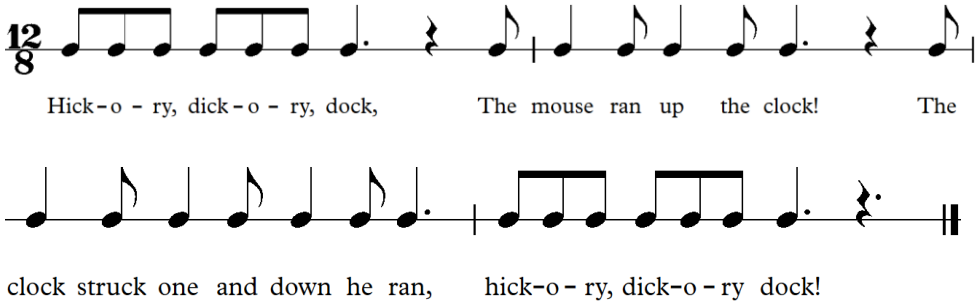
- *In 9/8, label the counting: 1 + a 2 + a 3 + a*



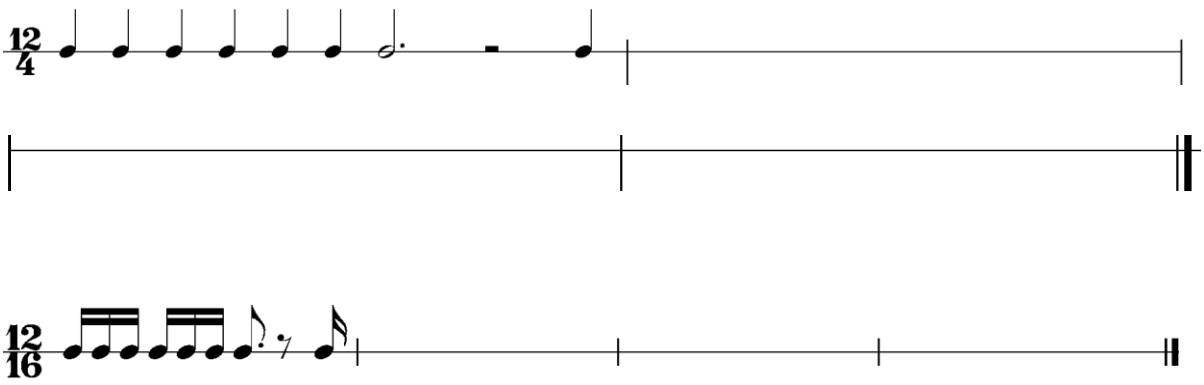
- *In 12/8, label the counting: 1 + a 2 + a 3 + a 4 + a.*



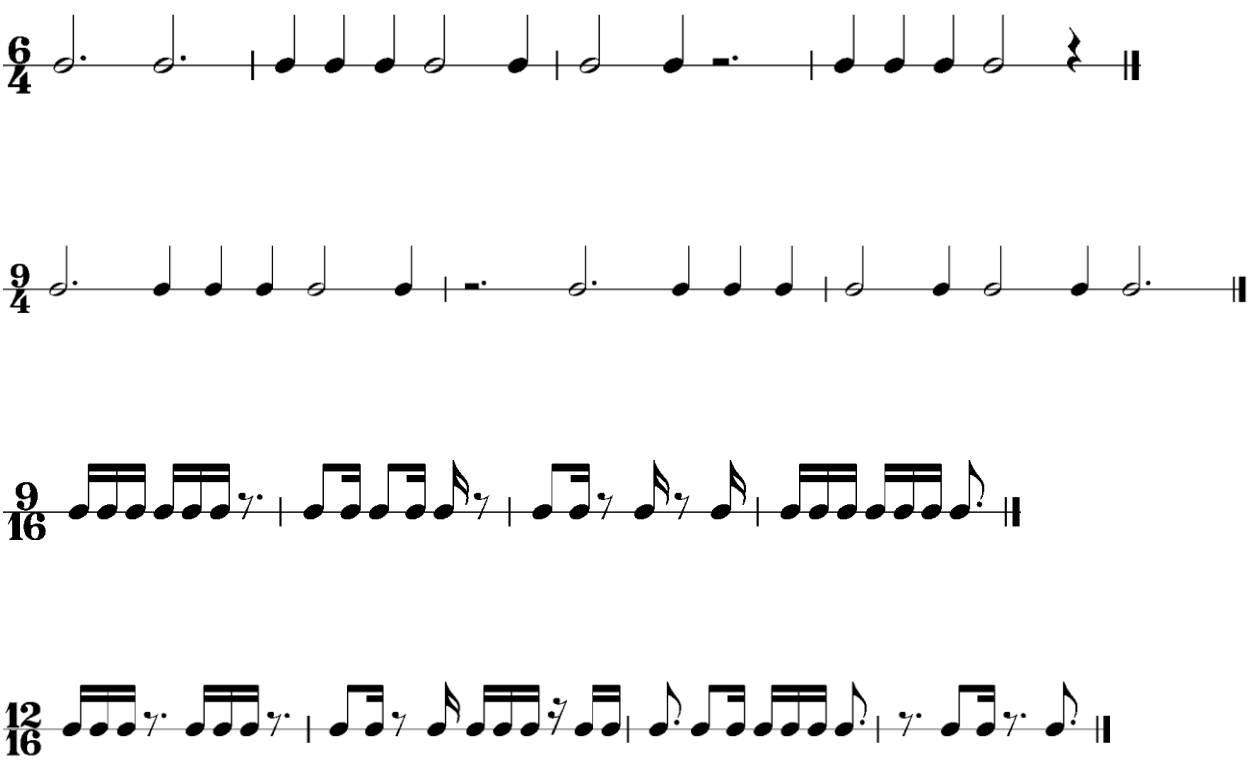
Here is the familiar nursery rhyme "Hickory, dickory, dock," written in 12/8 time.



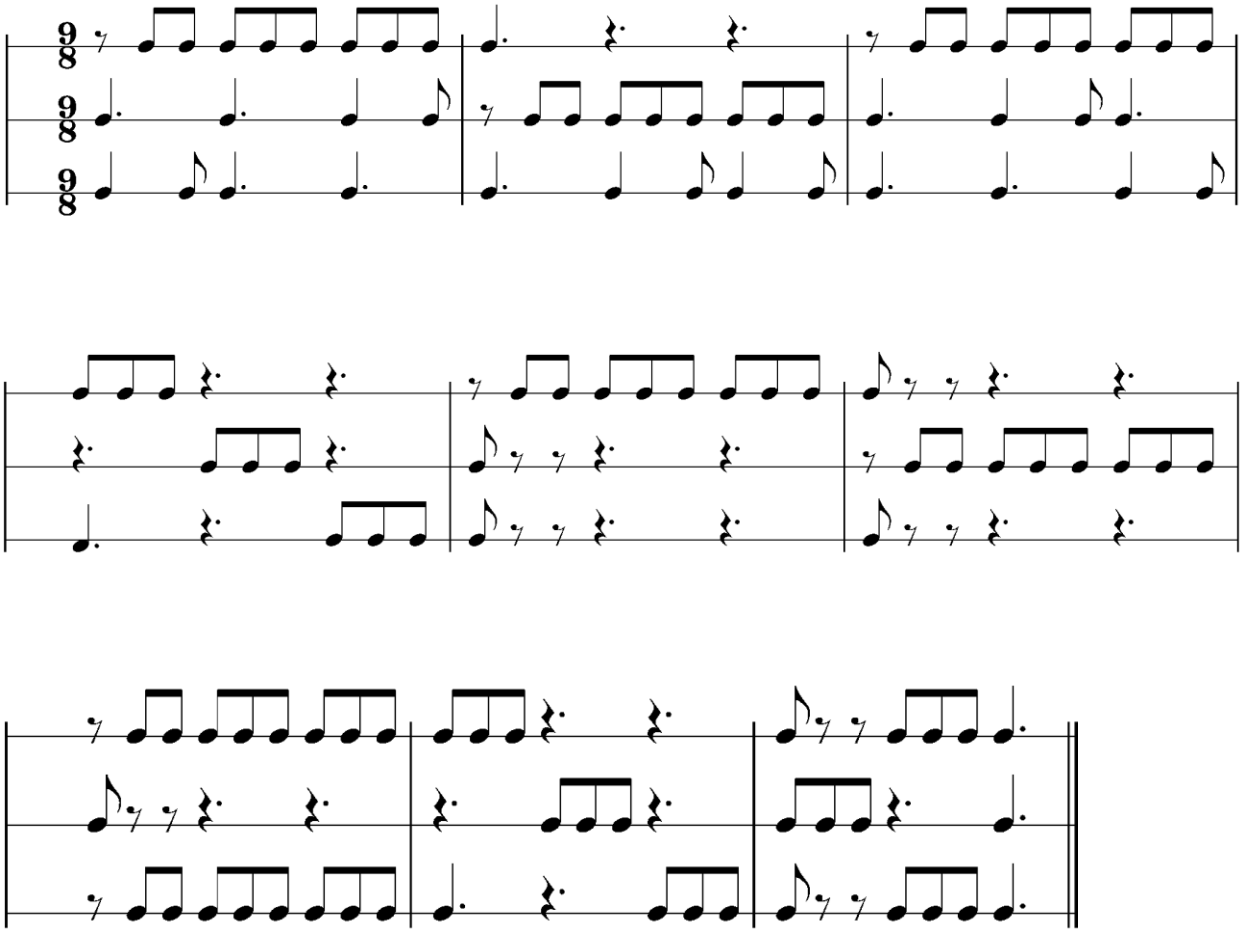
- *Practice clapping and chanting the words, then clapping and counting in compound quadruple. After becoming comfortable with the counting, re-notate in 12/4 and then 12/16 in the spaces below. The first measures have been started as a guide.*



B. Exercises - Clap and count the following rhythms:



C. Ensemble: "Joy" of Compound Time! *original rhythm ensemble by J. Oliver*
Inspired by J.S. Bach's "Jesu, Joy of Man's Desiring"
*(Teachers:***Prior to performing, have the class listen to this beloved work)*

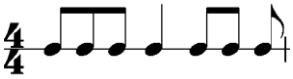


2.7 Ties

A tie is a curved line which connects two notes. The first note is played and then held for the combined value of both notes. Ties have two main applications:

- Ties are used to create values that do not exist with basic notation. For example, if a composer wants a note or chord to be held for five beats, there is no notational symbol for that value. Imagine a piece in 4/4 time: a note worth five beats exceeds the amount of beats which can "fit" into a measure. A whole note can be tied to a quarter note into the next measure to get the value of five held beats. Perhaps the composer desires a five beat note starting on the second beat of a measure in 4/4; the composer can start with a dotted half note and then tie it to a half note in the next measure – again, a five-count note in 4/4 time. Ties also connect values of divisions of the beat. If a composer is writing in a compound time such as 9/8 and desires a note worth five divisions, a dotted quarter could be tied to a quarter.
- Ties are used to clarify notation. As mentioned earlier, notation should be grouped in beat note values according to meter for ease of reading. Consider a measure of 4/4 time. Beginnings of beats should not be imbedded in longer values.

  Here is an example that is difficult to read:

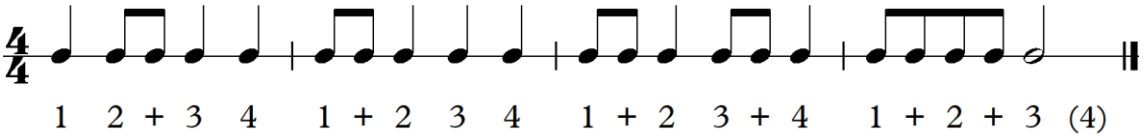


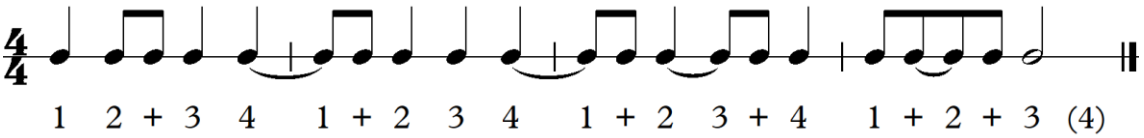
  Groupings should start on beat notes. Ties can help clarify this rhythm.

Notice that the beamed eighth notes always start on a numbered beat. A general guideline in groupings is that you should always be able to see the beginnings of numbered beats.

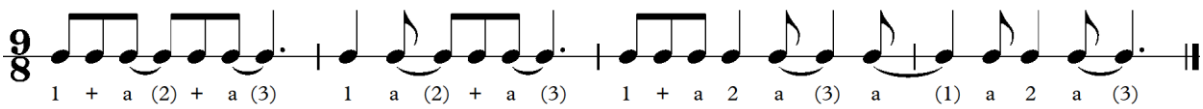
Exercises for Section 2.7

A. Clap and count*. First practice the rhythm without ties. Count within the time signature as notated under the measures. Once the rhythm is mastered, move on to the subsequent example with ties included. Continue to count within the time signature.*





Now master this example in 9/8 compound time - -
Reminder – 3 beats per measure – each beat divided into three parts: 1 + a 2 + a 3 + a.
*** On the line with ties, held syllables are in parenthesis.*

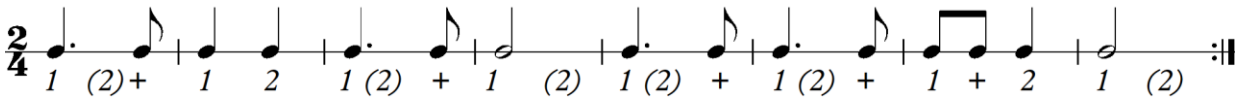


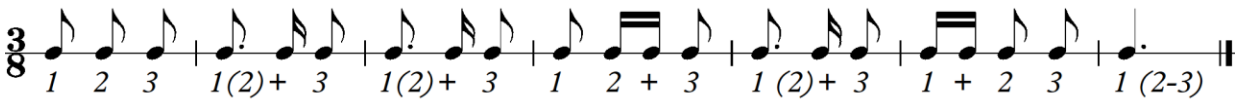
2.8 More about dotted notes

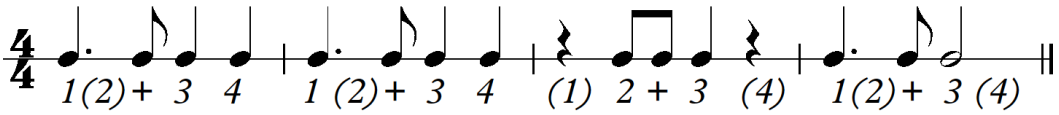
A critical concept needing to be mastered in order to comprehend music notation is the meaning of dotted rhythms. The vast majority of basic piano methods teach dotted notes (especially dotted quarters) as being worth "1 and a 1/2 beats." This definition only works in specific scenarios, and the notion becomes quite confusing in compound meter when a dotted note can actually be worth one complete beat. It is more practical to think of a dotted note as being worth three of the next smaller rhythmic value. (Dotted half notes are worth three quarters. Dotted quarters are worth three eighth notes. Dotted eighth notes are worth three sixteenth notes.) Another way of thinking of dotted notes, especially in simple meter, is that dotted rhythms have the value of the original note tied to the next smaller rhythm. (Dotted half notes are worth a half note tied to a quarter. Dotted quarters are worth a quarter note tied to an eighth. Dotted eighth notes are worth an eighth note tied to a sixteenth.)

Exercises for Section 2.8

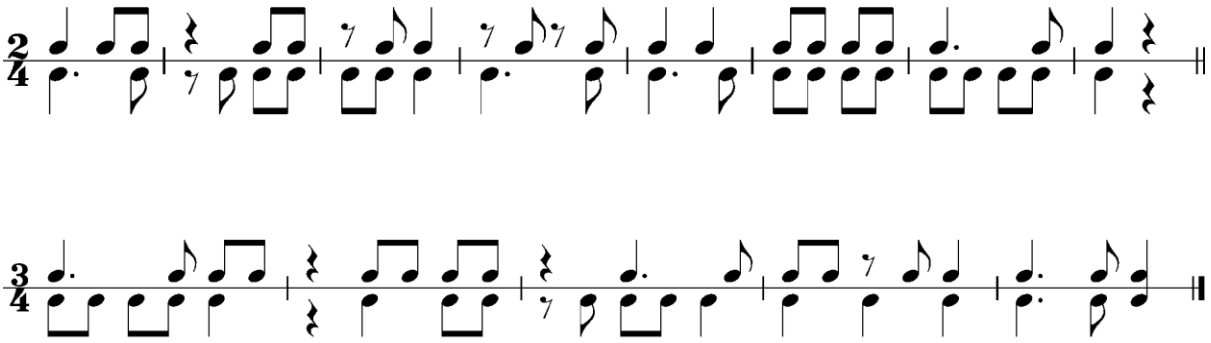
A. ***Clap and count the rhythm.*** *Here are some examples of dotted rhythms in simple time with counts below the measures:.*



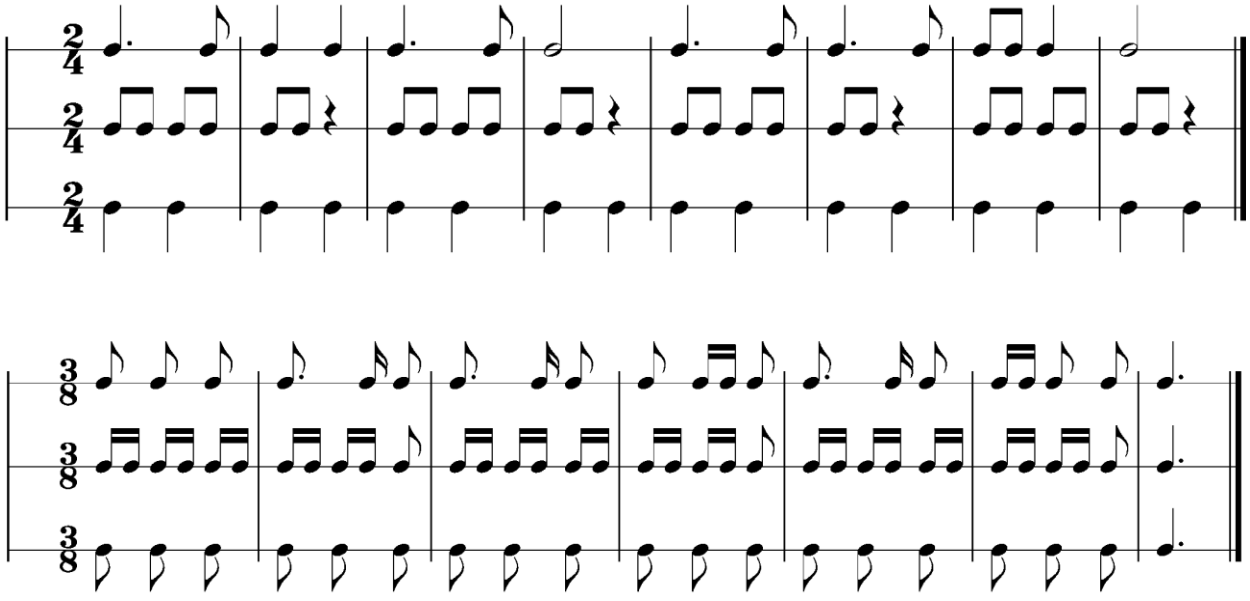




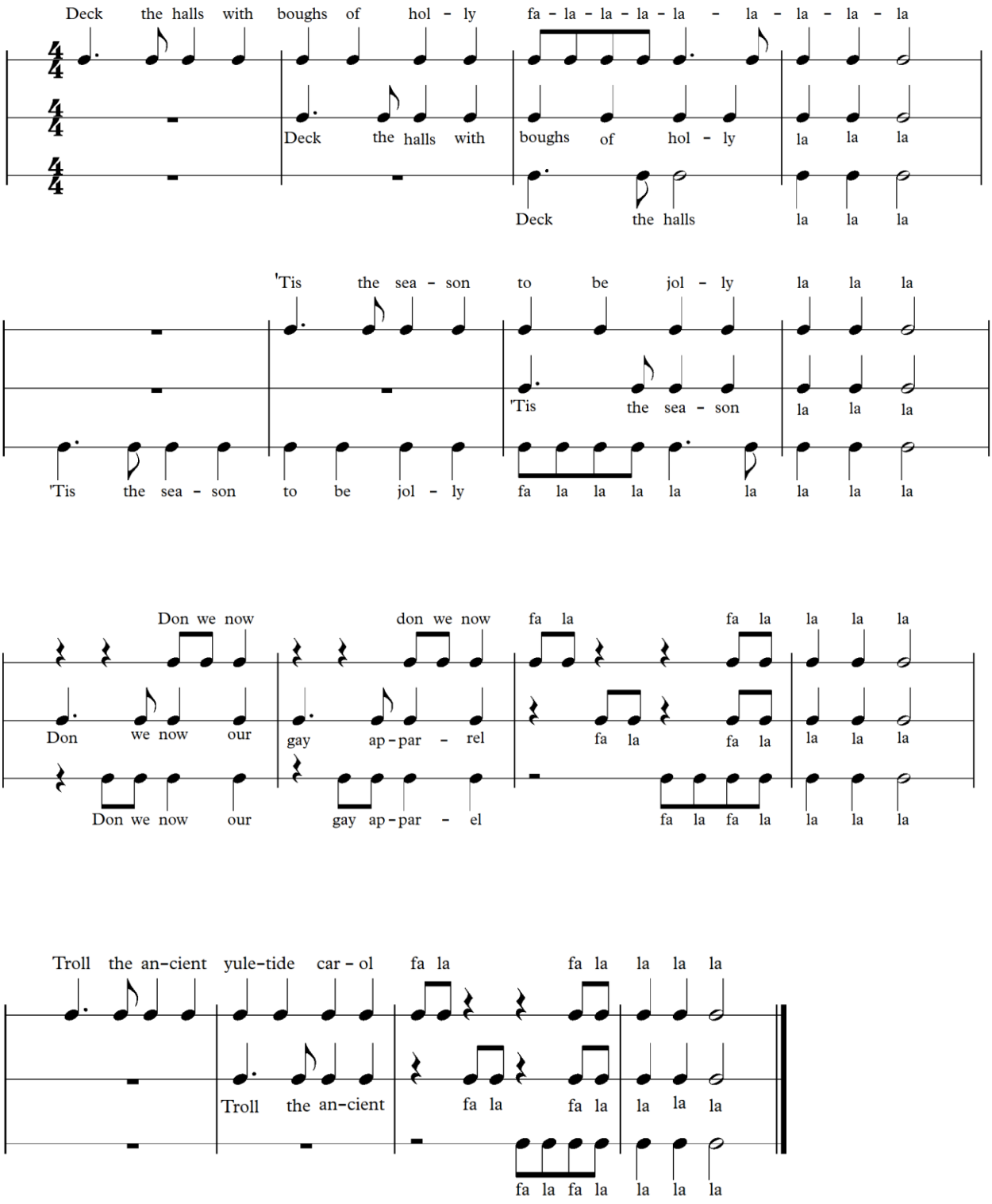
B. Two-handed exercises. *Perform these ensembles – left hand takes lower line, right hand takes upper line.*



C. Ensembles. *The first two examples from exercises A above are now re-notated as three-part ensembles, with the layering techniques discussed in Section 2.2. One part drums the pulse, one part has divisions in an ostinato pattern, and one part performs the given rhythm. With the layers of beat and division, students can firmly grasp the concept of dotted notes being worth three of the next smaller note.*



***Deck the Halls!*[36] – original rhythm ensemble by J. Oliver**



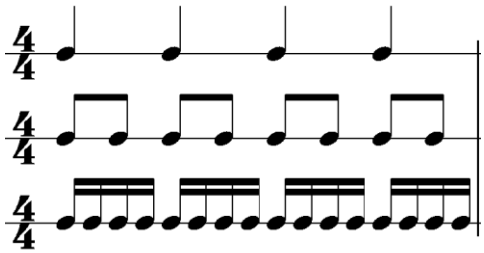
[36] "Deck the Halls," *Wikipedia.org*, last modified November 30, 2014, http://en.wikipedia.org/wiki/Deck_the_Halls.

2.9 Subdivisions in simple time signatures; incomplete measures (anacrusis)

All basic symbols of rhythmic notation divide into two notes of the next smaller value. Whole notes divide into two half notes; half notes divide into two quarter notes. This pattern continues through thirty-second notes dividing into two sixty-fourth notes. (See *Example 2.1b* to review ratios between note values.) It can then be stated that every note divides into four of the *next-next* smaller note. Whole notes divide into four quarters; half notes divide into four eighths, quarter notes divide into four sixteenths. The fractions are always equivalent. (From the previous list: 1 = 4/4, 1/2 = 2/8, 1/4 = 4/16, etc.) When a beat is divided by four, the resultant notes are called the subdivision of the beat. (Remember, when beats divide into two parts they are called division of the beat. In compound time, beats divide into three parts, also called the division of the beat.)

When first studying subdivisions it is easiest to start with groups of four sixteenth notes. Four sixteenth notes are the subdivision of a quarter note in 4/4, 3/4, or 2/4 time. It is helpful to chart equivalent note groupings on a board or on a poster so that students can see the relative values. As Carl Orff's methodologies advocate, verbalization with rhythms is one of the quickest ways to solidify and comprehend the ratios.

Example 2.9a



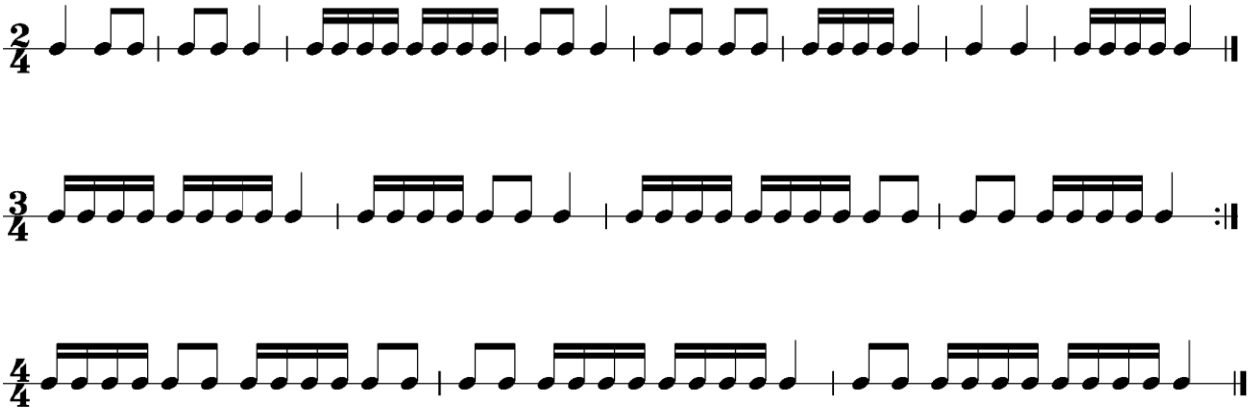
Students should clap and count these three lines of music *(Example 2.9a)* as an initial introduction to groups of four sixteenth notes. They can clap and sing the first line two times with a very robust sound and steady pulse, and then shift to the eighth notes, maintaining the strong pulse. After two times through the line of eighth notes, shift to sixteenths. When counting with numbers, line one should sound like this: "ONE-two-*three*-four-ONE-two-*three*-four." Line two, with the eighth notes, should be counted in the following manner: "**1** + 2 + **3** + 4 +." Finally, the subdivisions have added syllables that are easy to speak while clapping: "**1**e+a2e+a**3**e+a4e+a." Once these three lines of rhythm are very confidently performed, a good exercise for teachers to do is a call and response game. If in a classroom, use a pointer, and if in an individual lesson, perhaps a pencil or conducting baton. Everybody looks at the rhythms, then the caller (usually the teacher, at least at the beginning of the exercise) calls out a measure of rhythm while pointing to the correct rhythm on the chart. For example, if the caller performs a quarter, two eighth notes, a quarter, then four sixteenths, he or she would call the correct syllables (1 2 + 3 4e+a) while pointing at the correct rhythm on the chart.

A helpful verbalization activity for these three combinations of notes is a game called "Fruit Salad."[37] In this chanting game, students say the word "pear" for quarter notes, "apples" for eighth notes, and "watermelon" for groups of four sixteenths. Here are some examples in 2/4, 3/4, and 4/4 time. Again, a teacher can point to the correct rhythm as it is being spoken, so that students make a visual connection from the sound of the class to the look of the symbol.

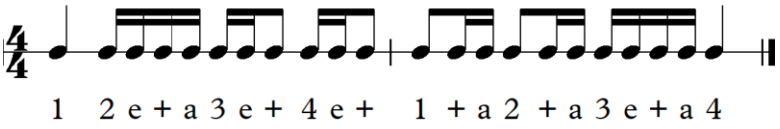
[37] This is a common method of teaching these rhythmic values. I've seen quarter notes verbalized with the word "pie," used in conjunction with related words such as "apple" for two eighth notes and "boysenberry" for four sixteenths. Over the years, I have come to call this sort of rhythmic chanting "Fruit Salad." I've not seen it referred to as "Fruit Salad" from any other source, so although the concept of verbalization is common, this particular method I can claim as my own. In 2003, I had the opportunity to share the idea of "Fruit Salad" counting with Martha Hilley, the co-author of *Piano for the Developing Musician*. She courteously asked my permission to use it in her teaching.

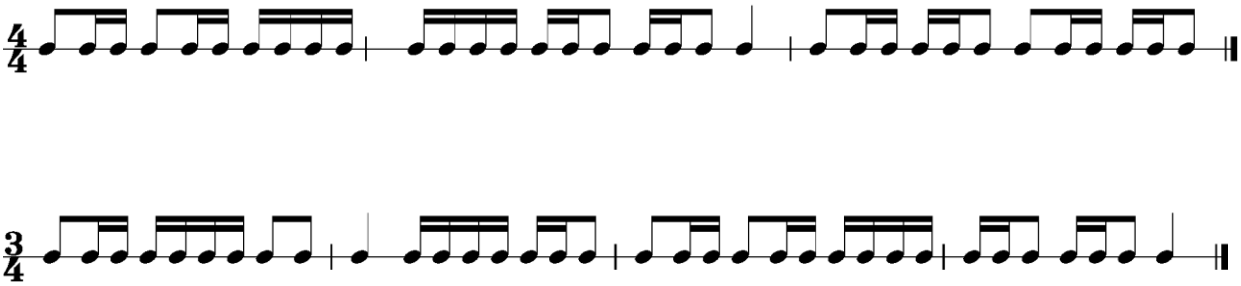
Exercises for 2.9

A. Clap and count the following rhythms. *Always count first with numbers (within the time signature), and then count and clap again using the "Fruit Salad" lyrics. Have fun!*



Working with the grouping of four sixteenth notes, two common combinations are an eighth followed by two sixteenths and two sixteenths followed by an eighth. Use "1e+a" as a guide and speak the syllables that represent the audible (sounding) notes. See below for an example with counting:

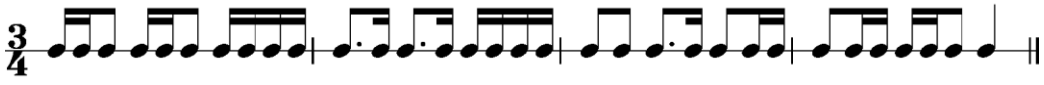


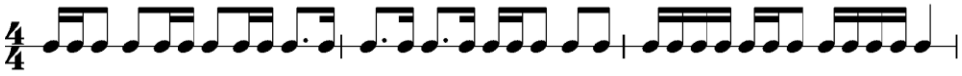


Again working with groups of four sixteenth notes, one more very common grouping is the dotted eighth followed by a sixteenth. One way to think of the dotted eighth note is that it is

an eighth note tied to a sixteenth note. Alternatively, think of the "1e+a" counting – with this rhythm one would play on the numbered beat, hold through "e+," then play again on "a." Finally, if the verbalization from "Fruit Salad" helped, think of the word "watermelon" and play on the first and fourth syllables.

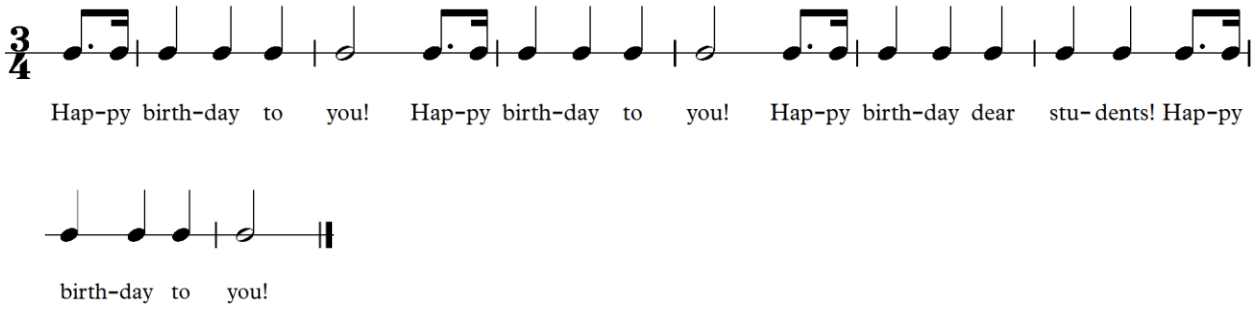
Practice these combinations of four sixteenth note groupings:





Many songs begin with the dotted eighth plus sixteenth grouping, including "Happy Birthday" and "The Star-Spangled Banner." Both of these pieces begin with an incomplete measure, or *anacrusis*. The missing beats of the incomplete measure can be found at the end of the piece. The final measure plus the anacrusis (all of the notes before the first downbeat) combine to create the value of a full measure. Notice in "Happy Birthday," the last measure is a half note, and the anacrusis is a dotted eighth with a sixteenth (a quarter value).[38] Together these values make up a full measure of 3/4 time.

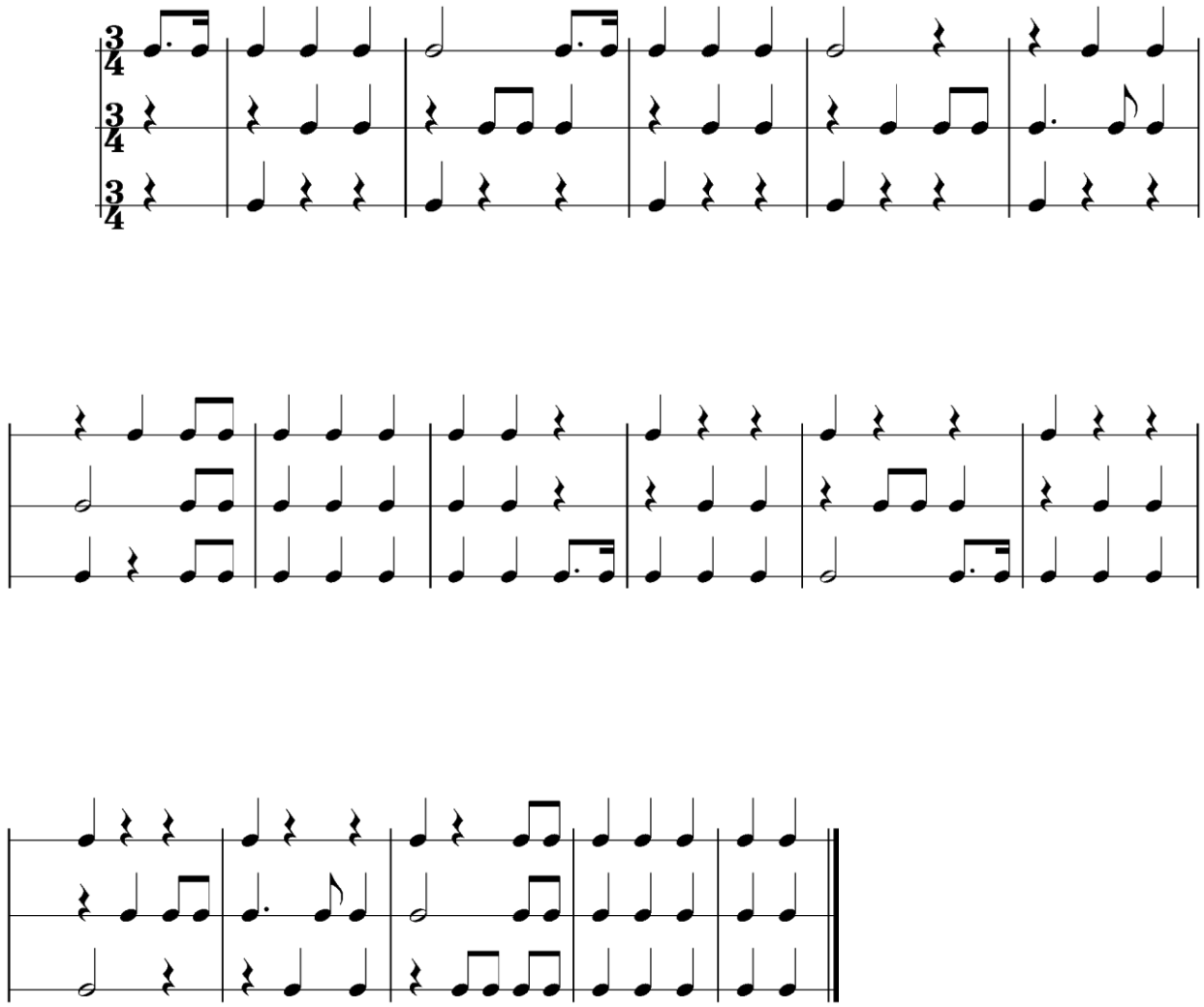
Example 2.9b



[38] "Happy Birthday to You," ©Copyright Warner/Chappell Music.

"The Star Spangled Banner" shares a similar anacrusis:

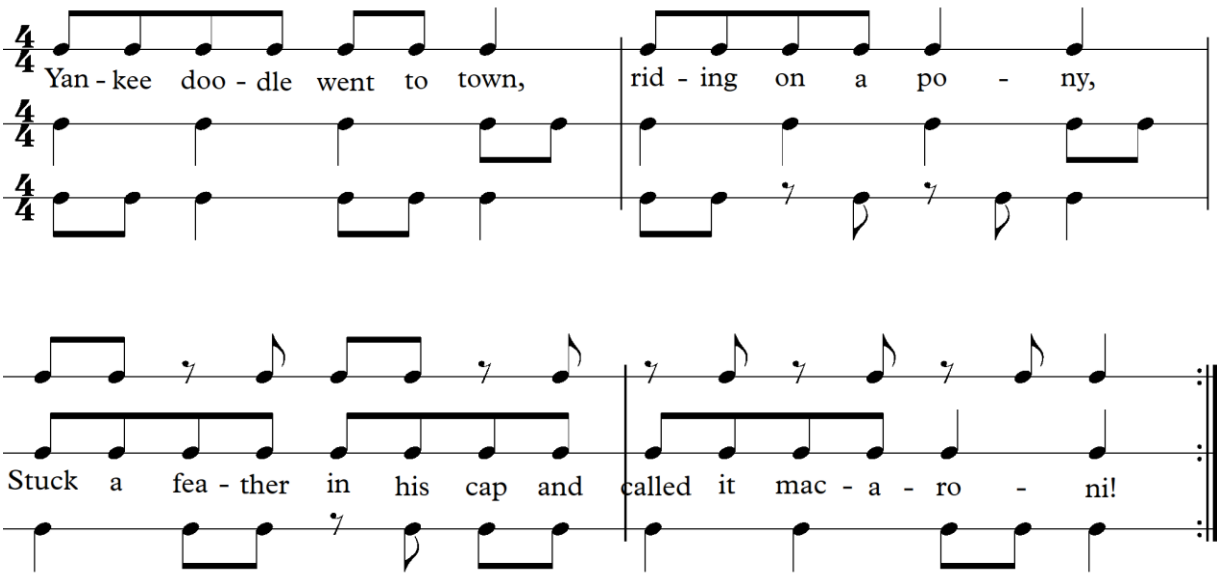
C. Ensemble – The Star Spangled Banner[39] (excerpt) (Original rhythm ensemble by J. Oliver)



[39] "The Star-Spangled Banner," *Wikipedia.org*, last modified December 5, 2014, http://en.wikipedia.org/wiki/The_Star-Spangled_Banner.

2.10 Syncopation; triplets

So far in this examination of rhythm there has been a focus on meter, metric accent, pulse and notation. When rhythm is manipulated to momentarily disrupt or displace the natural accents of a meter, the music is described as being *syncopated*. Syncopation is when there is a shift in emphasis to weak beats or divisions between beats. In simple time, syncopated notes fall on the "and" of a beat (the division) and not on the numbered beats. Look again at the Yankee Doodle ensemble from Section 2.3:



Whenever there is an eighth rest on the numbered beat and an eighth note on the "and" (between numbered beats), the resultant sound is called syncopation. Part 1 has syncopated rhythms in measure three and four; and Part 3 has syncopation in measures 2 and 3.

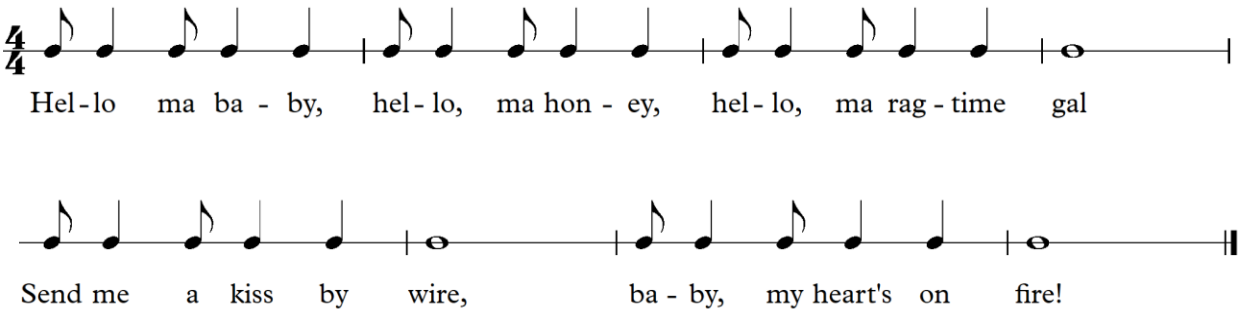
Syncopation can also occur when notes start on a weaker part of the beat and are held through the strong beats. In Section 2.7 Exercises, a line of rhythm was given in 4/4, and another in 9/8. These rhythms were drawn a second time with added ties. Every time a tie holds through a numbered beat, syncopation occurs.

Two wonderful examples with syncopation can be found in the classic tunes, "Hello, My Baby" and "The Entertainer." A word on notation: in 4/4 time, as long as the beginning of beat "one" and beat "three" are visible, notation is considered to be clear and readable. Though beat "two" is embedded within the quarter note which starts on the "and of 1," it is still considered proper notation in 4/4 time. *Example 2.10a* can be compared to its equivalent notation with tied eighth notes in *Example 2.10b*:

Example 2.10a

Example 2.10b

Example 2.10c "Hello, My Baby" (by Joseph E. Howard and Ida Emerson – 1899)[40]

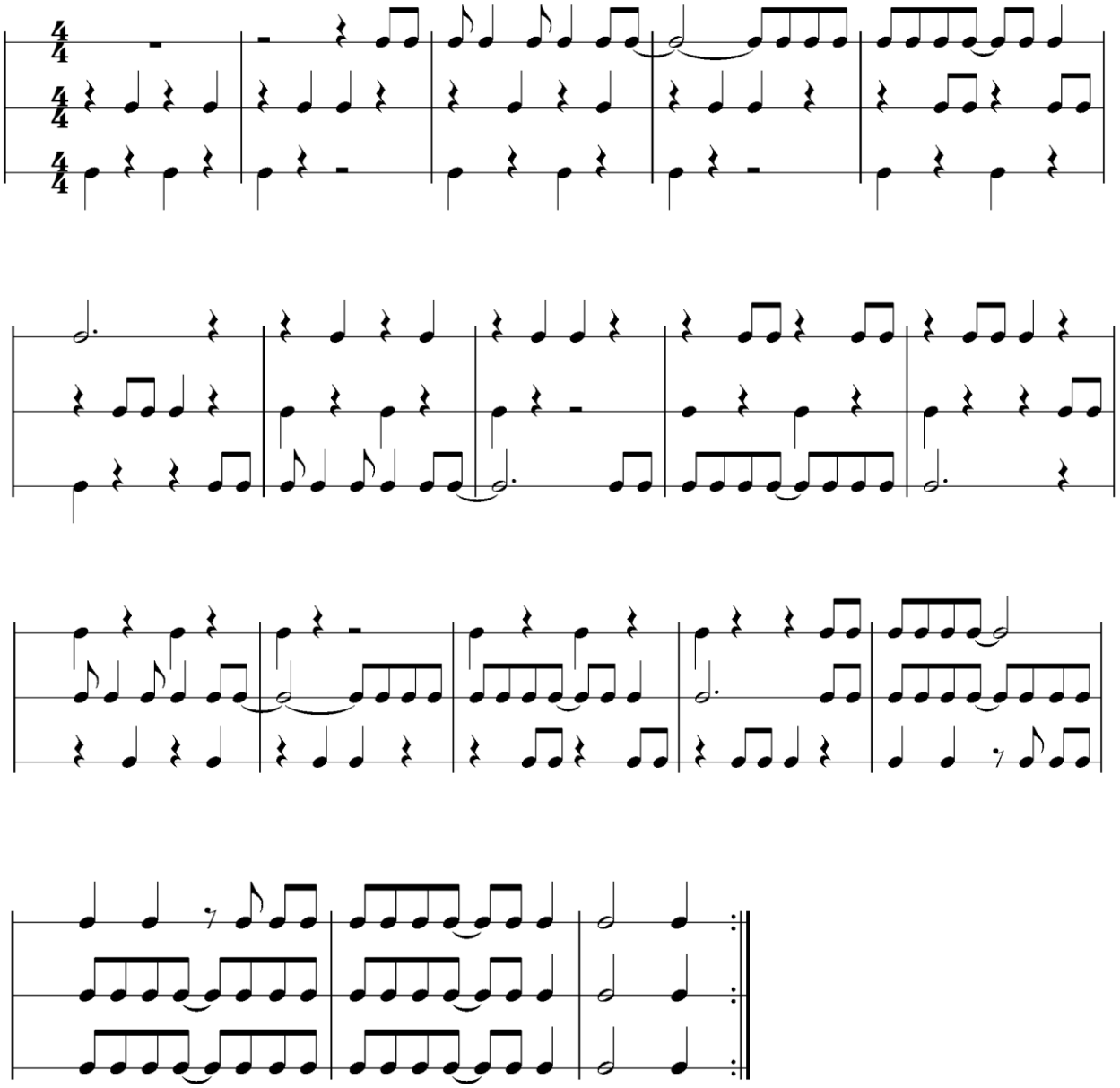


Clap and chant the rhythm above, first with the provided lyrics, then with counts in 4/4 time. The counting in the first three measures should sound like this: "1 and – and 3 – 4 –."

Another tremendously popular song with syncopated rhythms is "The Entertainer," composed in 1902 by Scott Joplin[41]. Joplin wrote in the ragtime style which features frequent use of syncopated rhythms.

[40] "Hello! Ma Baby," *Wikipedia.org*, last modified November 24, 2014, http://en.wikipedia.org/wiki/Hello!_Ma_Baby.

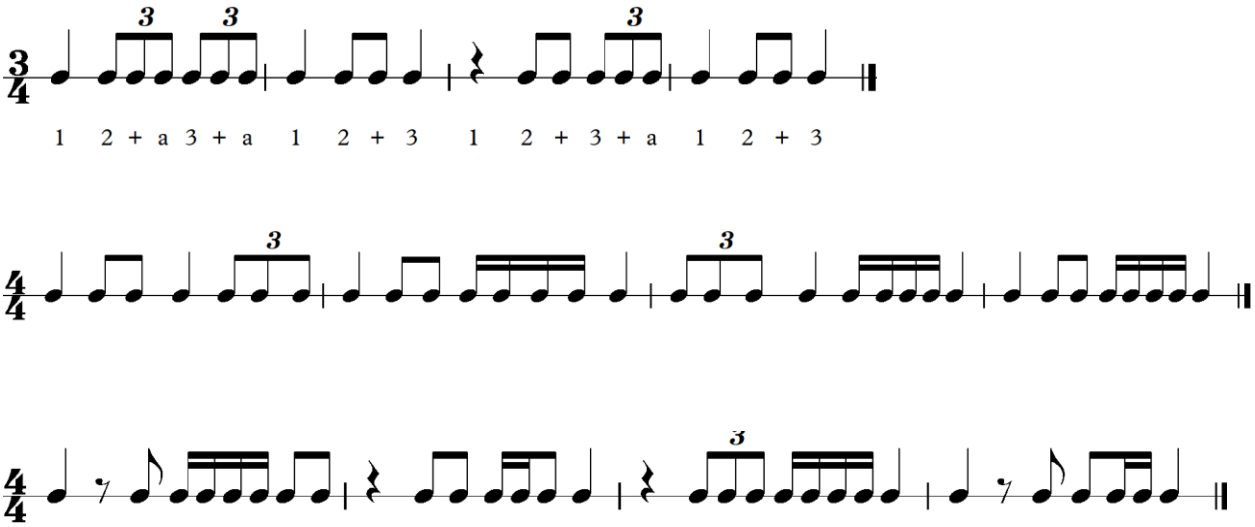
C. Ensemble – "The Entertainer" (original rhythm ensemble by J. Oliver)



[41] "The Entertainer (rag)," *Wikipedia.org*, last modified November 30, 2014, http://en.wikipedia.org/wiki/The_Entertainer_%28rag%29.

Triplets in simple time are groups of three notes that take the place of a typical unit of two. For example, in 4/4 time, the typical division of the quarter beat is into two eighth notes. Triplets are when three notes "squeeze" into the space of two. Going back to the "Fruit Salad" idea from Section 2.9, adding the triplet eighth notes provides one more variation to the rhythmic possibilities. Triplets are often counted with "1 + a," just like in compound meter.

D. Exercises with triplets. Clap and count the following rhythms:

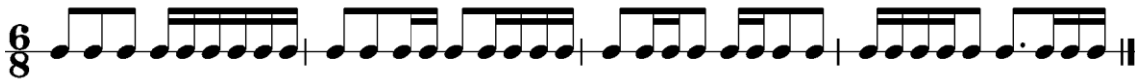


Now try the first two exercises above with the "Fruit Salad" method: quarters = pears; two eighths = apples; triplets = cantaloupe; four sixteenths = watermelon. Perform with a robust pulse for best results.

12.11 Subdivision in compound time

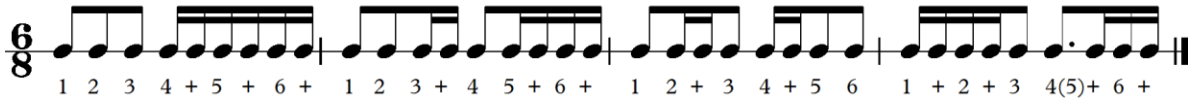
As discussed in section 2.5, the lower number in a compound time signature represents the value of the beat division. Each of the divisions can be divided again, creating the *subdivision* of the beat. In 6/8, 9/8 and 12/8 time, common subdivision patterns would be variables of 6 sixteenth notes grouped in dotted quarter values. Here are some examples:

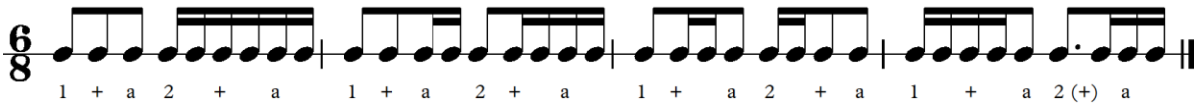
Example 2.11a



Several varieties of counting styles exist for compound time, including using the syllables "one – tah – tay – two – tah - tay" and "one – la – lee – two – la - lee." After teaching music theory and ear training for over fifteen years, I can confidently state that for most students, these methods simply become tongue twisters that inhibit the student's ability to be successful. In compound time the notes go by too quickly to utter a syllable on every moment. A more practical method of executing subdivision in compound time is to first work out the rhythm in terms of the division of the beat (6, 9, or 12) and then transition to counting with the larger beats in mind: "1 + a 2 + a." Here is *Example 2.11*, first counting in 6, then counting in the two large dotted quarter beats. Practice clapping and counting both lines.

Example 2.11b

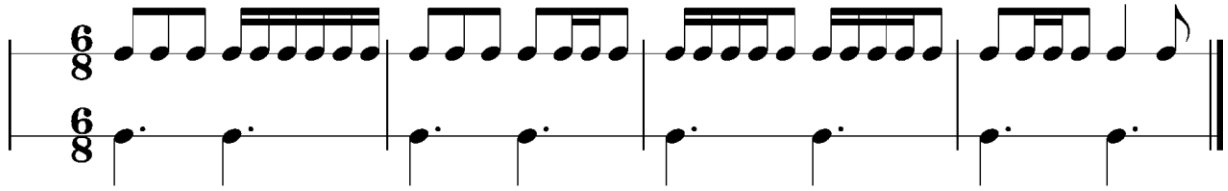


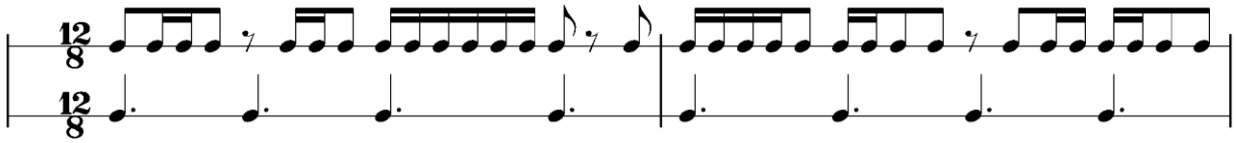


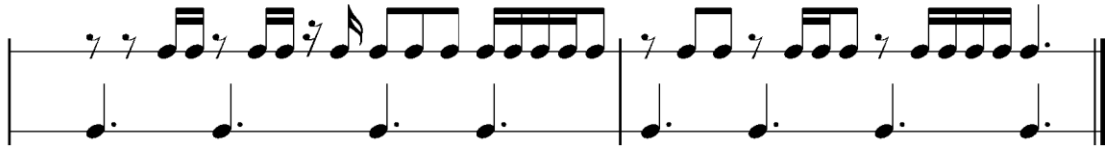
Although the lower number in compound time is typically an 8, it is also possible to have a 4 or 16. When the lower number is a 4, quarter notes are the division of the beat and eighth notes are the subdivision. When the lower number is a 16 (less common), sixteenth notes are the division of the beat, and thirty-second notes are the subdivision.

Exercises for 2.11

A. Practice these two-handed exercises – the left hand should perform the basic pulse as the right hand performs the rhythm on the upper line.





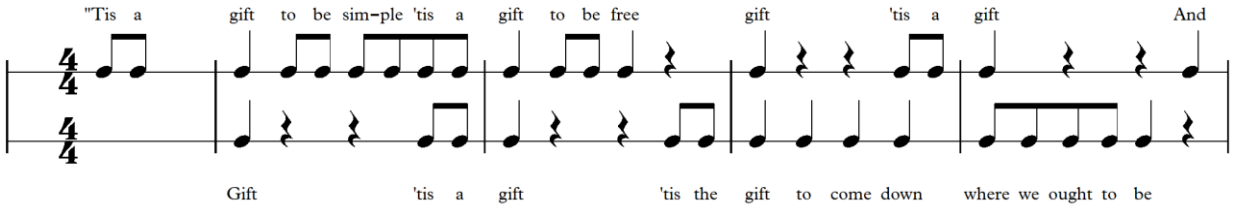


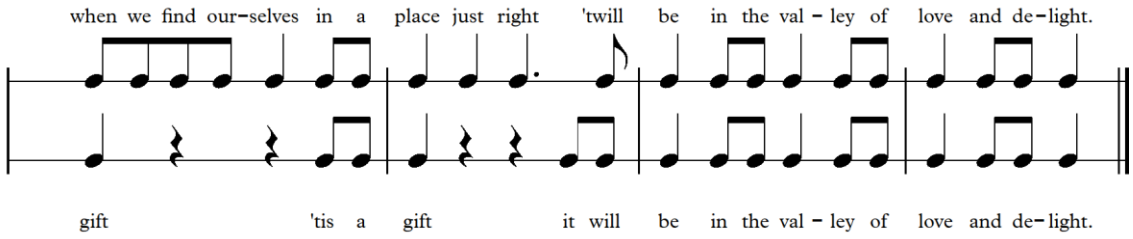
12.11 Putting it all together; ensembles combining a variety of topics

Simple Gifts – composed by Joseph Brackett Jr., 1848.[42]

(Original rhythm ensemble by J. Oliver)

This ensemble includes basic pulses and divisions in 4/4 time, dotted rhythms; the piece begins with an incomplete measure. (Begin playing on beat 4.)

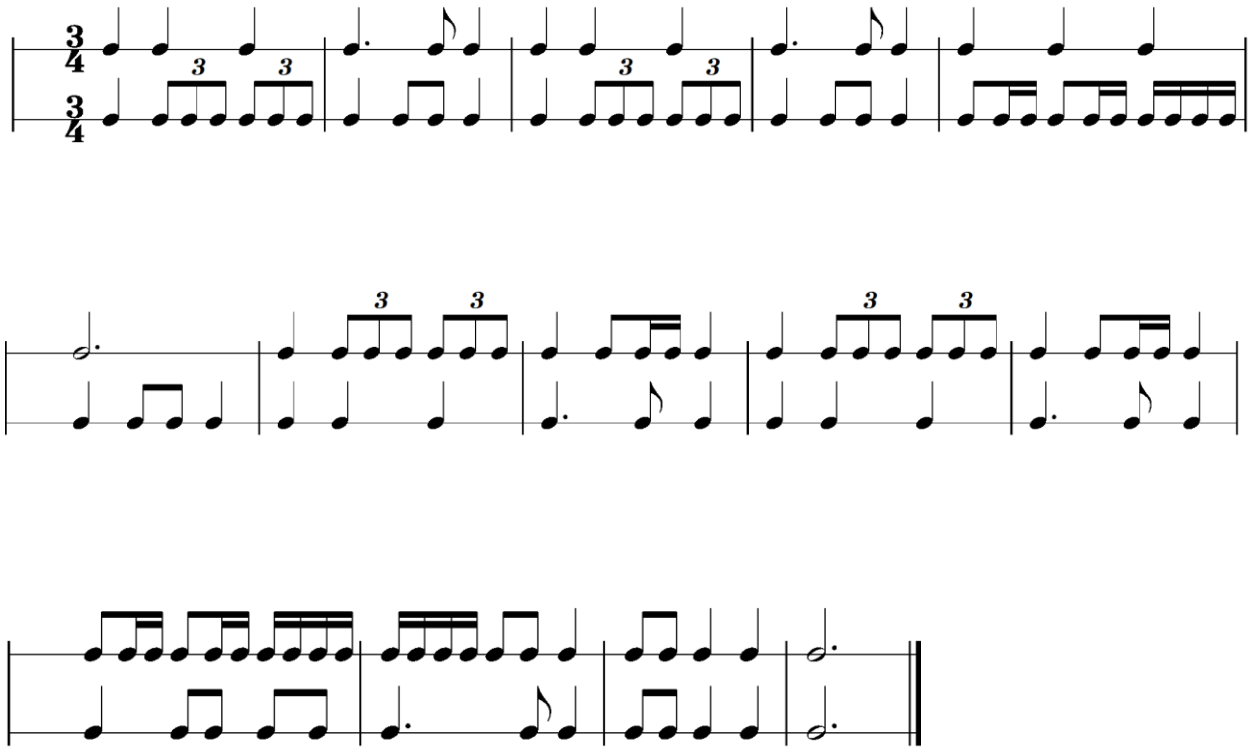




[42] "Simple Gifts," *Wikipedia.org*, last modified October 2, 2014, http://en.wikipedia.org/wiki/Simple_Gifts.

God Save the Queen – British National Anthem[43] (rhythm duet by J. Oliver)

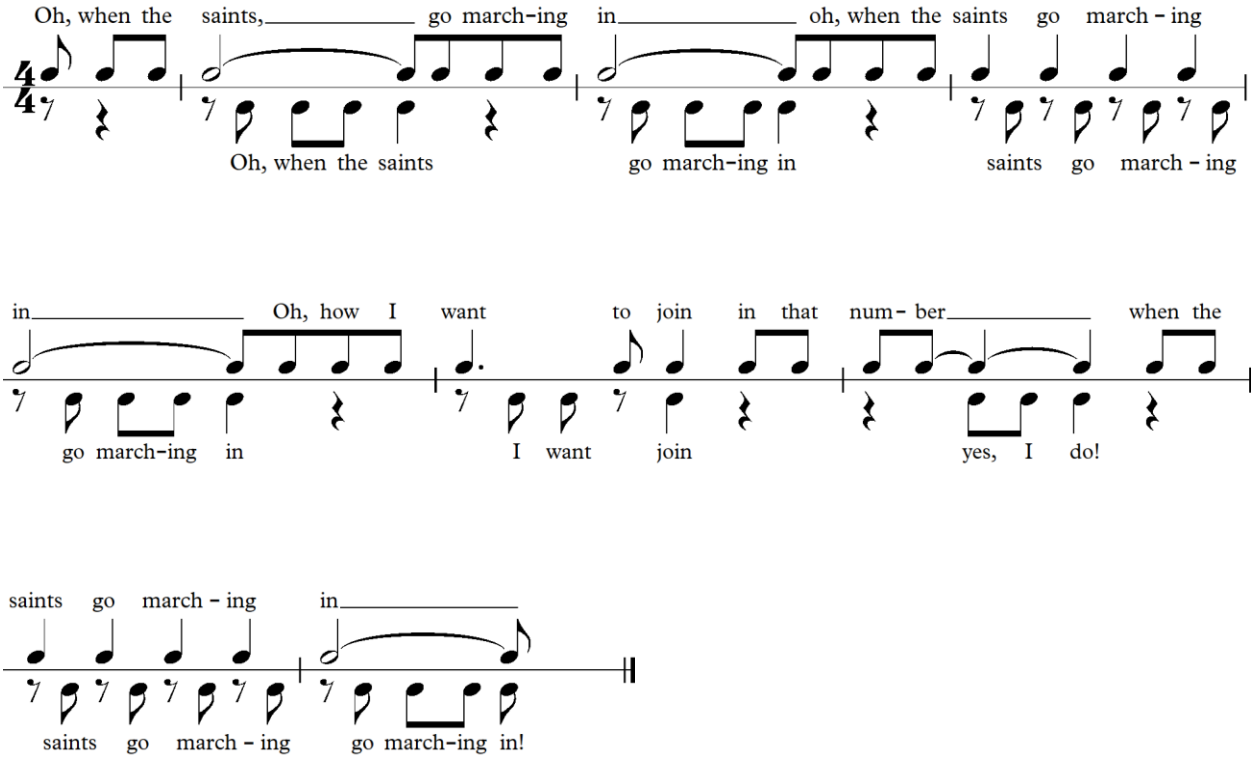
Features include dotted rhythms, eighth note triplets, a variety of subdivision patterns.



[43] "My Country, 'Tis of Thee," *Wikipedia.org*, last modified December 5, 2014, http://en.wikipedia.org/wiki/My_Country,_%27Tis_of_Thee.

When the Saints Go Marching In[44]

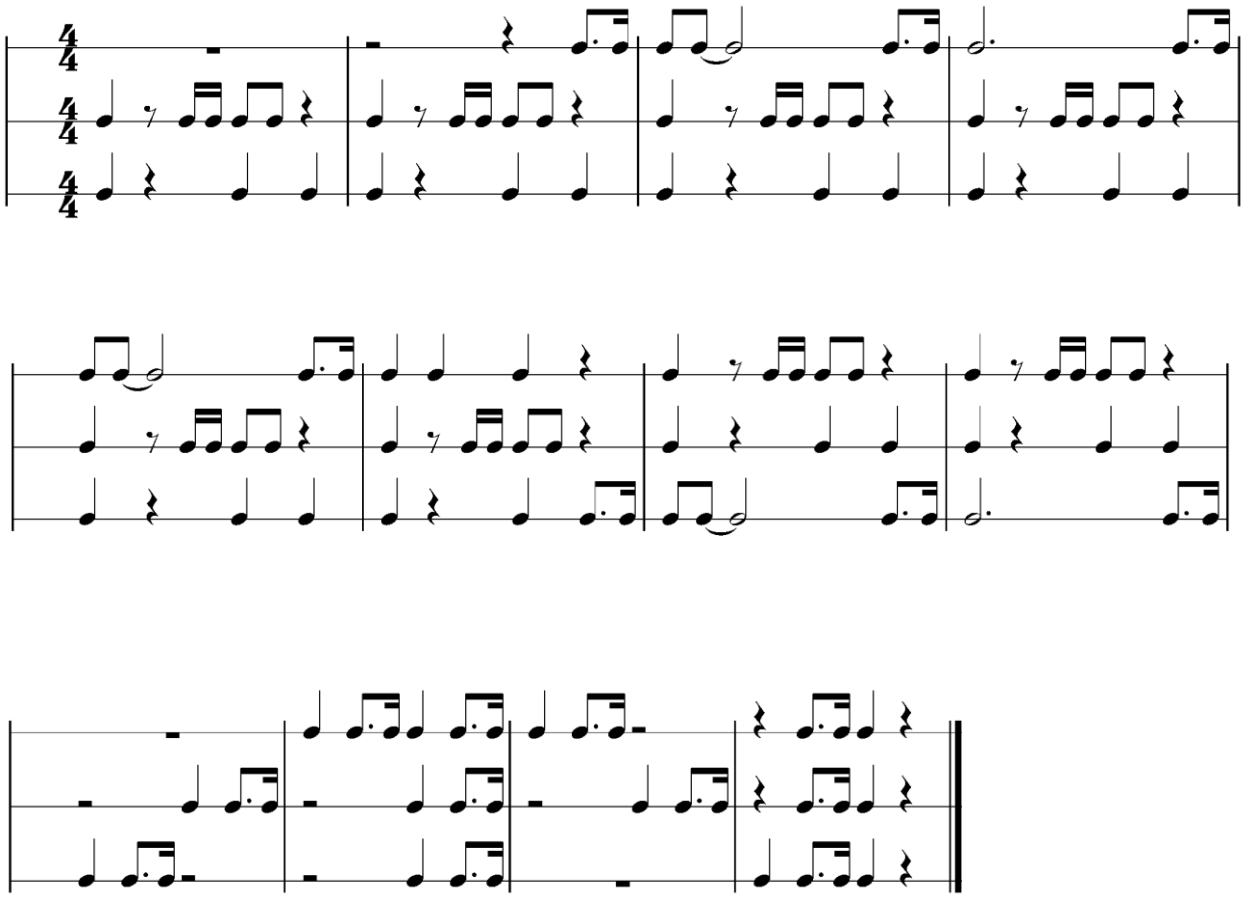
This duet begins with an incomplete measure – Silently count "one, two, three" and then enter on the "and of three." This piece uses many ties in the upper part as well as syncopation in the lower voice in measures 3 and 7.



[44] Palmer, Manus, Lethco*, Adult All-In-One Course*, 45.

B. Theme from "Raiders of the Lost Ark"[45] by John Williams, copyright 1991 Ensign Music Corp. (original rhythm ensemble by J. Oliver)

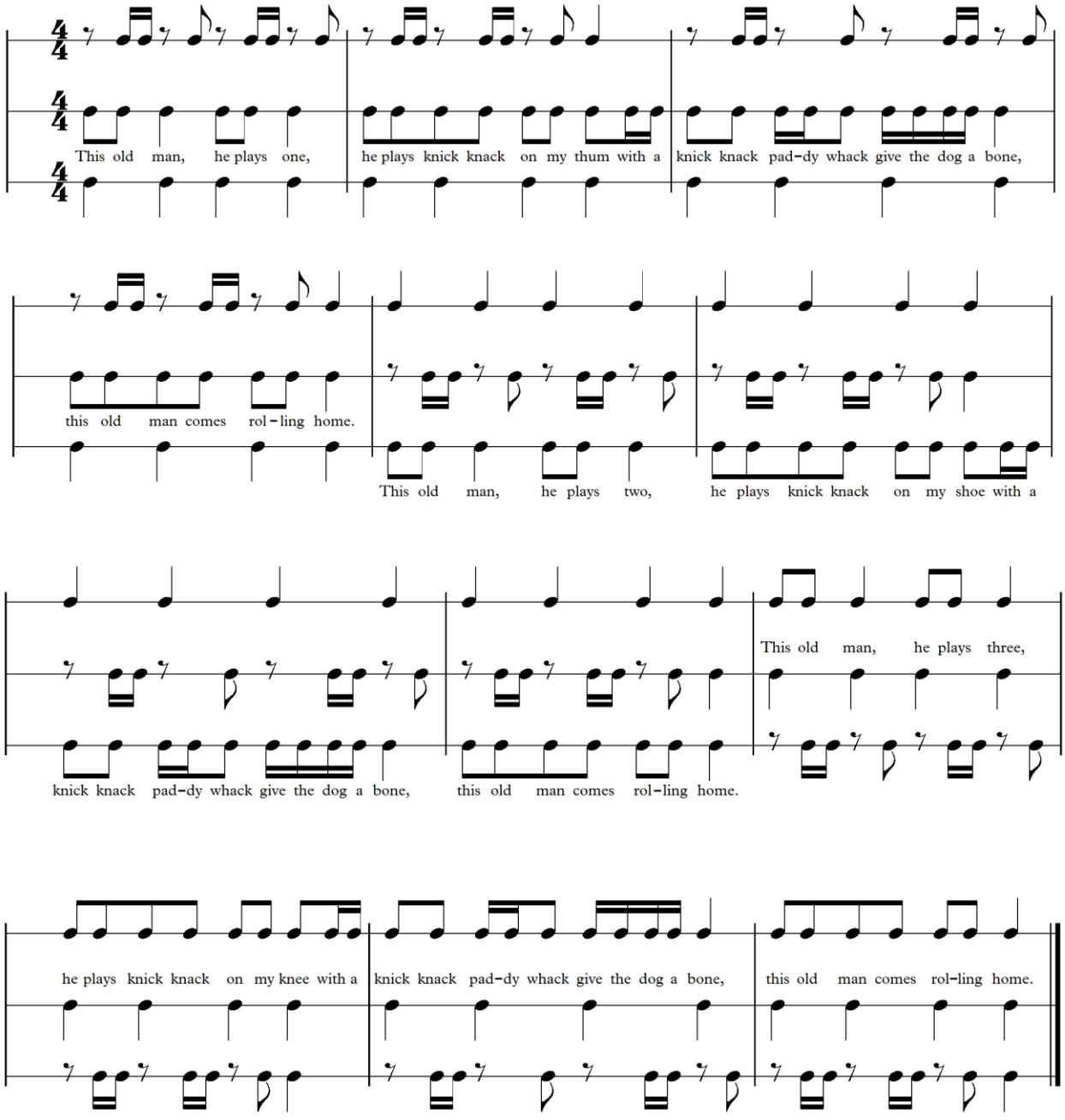
This exercise provides great practice in the dotted eighth plus sixteenth rhythm, along with an abundance of tied notes.



[45] "Raider's March," from the Paramount Motion Picture *Raiders of the Lost Ark*, ©Copyright 1981 by Bantha Music and Ensign Music Corporation. All Rights for the World Controlled and Administered by Ensign Music Corporation. *International Copyright Secured*. *All Rights Reserved*.

This Old Man*[46] – *(original rhythm ensemble by J. Oliver)

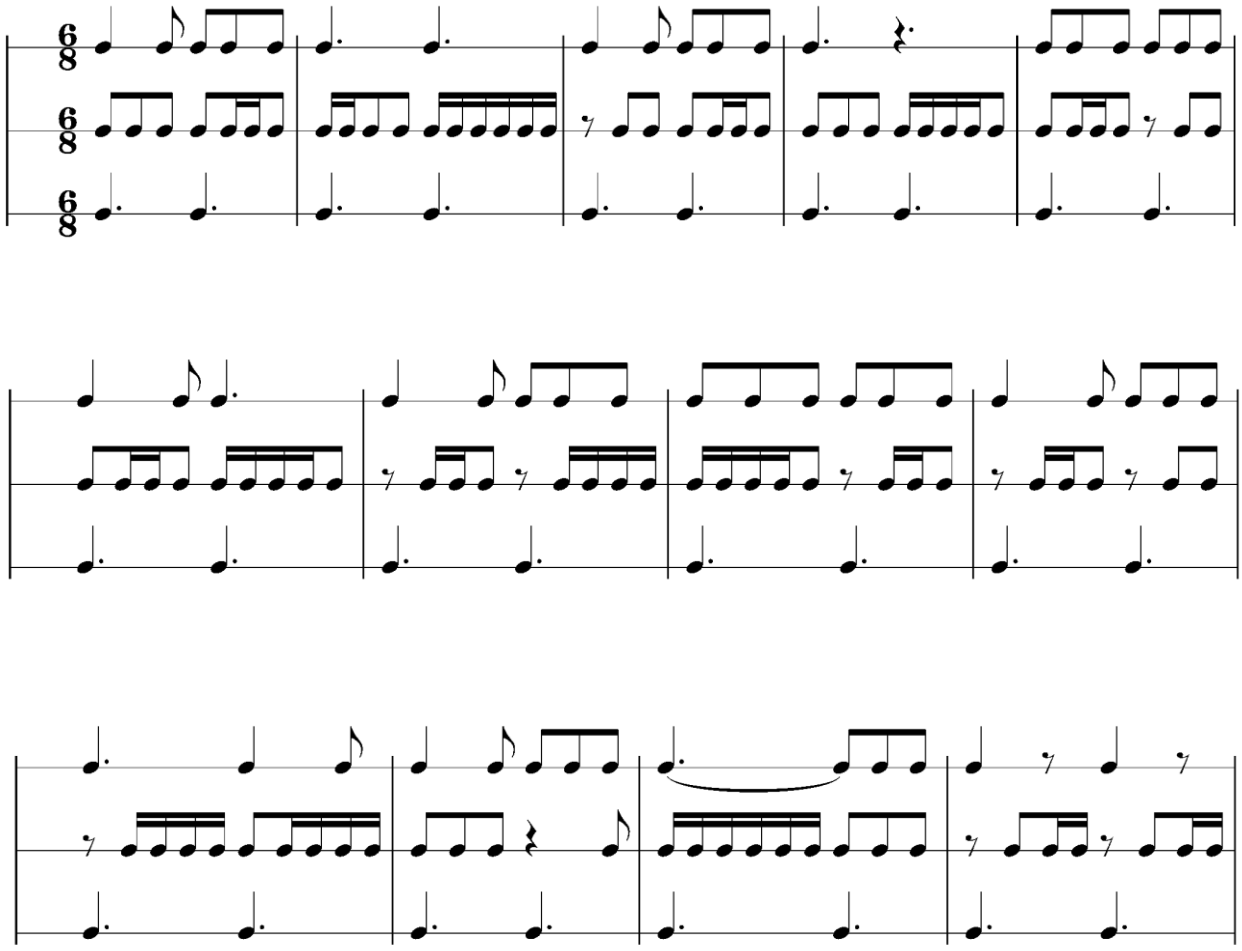
In this ensemble, one group plays a simple quarter beat. A second group plays the main melody which features variations of the four sixteenths subdivision groupings in 4/4 time. A final layer has a very syncopated accompaniment to the main rhyme. Careful attention to rests is imperative!



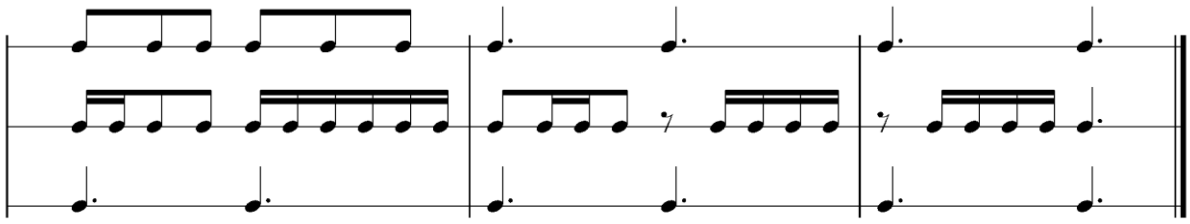
[46] "This Old Man," *Kidsongs.com*, accessed October 27, 2014, http://www.kidsongs.com/lyrics/this-old-man.html.

Take me out to the ballgame – by Jack Norworth and Albert Von Tilzer[47]
(Original rhythm ensemble by J. Oliver)

This ensemble helps students practice subdivision in compound time. Parts 2 and 3 can be performed by one person, with the left hand taking the steady dotted quarters of Part 3 while the right hand takes the variations of 6 sixteenth notes in Part 2. Careful attention is necessary for Part 2, as it has some syncopation on measures with rests on the strong beats.

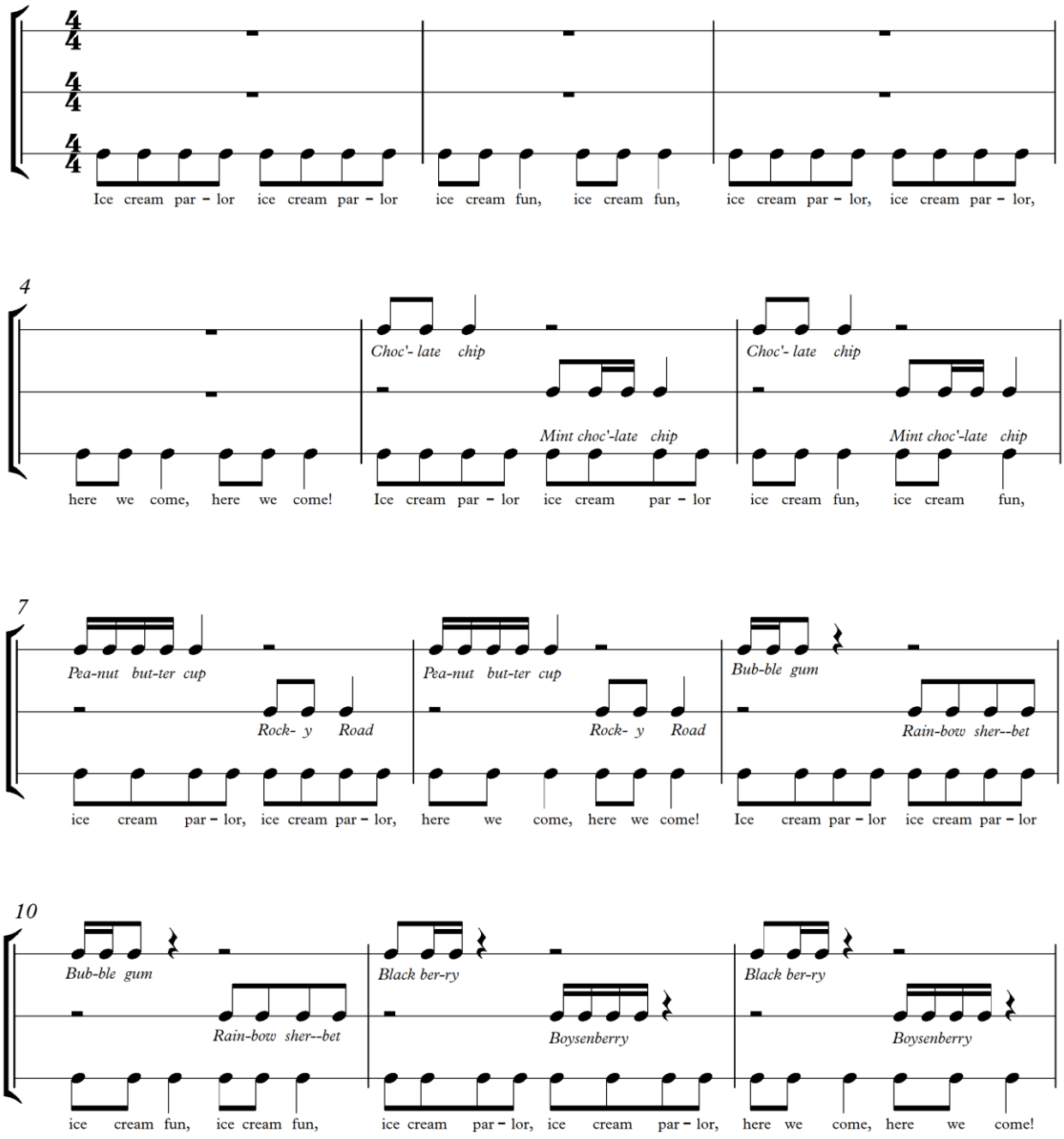


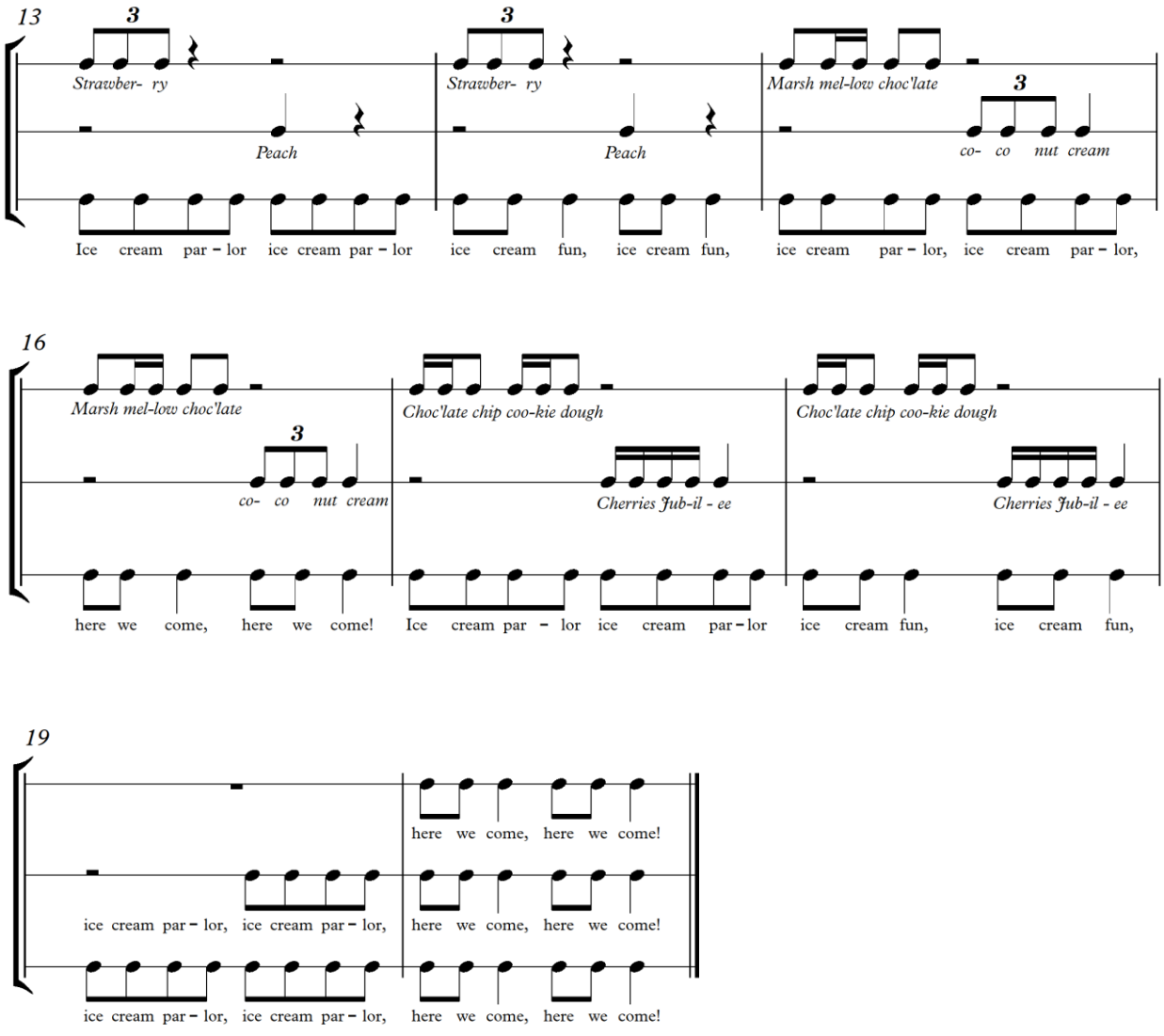
[47] "Take Me Out To the Ballgame," *Wikipedia.org*, last modified November 22, 2014, http://en.wikipedia.org/wiki/Take_Me_Out_to_the_Ball_Game.



Ice Cream Parlor (Original rhythmic ensemble by J. Oliver)

This ensemble utilizes a wide range of rhythms, provides a foundation layer with the pulse and division of beat, includes triplet patterns, and incorporates a wide variety of groupings of subdivisions in simple quadruple meter. After rehearsing at a moderate tempo, try pushing the group to perform at a lively pace.




13
3
Strawber- ry
Peach
Ice cream par - lor ice cream par - lor
3
Strawber- ry
Peach
ice cream fun, ice cream fun,
Marsh mel-low choc'late
3
co- co nut cream
ice cream par - lor, ice cream par - lor,
16
Marsh mel-low choc'late
3
co- co nut cream
here we come, here we come!
Choc'late chip coo-kie dough
Cherries Jub-il - ee
Ice cream par - lor ice cream par - lor
Choc'late chip coo-kie dough
Cherries Jub-il - ee
ice cream fun, ice cream fun,
19
here we come, here we come!
ice cream par - lor, ice cream par - lor,
here we come, here we come!
ice cream par - lor, ice cream par - lor,
here we come, here we come!

BIBLIOGRAPHY

Agay, Denes, ed. *Easy Classics to Moderns.* New York: Consolidated Music Publishers, 1956.

Bastien, Jane Smisor, Lisa Bastien and Lori Bastien. *Piano For Adults: A Beginning Course*. San Diego: Kjos Music Press, 1999.

Benjamin, Thomas, Michael Horvit and Robert Nelson. *Music for Sight Singing*, 4th ed. Belmont, CA: Thomson Schirmer, 2005.

Benjamin, Thomas, Michael Horvit and Robert Nelson. *Techniques and Materials of Music*. 7th ed. Belmont, CA: Thomson Schirmer, 2008.

Brandt, Jeff. *Tasty Rhythms*. Puyallup, WA: Jay Bee Music, 2001.

Carley, Isabel McNeill. *Simple Settings of American Folk Songs and Rhymes for Orff Ensembles, Book 1*. St. Louis: Magnamusic-Baton Inc., 1974.

Clark, Frances, Louise Goss, and Sam Holland. *The Music Tree: Time to Begin*. Revised ed. Miami: Sunny Birchard, Inc., 2000.

Conrey, Sean M. "Poetic Feet and Line Length." *The Purdue OWL*. April 3, 2013. https://owl.english.purdue.edu/owl/resource/570/03.

Eősze, László. *Zoltán Kodály: His Life and Work*. London: Collet's Holdings Ltd., in cooperation with Corvina Press, Budapest, 1962.

Farber, Anne and Kathy Thomsen. "What is Dalcroze?" *Dalcroze Society of America*. Accessed October 15, 2014. http://www.dalcrozeusa.org/about-us/history.

Fisher, Christopher. *Teaching Piano in Groups*. New York: Oxford University Press, Inc., 2010.

Flatischler, Reinhard. *The Forgotten Power of Rhythm*. Mendocino, CA: LifeRhythm, 1992.

Geronymo, Jairo Correa. "A Method of Sight Reading for Piano Ensemble, With Commentary and Preparatory Exercises." Doctoral Dissertation, University of Washington, 2003.

Hall, Anne Carothers. *Studying Rhythm*, 3rd ed. Upper Saddle River, NJ: Pearson Education, Inc., 2005.

Henry, Earl. *Fundamentals of Music*. Upper Saddle River, NJ: Pearson Education, Inc., 2009.

Hilley, Martha, and Lynn Freeman Olson. *Piano for Pleasure: A Basic Course for Adults*. 4th ed. Belmont: Schirmer/Wadsworth Group/Thomson Learning, 2002.

Horvit, Michael, Timothy Koozin and Robert Nelson. Music for Ear Training. Belmont, CA: Thomson Schirmer, 2005.

Kodály, Zoltán. *The Selected Writings of Zoltán Kodály*. Translated by Lily Halápy and Fred Macnicol. London: Boosey & Hawkes, 1974.

Kostka, Stefan and Dorothy Payne. *Tonal Harmony*. Boston: McGraw-Hill, 2008.

Liess, Andreas. *Carl Orff*. Translated by Adelheid and Herbert Parkin. Zurich: Atlantis Verlag, 1955. London: Calder and Boyars Limited, 1966.

Mozart, Wolfgang A. *Sonata in C, K. 545*. Munich: G. Henle Verlag, 1992.

Orff, Carl, and Gunild Keetman. *Music For Children – I: Pentatonic*. English Adaptation by Doreen Hall and Arnold Walter. Mainz: B. Schott's Söhne, 1956.

Palmer, Willard A., Morton Manus and Amanda Vick Lethco. *Adult All-In-One Course*. Van Nuys, CA: Alfred Publishing Co., Inc., 1996.

Phillips, Mark. *Sight-read any Rhythm Instantly*. New York: Cherry Lane Music Co., 2002.

"Rhythm." *Merriam-Webster Dictionary*. Accessed October 7, 2014. http://merriam-webster.com/dictionary/rhythm.

"Rhythm Tutorial." *Mediapolis.k12.* Accessed October 20, 2014, http://www.mediapolis.k12.ia.us/band/rhythm%20tutorial.htm.

Sadie, Stanley, ed. *The New Grove Dictionary of Music & Musicians*. London: Macmillan Publishers Limited, 1995.

Schaum, Wesley. *Rhythm Workbook*, Level 2. Mequon, WI: Schaum Publications, 1995.

Spencer, Peter. *Music Theory for Non-Music Majors*. Upper Saddle River, NJ: Prentice Hall, Inc., 2001.

Stewart, Dave. *Inside the Music*. San Francisco: Miller Freeman Books, 1999.

"The Kodály Concept." *Organization of American Kodály Educators*. Accessed October 16, 2014. http://www.oake.org/about-us/the-kodaly-concept.

Uszler, Marienne, Stewart Gordon, and Elyse Mach. *The Well-Tempered Keyboard Teacher*. New York: Schirmer Books, *A Division of Macmillan, Inc.*, 1991.

Walter, Arnold. Introduction to *Music for Children – I: Pentatonic*, by Carl Orff and Gunild Keetman, v-vii. Mainz: B. Schott's Söhne, 1956.

"What is Orff-Schulwerk." *American Orff-Schulwerk Association.* Accessed October 14, 2014, http:aosa.org/about/what-is-orff-schulwerk.

Wilson, Katharine M. *Sound and Meaning in English Poetry*. Port Washington, NY: Kennikat Press, 1930.