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The Budding Musician

A Method for Developing Cognitive and Physical Proficiency at the Piano

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A Senior Thesis submitted in partial fulfillment of the requirements for graduation in the Honors Program Liberty University Spring 2015

Acceptance of Senior Honors Thesis

This Senior Honors Thesis is accepted in partial fulfillment of the requirements for graduation from the Honors Program of Liberty University.

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Abstract

A comprehensive piano curriculum involves physical performance development alongside musicianship training. This thesis will discuss the decline in music literacy alongside research supporting the benefits of a creative, holistic, flexible music education program. These items will then be applied to developing an elementary piano curriculum. A four-volume piano method emphasizing theory and musicianship in the context of performance literature is outlined and level one is presented in detail.

The Budding Musician

A Method for Developing Cognitive and Physical Proficiency at the Piano
Private music instructors are well advised to teach technique on a primary
instrument while concurrently fostering musical literacy in the student. Using such an
approach in piano instruction with elementary age children aids in equipping students to
be well rounded musicians rather than turning out performers who lack musical
competence. Achieving this goal will require a curriculum that targets an appropriate age
group in order to teach music as a language. In order for this curriculum to be optimally
successful, assignments should foster creativity, introduce new concepts in a natural

Piano Education for Elementary Age Children

manner, and remain flexible in presentation style.

An elementary piano curriculum should include levels designed to appeal to students ages six to ten, corresponding with the average age of first to fourth grade students. Children between the ages of five and ten are in the Concrete Operational stage of learning where physical activity supplies the best means of learning. As such, this is the optimal time to begin piano instruction. Action-oriented learning, such as piano instruction, is also beneficial as "the mind does not come into being or grow without bodily movement." This starting age is further supported by the discovery that children can recognize tonal structure by the age of seven and chordal dissonance by the age of

^{1.} Amy Carmichael, "Learning to Play: Cognitive and Physical Development of Children and the Requirements of Playing the Piano," *Musical Offerings* 5, no. 1 (Spring 2014), 20.

^{2.} Frank Wilson, "Music as Basic Schooling for the Brain," *Music Educators Journal* 71, no. 9 (May, 1985), 41.

nine.³ During the time of adolescence when the ear is naturally developing, the hands and mind should also be developed through music education. At the age of six, a child ought to possess the coordination necessary to play simultaneously with both hands. It is worth noting that concepts differ from motor skill, and both must be taught in a manner that links the two in the mind of the student. ⁴ Elementary age students are at a critical point in their aural, physical, and mental development where they will begin making the connections between sight, sound, concept, and physical application that are foundational to a solid music education.

It should also be noted that a curriculum should not be designed for highly gifted child prodigies as they are the exception rather than the rule. Research from the Music Educators National Convention reveals that

approximately 2% are highly gifted and a further 2% have a low musical talent. Therefore, there are no completely unmusical people....Since everybody possesses at least some degree of musical aptitude, everybody can also benefit from musical instruction despite individual difference in innate capacities. ⁵

With this in mind, the target audience for an elementary piano curriculum will be children of average musical ability between the ages of six and ten years old.

^{3.} Frank Wilson and Franz Roehmann, ed., *Music and Child Development* (St. Louis, MO: MMB Music, Incorporated, 1990), 32.

^{4.} Marienne Uszler, Stewart Gordon, and Scott McBride Smith, *The Well-Tempered Keyboard Teacher*, 2 ed. (Belmont, CA: Schirmer Books, 2000), 239.

^{5.} Robert Colwell, ed. *MENC Handbook of Musical Cognition and Development*, (Oxford: Oxford University Press, 2006), 128.

Music Literacy

Children are influenced by the musical culture embedded within the historical milieu in which they grow up. Just as children today are raised in a culture that is saturated with popular music, children in previous centuries were surrounded by music steeped in classical tradition. Since classical music was the pervading popular genre, youth were accustomed to and educated in the reading and writing of music. Today, technological advances and the simplicity of the pop music genre shift the climate of the musical culture. As the musical environment changes, the majority of students may be less likely to receive a classical musical education. Many music students and teachers maintain that understanding how to read and write music becomes irrelevant with the simple, self-taught pop genre and the computer software available to aspiring composers. Thus, those who learn music are not necessarily literate in music. The aforementioned changes in popular music may play an integral part in the decline in music literacy that pervades collegiate music programs. In the same way that English majors or teachers must be able to read in their language, so music majors need to know how to read music. The quality of future music educators, and consequently the music education of the next generation are threatened by this shift away from classical music and notation. In order to reverse this decline in literacy, young pianists should be introduced to reading and writing music from their earliest lessons.

^{6.} Edward Asmus, "Music Teaching and Music Literacy," *Journal of Music Teacher Education* 13, no. 2 (Spring 2004), 7.

^{7.} Ibid.

^{8.} Idid., 8.

Reading and writing are not the only elements of music language and literacy.

Learning music and learning language are fundamentally similar as both have phonological, syntactic, and semantic properties. Musicians phonologically separate perceived pitches and categorize them in a simple fashion. The ear does not recognize tones in between pitches as gray areas; instead, the sound is understood in the context of the pitch either above or below. For example a tone between C4 and B3 can be understood as an under pitch C4 up to a certain point at which it would suddenly move into the category of a slightly sharp B3. Musical syntax allows the musician to process and store tonal sequences and to recognize disturbances to such patterns. Semantics gives the musician a way to communicate what they perceive musically. From a pedagogical standpoint, semantics should be the last step in teaching music. Students need to grasp general concepts before the introduction to the terminology and notation commonly associated with said concept.

If semantics is the least important element, a piano curriculum ought to begin with aural and rhythmic development through rote teaching, gradually incorporating notation and vocabulary in an eclectic manner. Pieces that are initially taught by rote can be reintroduced and reinforced on the grand staff. This will allow students to develop

^{9.} Wilson, Music and Child Development, 30.

^{10.} Ibid.

^{11.} Ibid., 32.

^{12.} Ibid., 33.

^{13.} James Lyke, Geoffrey Haydon, and Catherine Rollin, *Creative Piano Teaching*, 4th ed. (Champaign, IL: Stipes Publishing LLC, 2011), 56.

connections between sight and sound and to play confidently as they become familiar with notation. As concepts are learned contextually through literature, terminology can also be introduced. Students appreciate a challenge, such as learning GED or SAT vocabulary words in elementary school, as it allows the students to feel a sense of accomplishment. Similarly, teachers should "use appropriate, consistent terminology. Remember that students like big words and are generally capable of learning music terms early on." A good method book will not neglect or amend music terminology, as this would lead to confusion when the student finally encounters the proper terminology. A music teacher's vocabulary should remain consistent through elementary to college level in order to prepare students for their futures as musicians.

Creative Application

In addition to the use of notation and terminology to reinforce a concept, composition can also be used to solidify a student's understanding of an idea.

Composition fosters creativity and allows the student to express emotion through music.

Creative composition assignemts need to reflect the students' emotions, understanding, and experience of music in the context of their lives. Music teachers are encouraged to refrain from imposing their own ideas concerning how a musical concept should be

^{14.} Ibid.

^{15.} LouAnne Johnson, *Teaching Outside the Box: How to Grab your Students by their Brains* (San Francisco, CA: Jossey-Bass, 2005), 167.

^{16.} Lyke, 44.

^{17.} Oscar Odena, ed., *Musical Creativity: Insights from Music Education Research* (Surrey, England: Ashgate Publishing Limited, 2012), 75.

expressed, and to allow students to create their own connections between concept and sound. In a study on group composition and creativity, Ana Veloso and Sara Carvalho asked students to associate sounds with colors. One student associated the color dark blue with music played at the dynamic level *forte*. Given the assumption that the children in the study did not have synesthesia, the concepts of color and sound have no apparent connection. Therefore, it was assumed that the student must have associated the emotion he felt when hearing music played *forte* with previous feelings tied to the color blue. Students ought to feel free to express their own contextual understanding of musical concepts by "using imaginative processes to generate new and highly nuanced auditory patterns we call music."

In writing their own music, students are engaging in the highest level of learning. The revised *Bloom's Taxonomy of Learning* divides learning into three main categories. *Cognitive learning* involves recall of knowledge and intellectual development, *affective learning* changes values and attitudes, and psychomotor learning focusses on specific motor-skill improvement. ²⁰ Of the three, *cognitive learning* is crucial in music education as each element of learning can be associated with one of Bloom's 6 levels of *cognitive learning: Remembering, understanding, applying, analyzing, evaluating,* and *creating*. ²¹

^{18.} Ibid., 84.

^{19.} Elliot Eisner, "Qualitative Research in Music Education: Past, Present, Perils, Promise," *Bulletin of the Council for Research in Music Education* 130 (Fall 1996), 14.

^{20.} Wendell Hanna, "The New Bloom's Taxonomy: Implications for Music Education," *Arts Education Policy Review* 108, no. 4 (March/April 2007), 8.

^{21.} Ibid.

Each level builds on the next with *remembering* serving as the lowest level, and *creating* being the pinnacle of *cognitive learning*. Many musical endeavors such as playing, reading, and notating music fall into the *applying* category as they require the student to take action on discipline specific knowledge.²² Composition takes students to the highest level of cognitive development as it asks students to create their own music as a synthesis of what they have learned. This creative process grows the student as it involves "putting elements together to form a coherent or functional whole."

Creativity and emotional expression may also be fostered through improvisation, harmonization, and keyboard exploration. Improvisation and harmonization can be used creatively in a piano method to reinforce a new concept such as a chord progression. The student can either be given the chords and asked to improvise a melody over the progression, or be given the melody and asked to provide the harmony. Both methods encourage creativity while allowing young pianists to learn by doing. A foundational piano course may also spark creativity by encouraging the student to explore the piano keyboard—high and low tones, piano and forte dynamics, legato and staccato articulation, and pedal use, to name a few. One method of keyboard exploration involves teaching chords in root position first. This helps solidify students' understanding of the relationship between chord and key while also giving them an opportunity to utilize the keyboard beyond the typical five finger pattern.²⁴

^{22.} Ibid., 12.

^{23.} Ibid.

^{24.} Lyke, 44.

Holistic, Contextual Concept Presentation

Effective music teachers not only encourage creative concept application; they also foster music learning in a way that approximates how learning occurs naturally in a child's life. Life is not broken down into bits and pieces; thus, children are accustomed to processing small parts alongside the whole. Rather than processing fragments of information apart from their natural context, the brain is used to sorting through the whole to find meaningful connections between the parts. Since children are accustomed to learning by making connections between elements, they should be taught music through immersion. New concepts will naturally be discovered as they observe, hear, and play them in the context of a song. Such a teaching strategy is more brain-compatible and natural than dividing and sub-dividing information into points that are presented with no apparent connections. Concentrating on important associations rather than on individual elements is fundamental to both music performance and composition.

Taking a holistic approach a step further would affect the structure of piano curricula. Since elements of music should be taught contextually through performance literature, it would be unnecessary to have additional supplemental materials. Ear training, theory, and technique are often presented in supplementary workbooks that the teacher, parent, and student may or may not elect to purchase. An alternative holistic

^{25.} Renate Caine, and Geoffrey Caine, *Making Connections: Teaching and the Human Brain* (Alexandria, VA: Association for Supervision and Curriculum Development, 1991), 111.

^{22.} Susan Kenney, "Brain-Compatible Music Teaching," *General Music Today* 23, no. 1 (October 2009), 24.

^{27.} Eisner, 13.

approach would employ a single method book that introduces aural recognition, theoretical concepts, and technique directly from the performance literature. In addition to providing a more brain-compatible learning environment, this approach aids in developing practice habits both at and away from the piano early in a child's musical career. Furthermore, students are encouraged to develop their ears, eyes, hands, and mind as they are guided to the discovery of each new concept in the music.

Flexibility of Purpose and Material

Other important elements in music education include flexibility of purpose and creative problem solving. Musicians and music educators must focus on "creating flexible purposes, that is, being willing to shift aims in process in order to preserve unanticipated qualities or to achieve new, unanticipated goals." If a piece is intended to introduce a new dynamic level to a student, yet the student notices a difficult chord, the teacher should use the opportunity to teach a lesson on harmony. Both music and teaching are filled with such unanticipated moments that require flexibility. Furthermore, unanticipated problems typically have "multiple rather than singular solutions." A flexible, well-tailored curriculum should present solutions that appeal to auditory, visual, and kinesthetic learners. Teachers ought to become familiar with each student's primary learning style. Additionally, students should be led to discover which learning style they possess. A Lessons can then be tailored to the student's strongest learning style while also

^{28.} Ibid., 14.

^{29.} Ibid.

^{30.} Johnson, 145.

building their weaker areas. Such curricula ought to be comprehensive in scope, yet flexible in presentation and appealing to all learning styles.

Due to the variance of learning styles and sight reading abilities among students, a curriculum should be loose leaf and customizable. The students would be given binders and each individual lesson, song, and work page would be given separately. With this approach each weekly assignment is given as new material that is unfamiliar to the student. Giving individual assignments each week allows for the flexibility necessary to customize lessons to each student, while concurrently discouraging a competitive or comparative nature between friends or siblings. The method book can include multiple songs for each concept in order to appeal to varying learning styles and technical levels, thus allowing the teacher to assign the songs that are best suited to each student. One piece may implement a new concept that exhibits a prominent audible motive in the song, while another may present the same concept in a visually prominent way. Both pieces contain the new concept, yet they appeal differently to auditory and visual learners. It should be noted that a piece which emphasizes one learning style should not neglect the others. A strong curriculum will also implement all three learning styles in the initial presentation of each concept. For example, the instructor should ask students to identify the interval by ear, recognize the interval on the page, play the interval, and draw the interval. In this manner students are synthesizing the information in a number of ways immediately solidifying their understanding through application. This method engages

advanced learning according to *Bloom's Taxonomy of Learning* as it requires the student to *apply, analyze*, and *evaluate* the new concept.³¹

The Budding Musician

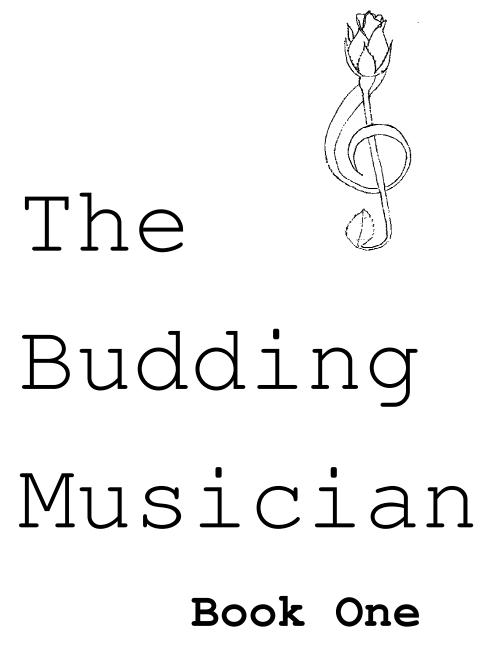
The following creative thesis project is the first level of an elementary piano method that will be presented in four levels corresponding to scholastic grades one through four. The goal of the material will be to teach the fundamentals of music through aural, rhythmic, visual, technical, and theoretical concepts. Student creativity will be encouraged through composition and exploration at the keyboard. Each concept will be presented holistically in the context of classical, popular, and original songs of varying styles. The repertoire will be simple enough so that a student will not become discouraged, yet challenging enough so that the student cannot sight read the entire method book without learning the concepts. Within a few lessons the teacher will be able to gauge the student's learning style and propensity for sight reading and adjust repertoire assignments accordingly.

Throughout the four levels, a variety of topics will be explored by the student. The first level is presented below. The remaining three levels will increase the student's physical ability while introducing concepts such as: intervals; accidentals; key signatures; tonic-dominant relationship; primary and secondary triads; major, minor, and chromatic scales; cadences; simple and compound meters; simple forms; seventh chords; and chord inversions. Due to the progressive order of the materials, a student must begin in level one and continue through the course in sequence. If the student has had previous musical training, the teacher must assess the ability of the student and place him or her in the

^{31.} Hanna, 12-13.

appropriate level regardless of age or academic grade. This curriculum is designed to equip students to play the piano artistically and to comprehend music theory.

The success of the curriculum will be tied directly to the success of each student. While the student, parent(s), and teacher share the responsibility for the student's success, the curriculum also plays a crucial role. Performance should not be considered the only measure of a student's success. This foundational curriculum will be considered successful if it enriches the lives of children by encouraging them to explore and understand how to read, write, and enjoy various styles of music at a deeper level. Students who complete the four levels will have a solid understanding of music in theory and in practice, thus preparing students for further study in piano or other instruments.



Lauren Hartburg





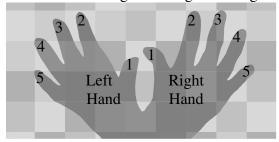
The Piano

Congratulations on your descision to learn to play the piano! As you sit at the piano during your lesson or at home, make sure you sit up tall, and keep your feet on the floor (if you cannot reach the floor, you should place your feet on a stool).

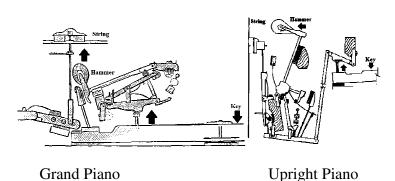
Your fingers should be curved like you are holding a ball in your hand. If you have 2 tennis balls, hold one in each hand to get the feeling of keeping your hands rounded.

Each finger has a number which your teacher may refer to. Have an adult help you trace your hands at the bottom of this page and number your fingers.

Can you wiggle finger 1? How about finger 4? Finger 2? Finger 5? And lastly finger 3?



Piano Mechanics

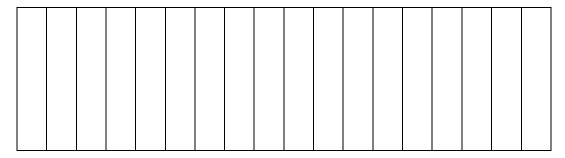




The action is like a seesaw. When you press the key down, it lifts a hammer on the inside of the piano that strikes a string and produces the sound.

Black and White

Look at your piano keyboard. Can you find a pattern in the black keys? Draw the black keys on the piano below starting with a group of 3



The piano has groups of 2 and 3 black keys. Higher sounds are on the right and lower sounds are on the left. Find and play a high set of two black keys, a low set of three black keys, a low set of two black keys, and a high set of three black keys.

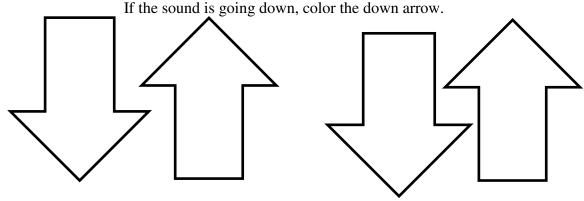
Trace the arrows over the notes. Circle the group of notes going up.



Trace the arrows over the notes. Circle the group of notes going down.



Each note on the page represents a key on the piano. Just as the notes on the page can be traced up or down, the sounds on the piano can get higher (to the right) and lower (to the left). Listen to your teacher play. If the sound is going up, color the up arrow.



Place left hand on any group of three black keys. Try playing it with the right hand. Try it with both hands together.



Place right hand on any group of three black keys. Try playing it with the left hand. Try it with both hands together.



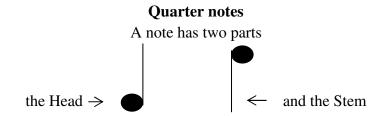
Write your own 4 bar song for the right hand using any group of 3 black keys. Use fingers 2, 3, & 4 and write finger numbers under each note so that you can practice your song.



Now do the same for the left hand. Remember the finger numbers are different from your right hand.



How do your songs sound? How do they make you feel? What do your songs remind you of? What do you want to call them?



The stem can go **up on the right** or **down on the left** (like a d) (like a p)

Trace the notes then color them in. Draw your own quarter notes.

Draw a circle, color it in, and add the stem.



A quarter note receives one beat. Count one for every quarter note. Play this rhythm on any one key.



Play with your left hand on any group of three black keys.

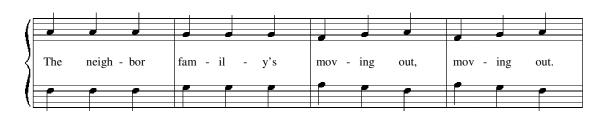


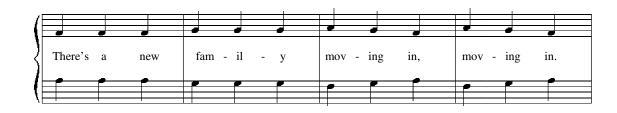
Play with your right hand on any group of three black keys.



Moving Day

Try playing with both hands together.





Half notes

Half notes are twice as long as quarter notes. Count to two each time you play a half note. Try counting this rhythm. Play the rhythm on any one key on the piano.



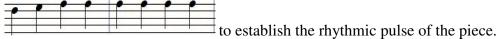
Place left hand on any group of three black keys.



Place right hand on any group of three black keys.



The student may also practice this song by playing 2 quarter notes for every half note



Bells

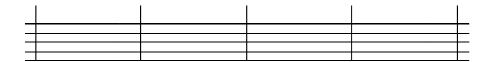
Try playing both hands together. You can also play this song while holding the damper pedal down.



Trace the half notes. Draw your own half notes. First draw a circle, then add the stem.



Using a group of three black keys, write your own song for Left Hand using half notes and quarter notes. Write the finger numbers over the notes so you remember your tune.



Using a group of three black keys and the following rhythm, write your own melody for Right Hand. Write the finger numbers over the notes so you remember your tune.

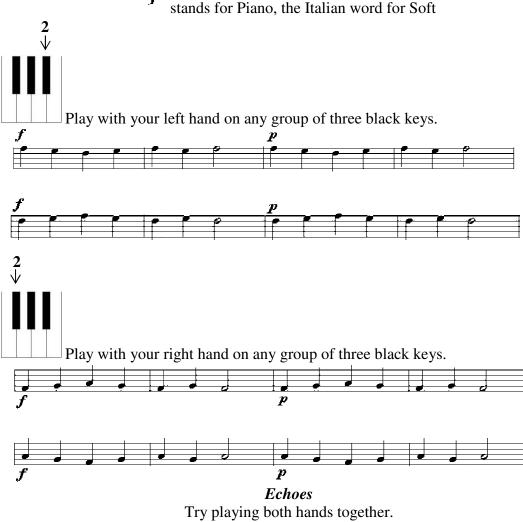


Dynamics

Dynamics are how loud or soft you play.

 ${m f}$ stands for Forte, the Italian word for Loud

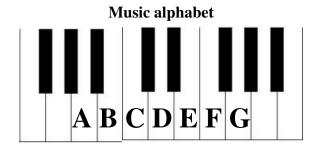
stands for Piano, the Italian word for Soft



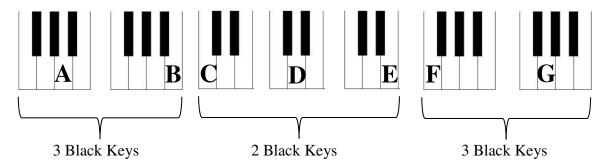


Circle \boldsymbol{f} or \boldsymbol{p} below each picture





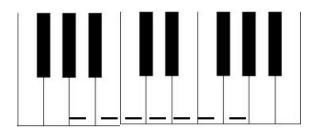
The music alphabet has 7 letters: A B C D E F G. Each white key has a letter name. Every seven keys the pattern starts again on A. The black keys can help you find each white key.



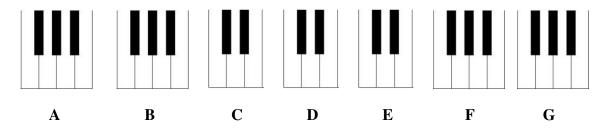
Find and play a low A and a high A. Find and play a low B and a high B. Find and play a low C and a high C. Find and play a low D and a high D.

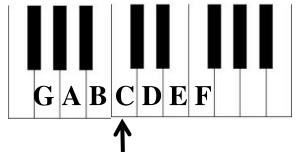
Find and play a low E and a high E. Find and play a low F and a high F. Find and play a low G and a high G.

Write the music alphabet on the keyboard.



Print each letter where it belongs on the keyboard above it.

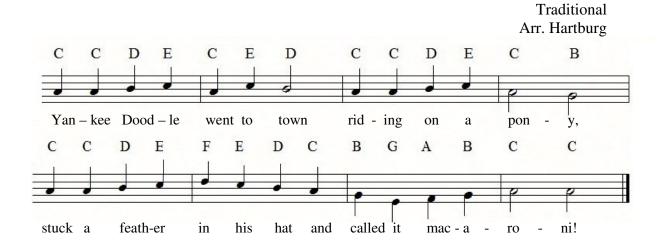




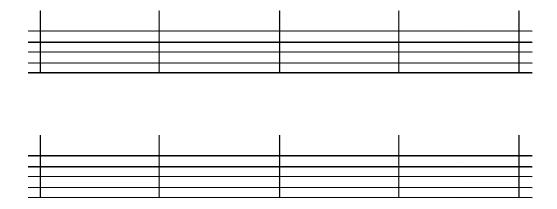
Place both thumbs on any C.

Yankee Doodle uses all seven white keys A, B, C, D, E, F, and G. Play notes with the stems up with the right hand. Play notes with the stems down with the left hand.

Yankee Doodle



Write your own piece. Write the letter names over the notes you use.

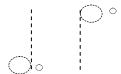


Dotted Half Notes

Dotted half notes get three beats. Count to three for every dotted half note. Count the following rhythm. Play the rhythm on any one key on the piano.

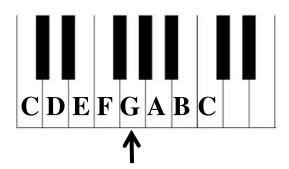


Trace the dotted half notes. Draw your own dotted half notes. Draw a circle, add the stem, and then add the dot.

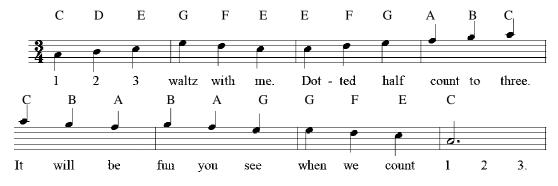


Place both thumbs on any G to play this song.

Play notes with the stems up with the right hand. Play notes with the stems down with the left hand.



1 2 3 Waltz



Whole Notes

Whole notes get four beats. Count to four for every whole note. Count the following rhythm. Play the rhythm on any one key on the piano.



Trace the whole note. Draw your own whole notes.

Place both thumbs on any G to play this song.

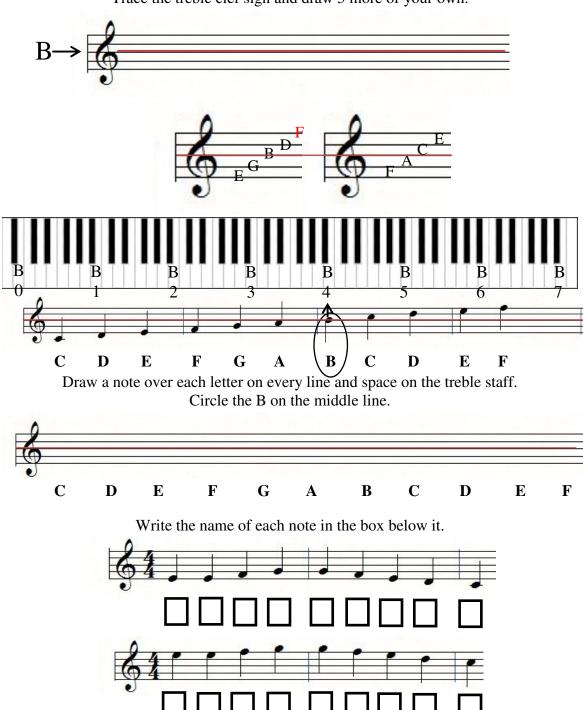
Play notes with the stems up with the right hand. Play notes with the stems down with the left hand.

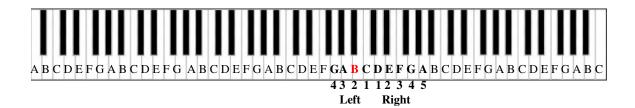


Treble Clef

The notes are printed on a **STAFF** which is made up of **5 lines** and **4 spaces**. By placing the notes on the staff a musician can tell how far apart notes are in comparison to each other. A **clef sign** can be placed on the staff to connect one of the lines to a specific note on the piano. When the **treble clef** is used the center line on the staff is B.

Trace the treble clef sign and draw 5 more of your own.

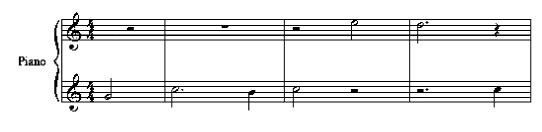




Score

Auld Lang Syne

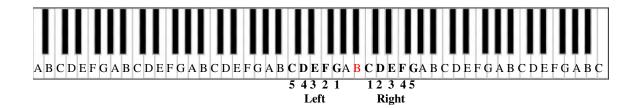
Traditional Arr. Hartburg







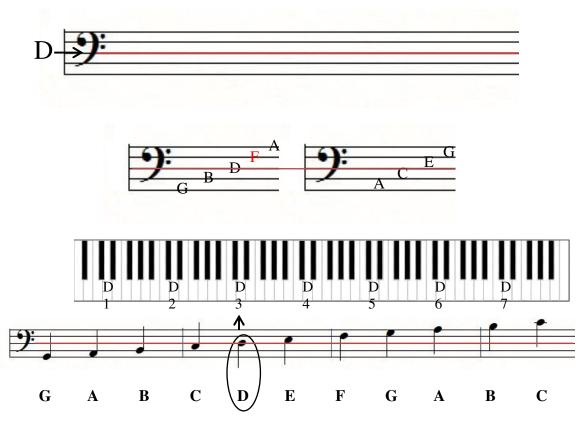






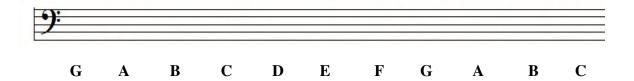
Bass Clef

When the **bass clef** is used the center line on the staff is D. Trace the bass clef sign and draw 5 more of your own.

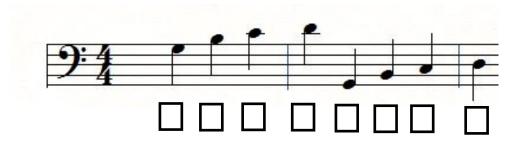


Draw a note over each letter on every line and space on the bass staff.

Circle the D on the middle line.



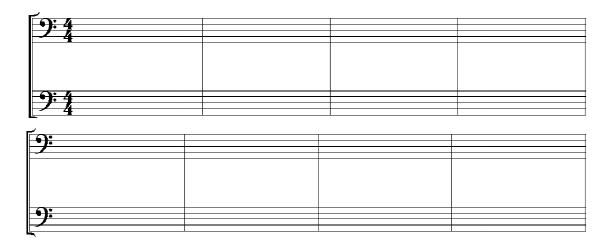
Write the name of each note in the box below it.







Write your own song in the Bass Clef



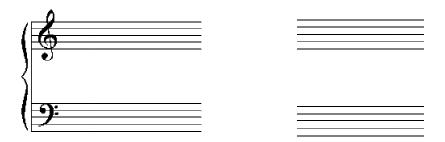


When the Saints Go Marching In

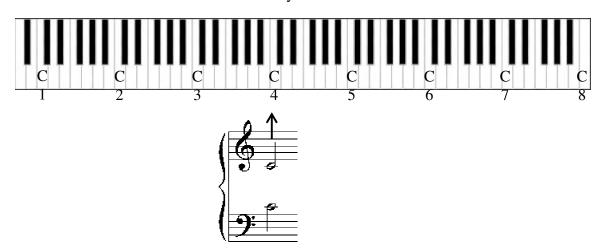


Grand Staff

The grand staff is the treble staff and bass staff connected by a brace. Trace the brace and draw your own. Draw the treble and bass clef signs.



Middle C is right in the middle of the two staffs, and it is close to the middle of the keyboard.



Draw 3 middle Cs in the Treble Clef



and 3 in the Bass Clef



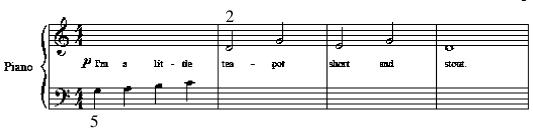
Circle the notes used in "I'm a Little Teapot"



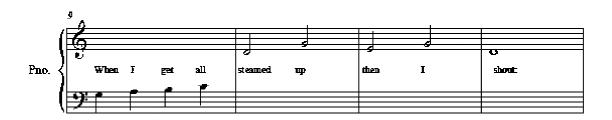
Place both thumbs on Middle C

I'm a Little Tea Pot

Sanders & Kelley Arr. Hartburg









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