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**The
Musician's
Guide to**

Fundamentals

SECOND EDITION

Jane Piper Clendinning

Elizabeth West Marvin

Joel Phillips

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Florida State University College of Music

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Eastman School of Music

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Westminster Choir College of Rider University



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To our teachers, colleagues, and students—
with whom we have shared the joy of music, and from
whom we continue to learn—and, with thanks,
to our families for their patience and support



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Preface

We hope you have chosen this course because you have an interest in—even a love for—music. Perhaps you want to learn to read music, write your own songs, or just listen to music with more understanding. This book can help you do all three.

Have you ever tried to explain something, but didn't know the right words? Our study begins with the vocabulary that will help you communicate your musical ideas. You'll learn musical terms and symbols, and how to read and write pitches and rhythms, scales, intervals, and chords. We'll build on these basics and consider how music is put together, what musical elements are being used, and why it sounds the way it does.

When you finish this book, you'll have all the tools you need to compose a song, and we hope you'll perform it in class. What better way to demonstrate what you have learned than to write your own music!

In this course, you will study classical music, as well as rock, jazz and blues standards, and folk songs. We encourage you to explore music of other cultures and styles, too; much of what you'll learn is useful in thinking about any type of music. We hope that you will enjoy using this book, and that the concepts you learn will enrich the ways you think about music for many years to come.

With this new edition of our text, you will be able to learn more than ever online. New features described below—including an ebook, online notation from Noteflight, quizzes with listening, and more—offer resources for students and instructors in traditional and online classes.

Using this Text

This book offers a comprehensive set of materials for learning music fundamentals through repertoire, hands-on music-making, and creative music writing. The twelve chapters introduce everything you need to know to compose and notate a song of your own.

The *Musician's Guide to Fundamentals* is organized to make it as easy as possible for you to learn. It includes many useful features, described here, that will facilitate your study.

- **Listening icons** 🎧 identify the nearly one thousand recordings accessible online at StudySpace (www.norton.com/studyspace)—the student website for this text—and within the ebook.
- **Download icons** 📄 indicate excerpts from widely available recordings that you can purchase and download separately. Copyright restrictions make it impossible to supply recordings of these works, but you should find and listen to them whenever possible.
- **Key Concept** and **Summary** boxes highlight new ideas and gather essential information.

KEY CONCEPT A **half step** (or **semitone**) is the interval between any pitch and the next closest pitch on the keyboard in either direction. The combination of two half steps forms a **whole step** (or **whole tone**). A whole step always has a note that could be inserted in the middle.

- **Try It** exercises are scattered throughout chapters to provide opportunities to practice new concepts. They give you immediate feedback on your understanding and prepare you for the assignments at the end of the chapter. When you see one

of these exercises, try it, then check your answer in Appendix 1. Only then will you know that you understand the concept and can apply it in your music-making.

TRY IT #1

Look at the meter signature to determine how many beats are in each measure, then write the counting syllables beneath the melody. The beat unit is the dotted-quarter note.

Cerf and Stiles, "Dance Myself to Sleep," mm. 9–13

Be - cause I get up off my pil - low and I flip on the light. I get
(1) 2 3 4

down and get hip in the still of the night.

- Since many concepts can be learned in more than one way, **Another Way** boxes offer alternative explanations. Use the method that works best for you.

ANOTHER WAY A common mnemonic (memory) device to help you remember the first four flats is the word “bead.” One handy sentence to remember for the order of both sharps and flats is “Father Charles Goes Down And Ends Battle.” When you read it forward, the first letter of each word gives the order of sharps; when you read it backward (“Battle Ends And Down Goes Charles’s Father”), you get the order of flats.

- Every chapter ends with a list of **Terms You Should Know**, **Questions for Review**, and a **Reading Review**. The **Questions for Review** are open-ended questions about chapter content; formulate answers to them in your own words. **Reading Reviews** are short matching quizzes; answers are provided in Appendix 2. These tools will help you test your mastery of the material covered before you move on to the next chapter.
- A **Did You Know?** box also appears at the end of each chapter to explain historical background for featured composers and pieces.

Did You Know?

Early rock and roll owes much to the blues. Not only did rock musicians borrow the 12-bar blues progression and the blues scale, in some cases they also reworked entire blues songs—either as covers (interpretations that acknowledged the original composers) or as “new” songs of their own. Rock-music scholars (and lawyers) have debated the question of when borrowed material becomes one’s own and when it is protected by copyright law. For example, some of Led Zepplin’s most famous songs have blues roots, raising both scholarly and legal controversies about their authorship. These songs include “Dazed and Confused” (compare with Jake Holmes’s “I’m Confused”), “Whole Lotta Love” (compare with Willie Dixon’s “You Need Love”), “Bring It on Home” (compare with a song with the same title by Willie Dixon), and the “Lemon Song” (compare with Howlin’ Wolf/Chester Burnett’s “The Killing Floor”).



End-of-chapter activities and assignments invite you to practice what you've learned:

- **Apply It** activities emphasize the skills you need to understand and recall musical patterns. Activities include singing and rhythm reading, keyboard practice, short listening and writing activities, and more. So that you can assess your progress, answers to written Apply It exercises appear in the back of the book, and recordings of many melodies and rhythms are available online.
- Three or four double-sided, tear-out-and-turn-in **Workbook Assignments** give you the opportunity to master the concepts presented in each chapter. These assignments, which include abundant practice, reinforce concepts in the order that they appear in the chapter; headings indicate when you are ready to complete each assignment.
- One or two **Aural Skills Assignments** round out each chapter. These assignments often guide you through the process of listening to and notating recorded music.

In the back of the book, along with the answers to Try It, Reading Review, and Apply It exercises, you will find the **Glossary** and several **Appendixes** that provide additional information on topics such as guitar chords, the overtone series, the diatonic modes, and C-clefs.

Using the Anthology

As part of this text, we have included a short **Anthology** with musical scores for 23 pieces. Our spiral-learning approach revisits the anthology's core repertoire from chapter to chapter as you learn new concepts—a single piece might illustrate pitch, meter, scales, and triads. By the second or third time you “visit” a particular work, it will seem like an old friend. We hope that you will listen to the music until you know each work well enough to hear it in your head, the same way you can hear familiar songs from the radio, television, or movies just by thinking about them.

We have chosen music for study that we like and that our students have enjoyed. Some of the works should be familiar to you, and other pieces may be new. The anthology includes pieces for varied performing ensembles in contrasting musical styles—from American popular songs to classical sonatas, from a piano rag to a piano waltz, from a folk song to a choral hymn. Complete recordings of all the anthology pieces are available online.

Using Total Access

With Total Access—included free with every new copy of this text—you can access all the media you need for your music fundamentals course. Total Access includes:

- An **ebook**—with the same text as this book—that enables you to highlight, take notes, listen to musical examples, and access exercises
- **Noteflight**, a cloud-based notation program, that you can use to complete, listen to, and turn in most of the assignments in this text—as well as compose your own music—from any computer or mobile device with an Internet connection
- Expanded online **quizzes** that test your mastery of theoretical concepts—both aural and written—and offer immediate, detailed feedback
- Online **recordings** featuring performances by students and faculty at the Eastman School of Music
- A **Virtual Keyboard** and **Virtual Guitar** that you can use to practice finding notes, scales, and chords.

To begin Using Total Access, go to wnnorton.com/studyspace and register with the code on the card in the front of this book.

To the Instructor

The *Musician's Guide to Fundamentals* is a comprehensive teaching and learning package for undergraduate music fundamentals classes that integrates technological resources with a textbook and audio recordings. In addition, we have designed the package with numerous support mechanisms to help you efficiently prepare for class.

- The online **Answer Key** includes answers to all exercises in the same format and pagination as the text, plus instructions and resources for Apply It activities.
- The **Instructor's Manual** by Peter Martens (Texas Tech University) offers a wealth of materials, including chapter overviews, teaching strategies, class activities, supplemental repertoire, additional exercises, and test questions.
- **Coursepacks** enable your students to connect to Total Access through your campus learning-management system.
- You will no longer need to search online or in the library before class to find a recording of the work you will be studying; **recordings** of all the core repertoire and all dictation exercises are available online in high-quality performances. In addition, bonus tracks (Bach, Newton, and Joplin) demonstrate alternative performances.

To access these resources, visit wnnorton.com/instructors.

This new edition includes a number of additional resources that will prove especially useful to instructors of online and hybrid classes:

- With **Noteflight**, your students can complete and turn in—and you can grade—assignments electronically for a paperless class.
- Newly expanded **quizzes** report directly to your learning-management system gradebook and offer new ways of assessing proficiency in written and aural skills.
- New **Apply It** activities provide additional opportunities for self assessment with answers to written questions in the back of the text and online recordings of melodies and rhythms available for students to check their work.

We hope that all users of this textbook—student and teacher alike—will get to know the repertoire, find the class activities and aural assignments challenging and enjoyable, and emerge from this class with some new skills that will contribute to their lifelong engagement with music listening and performance.

Our Thanks to . . .

A work of this size and scope requires the help of many people. We are especially grateful for the support of our families. Our work together as coauthors has been incredibly rewarding, and we are thankful for that collaboration and friendship. While working on the project, we received encouragement and useful ideas from music fundamentals teachers across the country. We thank these teachers for their willingness to share their years of experience with us.

For subvention of the recordings that accompany the text, and for his support of strong music theory pedagogy, we thank Douglas Lowry (former Dean of the Eastman School of Music). For performance of many of the short examples in the text, we thank Richard Masters, whose sight-reading abilities, flexibility, and good grace

are all appreciated. We also thank Don Gibson (former Dean and current Professor of Music Theory at Florida State University's College of Music) for his enthusiasm and unflinching support. For pedagogical discussions over the years, we are grateful to our colleagues at Florida State University, the Eastman School of Music, Westminster Choir College, and to the College Board's AP Music Theory Test Development Committee members and AP readers. Special thanks to Paul Murphy who stepped in on short notice to assist with aural skills materials. Thanks also to Peter Martens (Texas Tech University) for his work on the Instructor's Manual, to Elizabeth A. Clendinning (Emory University) for writing the online quizzes, and to Sarah Sarver (Oklahoma City University) for reviewing online materials.

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For the production of the recordings, our thanks go to recording engineers Mike Farrington and John Ebert, who worked tirelessly with Elizabeth Marvin at Eastman on recording and editing sessions, as well as to Helen Smith, director of Eastman's Office of Technology and Media Production. We finally thank the faculty and students of the Eastman School who gave so generously of their time to make these recordings. The joy of their music-making contributed mightily to this project.

We are indebted to the W. W. Norton staff for their commitment to *The Musician's Guide to Fundamentals* and their painstaking care in producing this volume. Most notable among these are Justin Hoffman and Susan Gaustad, whose knowledge of music and detailed, thoughtful questions made them a pleasure to work with, and music editor Maribeth Payne, whose vision and great enthusiasm have helped launch this new edition. We are grateful for Norton's forward-thinking media editor Steve Hoge, who helped refine our ideas for the book's website and made them a reality. Lisa Buckley created the design, Debra Nichols provided expert proofreading, Chris Freitag developed marketing strategies, Amanda Sewell handled final editing of the recordings with a great eye and ear for detail, and Ben Reynolds oversaw the production of this text through to completion. Our gratitude to one and all.

Jane Piper Clendinning
Elizabeth West Marvin
Joel Phillips

CHAPTER 1

Pitch Notation and the Grand Staff

Musical Contour

Listen to the hymn “Amazing Grace,” shown in music notation in Example 1.1. Follow the shape of the musical line as you listen.

EXAMPLE 1.1 Newton, “Amazing Grace,” mm. 1–8

stem
1
2
3
4
5
6
7
8
note head
A - maz - ing grace, how sweet the sound That saved a wretch like me!

The musical notation above—the **score**—shows various symbols that represent musical sounds. The most basic symbol is the **note**. Each note, written as a small oval (either black or hollow) attached to a **stem** going either up or down, represents a single musical sound, or **pitch**. Notes are written higher or lower on the five horizontal lines of a musical **staff**; this shows graphically the “shape,” or **contour**, of a melody. Notes 5 to 9 of “Amazing Grace” represent a **descending contour** and the notation on the staff likewise moves downward from left to right, each note lower than the previous one. The next three pitches move upward in an **ascending contour**. Most music—like this melody—moves both up and down, with melodic contours forming arches and waves, often with a single high point, as marked at the end of this phrase. The vertical lines on the staff, called **bar lines**, mark off equal amounts of time, called **measures**.

Introduction to Pitch Notation: Letter Names

Drawing a melody’s contour may give a general idea of its shape, but you need more-precise information to play the tune correctly.

TOPICS

- musical contour
- introduction to pitch notation: letter names
- the piano keyboard: naming white keys
- staff notation
- treble and bass clefs
- naming pitches with octave numbers
- ledger lines
- the grand staff
- writing music in a score

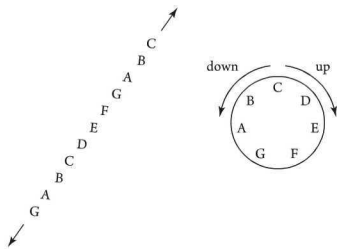
MUSIC

- Johann Sebastian Bach, Prelude from Cello Suite No. 2 in D Minor
- Elton John and Tim Rice, “Circle of Life,” from *The Lion King*
- Scott Joplin, “Solace”
- John Lennon, “Imagine”
- John Newton, “Amazing Grace”
- Joel Phillips, “Blues for Norton”
- Lalo Schifrin, Theme from *Mission: Impossible*

KEY CONCEPT In a musical score, each note has a **letter name**—A, B, C, D, E, F, or G—which is determined by its position on the staff.

To count up beyond G, start over with A; to count down below A, start over again with G, as shown in Figure 1.1. You can also think of the seven letter names around a circle, like a clock. Think of the movement as upward when you count forward or clockwise, and downward when you count backward or counterclockwise. For example, five notes above E is B: E–F–G–A–B. Six notes below E is G: E–D–C–B–A–G. When counting, be sure to include the first and last letter names of the series: three above F is A (count F–G–A, not G–A–B).

FIGURE 1.1 Letter names



In this seven-name system, each letter name reappears every eighth position (eight above or below D is another D).

KEY CONCEPT Pitches separated by eight letter names are an **octave** apart. The repetition of letter names reflects the way we hear: Pitches an octave apart sound similar. This principle is called **octave equivalence**.

TRY IT #1

Find the letter name requested.

- | | | |
|-------------------------|----------------------|----------------------|
| (a) 7 above D: <u>C</u> | (f) 5 above F: _____ | (k) 2 above G: _____ |
| (b) 5 above A: _____ | (g) 3 above C: _____ | (l) 4 above B: _____ |
| (c) 3 below B: _____ | (h) 8 below D: _____ | (m) 6 below D: _____ |
| (d) 6 below C: _____ | (i) 4 below E: _____ | (n) 5 below F: _____ |
| (e) 2 below E: _____ | (j) 6 above G: _____ | (o) 7 above E: _____ |

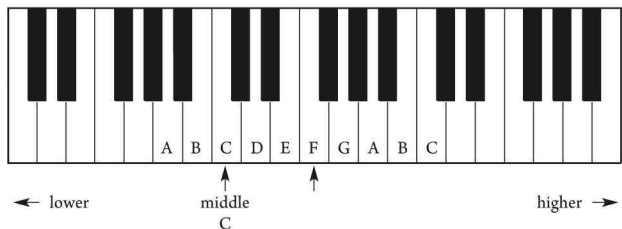
The Piano Keyboard: Naming White Keys

Look at the diagram in Figure 1.2 to identify pitch locations on the keyboard. (Or use the model keyboard in your text or the Virtual Keyboard on StudySpace.) The white key immediately to the left of any group of two black keys is a C, and the white key

immediately to the left of any three black keys is an F; each is indicated by an arrow. Write in the remaining letter names for the white keys in the figure, using the black-key groupings to find your place.

KEY CONCEPT Middle C is the C closest to the middle of the keyboard. No black key appears between E and F or between B and C.

FIGURE 1.2 Piano keyboard



Staff Notation

As shown in Example 1.2, the staff (plural is staves) consists of five lines and four spaces, which are generally read from bottom to top, with the bottom line called the first and the top line the fifth. As a first step in writing pitches, ovals called notes or **note heads** are drawn on the lines or in the spaces of the staff (most notes will also require stems, as we'll see later). Filled note heads are played for a shorter duration than hollow ones. Higher pitches are notated toward the top of the staff, lower pitches toward the bottom, as marked.

EXAMPLE 1.2 Note heads on a staff





Treble and Bass Clefs

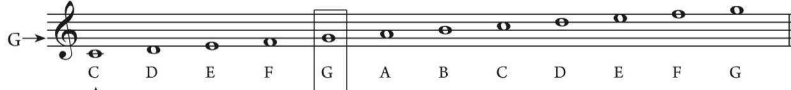
The letter names of the notes in Example 1.2 can't be identified without a **clef**, the symbol that appears on the far left of every staff. The clef shows which line or space represents which pitch (and in which octave). In Example 1.3, notes are written on the staff with a **treble clef**, sometimes called the G-clef. Its shape somewhat resembles a cursive capital G, and the end of its curving line (in the center) rests on the staff line for G. All the other pitches can be read from G by counting up or down in the **musical alphabet**. The note


above the highest staff line (F) is G. The note below the lowest staff line (E) is D, and the note below that, with the little line through it, is middle C. The treble clef represents the higher notes on a keyboard.

As soon as possible, memorize the note names for each line and space. Learn the “line notes” together and the “space notes” together, as in Example 1.4.

EXAMPLE 1.3 Treble clef (G-clef) 

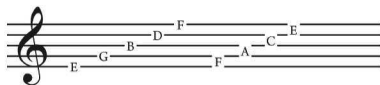
 = letter G → 



G →  C D E F G A B C D E F G

↑
middle C

EXAMPLE 1.4 Treble-clef lines and spaces




— F —
— D —
— B —
— G —
— E —

— F —
— A —
— C —
— E —

ANOTHER WAY To remember note names of the lines (E–G–B–D–F), you might make up a sentence whose words begin with these letters, like “Every Good Bird Does Fly.” The spaces simply spell the word F–A–C–E.

TRY IT #2

(a) Write the letter name of each pitch in the blanks below. 



(1) B (2) ___ (3) ___ (4) ___ (5) ___ (6) ___ (7) ___ (8) ___ (9) ___ (10) ___ (11) ___ (12) ___

(b) Write the letter names in the blanks, then circle the highest and lowest pitches.

Lennon, “Imagine,” mm. 28–30



You _____ You may say _____ I’m a dream - er. But I’m not the on - ly one.

(1) E (2) ___ (3) ___ (4) ___ (5) ___ (6) ___ (7) ___



Now listen to Example 1.5, the beginning of Bach's Cello Suite No. 2, while looking at the music shown in the example. This lower-sounding melody is written in the bass clef.

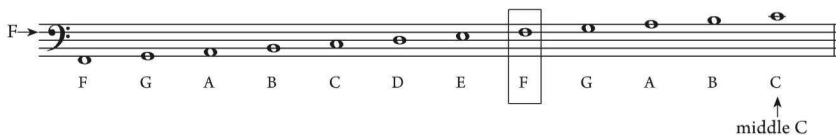
EXAMPLE 1.5 Bach, Prelude, from Cello Suite No. 2 in D Minor, mm. 1–4 



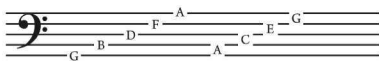
The bass clef, used for the lower notes on a keyboard, is also known as the F-clef: it somewhat resembles a cursive capital F, and its two dots surround the line that represents F. Other pitches may be counted from F, or memorized according to their positions on the staff, shown in Example 1.6. Example 1.7 shows the lines and spaces labeled with their letter names.

EXAMPLE 1.6 Bass clef (F-clef) 

 = letter F → 




EXAMPLE 1.7 Bass-clef lines and spaces



ANOTHER WAY Two ways to remember the bass-clef spaces (A–C–E–G) are “All Cows Eat Grass” and “All Cars Eat Gas.” The bass-clef lines (G–B–D–F–A) might be “Great Big Doves Fly Away.”

TRY IT #3


(a) Identify the pitches on the bass staff below with letter names. 



(1) F (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12)

TRY IT #3 (Continued)

- (b) Listen to the beginning of “Blues for Norton.” The lowest part is shown below. Then write the letter names for the pitches that have blanks beneath them. Circle the highest and lowest pitches.

Phillips, “Blues for Norton” (bass line), mm. 2–3 



(1) F (2) ___ (3) ___ (4) ___ (5) ___ (6) ___ (7) ___ (8) ___

ASSIGNMENT 1.1

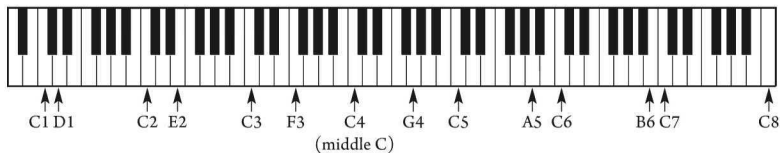
Naming Pitches with Octave Numbers

As seen in the previous examples, letter names reappear in different octaves in the bass and treble clefs. To specify exactly in which octave a pitch appears, use octave numbers.

KEY CONCEPT As Figure 1.3 shows, the lowest C on a standard piano keyboard is designated C1, and the highest is C8; middle C is C4. The number for a particular octave includes all the pitches from C up to the following B.

The B above C4, for example, is B4; the B below C4 is B3. The white notes below C1 on the piano are A0 and B0.

FIGURE 1.3 Piano keyboard with octave numbers



Ledger Lines

Some of the pitches on the piano keyboard, including middle C, cannot be notated on the five lines and four spaces of the treble or bass staff.

KEY CONCEPT When music extends above or below the staff, extra lines—called **ledger lines**—are drawn to accommodate these notes (Example 1.8). Read ledger lines (and the spaces between them) just like other staff lines and spaces: by counting forward or backward in the musical alphabet.

EXAMPLE 1.8 Ledger lines above and below the staff

(a) Treble clef

Diagram (a) shows a treble clef staff with notes G, A, B, C, D, and E. The notes G, A, B, and C are on the staff lines, while D and E are on ledger lines above the staff. Below the staff, a piano keyboard is shown with arrows pointing to the corresponding keys for notes A, B, C, D, G, A, B, C, D, and E. The keyboard labels include C3, C4 (middle C), C5, C6, and C7.


(b) Bass clef

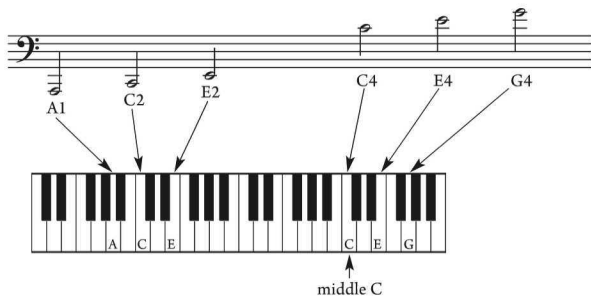
Diagram (b) shows a bass clef staff with notes B, C, D, E, F, and G. The notes B, C, D, and E are on the staff lines, while F and G are on ledger lines below the staff. Below the staff, a piano keyboard is shown with arrows pointing to the corresponding keys for notes C, D, E, F, B, C, D, E, F, and G. The keyboard labels include C1, C2, C3, C4 (middle C), and C5.

(c) Octaves from C2 to C6


Diagram (c) shows a bass clef staff with notes C2, C3, C4, C4, C5, and C6. The notes C2, C3, C5, and C6 are on ledger lines below the staff, while C4 is on the staff line. A treble clef is placed above the staff for the C4 note. Below the staff, a piano keyboard is shown with arrows pointing to the corresponding keys for notes C1, C2, C3, C4 (middle C), C5, and C6.

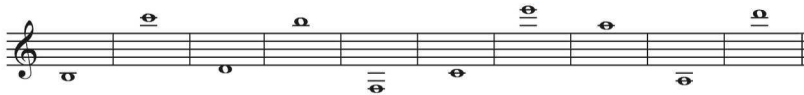
KEY CONCEPT The highness or lowness of a pitch (in other words, the octave in which it lies) is called its **register**.

(b) Bass clef 



TRY IT #4

Write the letter name and octave number for each pitch given below. 



(a) **B3** (b) _____ (c) _____ (d) _____ (e) _____ (f) _____ (g) _____ (h) _____ (i) _____ (j) _____



(k) **G3** (l) _____ (m) _____ (n) _____ (o) _____ (p) _____ (q) _____ (r) _____ (s) _____ (t) _____

ASSIGNMENT 1.2

The Grand Staff

Pitches for keyboards, and other instruments that play very high and low notes, are written on a grand staff like the one in Example 1.11.