

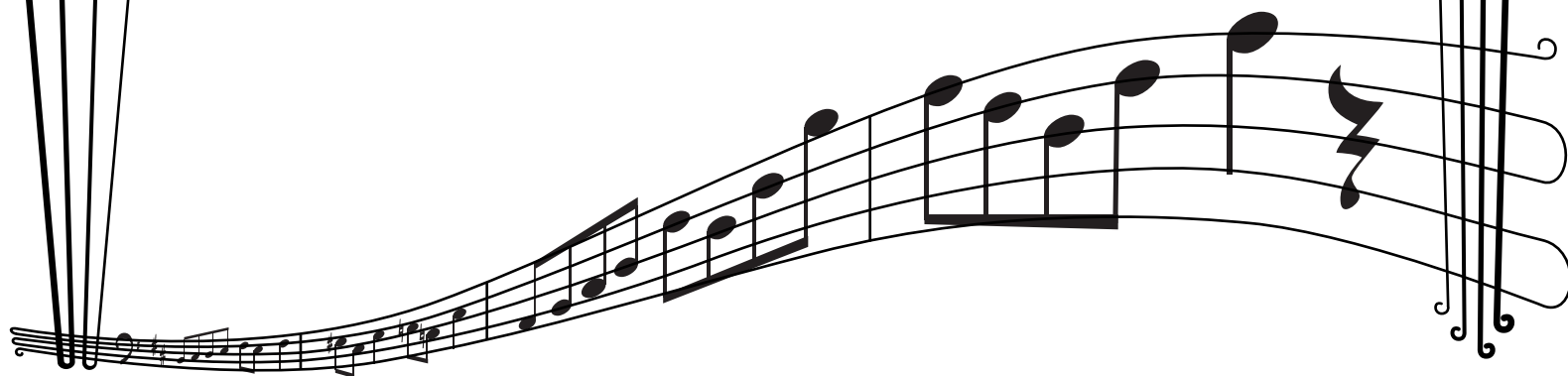


# String Theory

Music Fundamentals Workbook

by  
Caryn Wiegand Neidhold

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Name



# String Theory

## Music Fundamentals Workbook

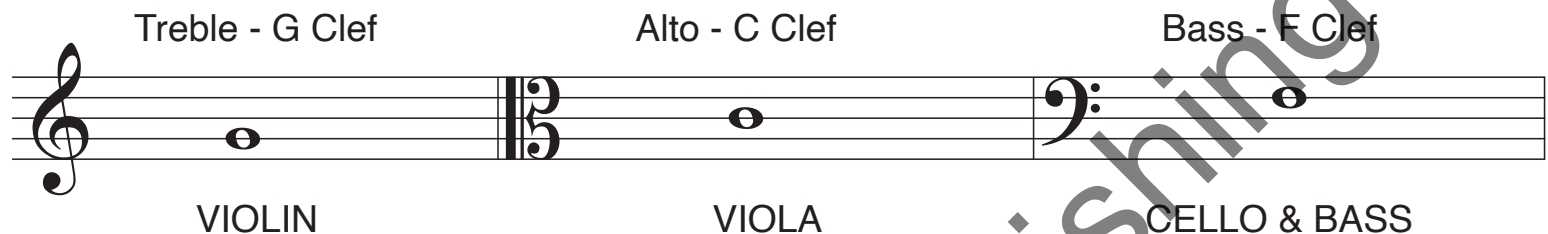
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Cello

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# The Secret of Clefs

The symbols at the start of every music line are called **clefs**. Each instrument has a clef they use most of the time, and these three clefs are used the most:



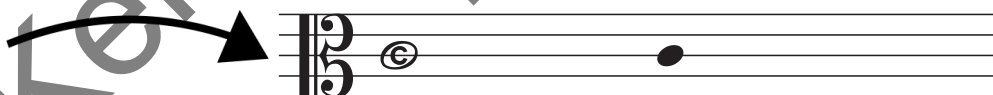
When Violas, Cellos, and Basses play advanced music, they also use other clefs. Violins only use the treble clef.

*The secret is. . .* The **clef** shows one note which you can use to find the rest of the notes. In secret codes, this is known as the cipher or encryption key.

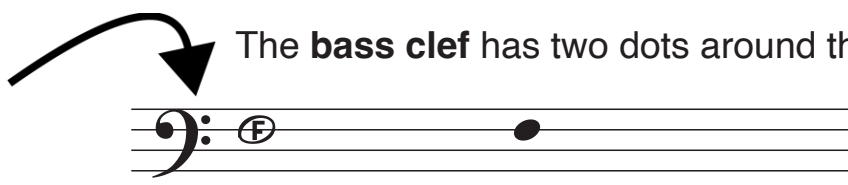
The **treble clef** has a swirl around the G on line 2.



The **alto clef** has two bumps that come together on the C on line 3.



The **bass clef** has two dots around the note F on line 4.



You can figure out the rest of the notes using lines and spaces up and down.  
Some of the notes have been given to help you on your way.

LOOK!  
Leder lines  
make the staff  
go higher and lower.

Go down the musical alphabet

Go up the musical alphabet

Go down the musical alphabet

Go up the musical alphabet

Go down the musical alphabet

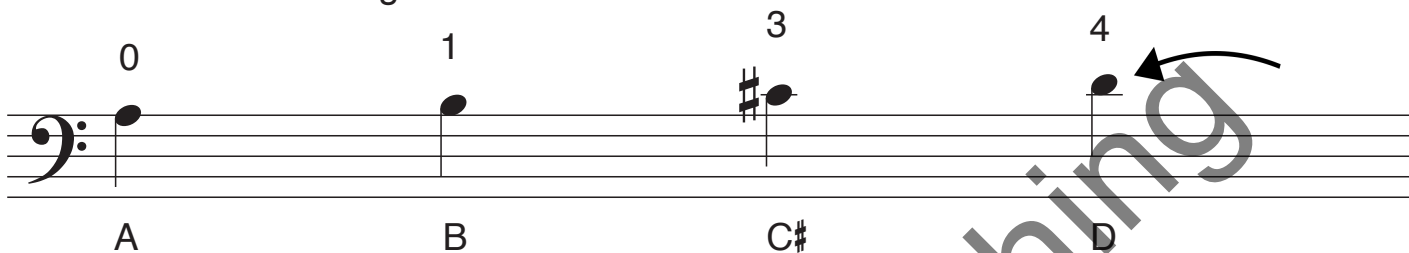
Go up the musical alphabet

Here are two important things to keep in mind:

1. The staff lines are not your strings (there are 5 staff lines and your instrument has 4 strings)
2. The note names will always stay the same in your clef. Be patient – you will get the hang of this!

# A String Notes

These are the A string notes:



Ledger lines help make the staff go farther. You can think of this like staff line 6.

The note name, finger number, and string will always be true.

You have to memorize which line and space the notehead is on.

The note B will always be on the top of the staff (Space 5), no matter what kind of note it is.



C# (C-sharp) can be shown in two different ways.



The # is in front of the note.

The C# is in the key signature.

Just like you memorized numbers, you will need to memorize the note names, fingers and strings. When you see this number...

## 54

...you recognize it quickly. That is how you will soon be with note names, fingers and strings!

# Time Out for Notation

Penmanship (how clearly you write) in music is important. If you don't write the notes correctly, no one will know how to play them.

Here are some things to remember:

Noteheads are **one space wide**.

For noteheads *below* the middle line (Line 3), **stems go up**.

On the middle line, Line 3, stems go **up or down**.

Stems are **3 spaces long**.

For noteheads *above* the middle line (Line 3), **stems go down**.

Stems go **UP** on the right.  
Stems go **DOWN** on the left.

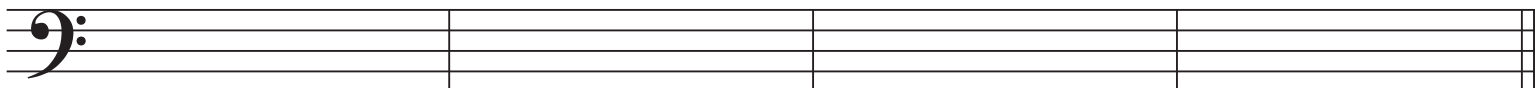
Draw the stems on these noteheads:

Stems go DOWN

Stems go UP

Draw the notes for the correct line or space. There are 4 notes in each measure.

1. Draw the notehead - one space wide.
2. Draw the stem - three spaces long.



Line 1 Space 3 Line 2 Space 2 Space 4 Line 3 Space 1 Line 5 Line 3 Space 2 Line 4 Space 3 Line 3 Space 1 Line 4 Space 1

Musical notation for the bass line of 'The Rose Tree' in G major, 3/4 time. The melody consists of eighth and quarter notes across three measures.

A musical staff in bass clef with a key signature of two sharps (F# and C#). The melody consists of quarter notes: F#2, G#2, A2, B2, A2, G#2, F#2, E2, D2, C#2, B1, A1, G#1, F#1, E1, D1, C#1, B0, A0, G#0, F#0, E0, D0, C#0, B-1, A-1, G#-1, F#-1, E-1, D-1, C#-1, B-2, A-2, G#-2, F#-2, E-2, D-2, C#-2, B-3, A-3, G#-3, F#-3, E-3, D-3, C#-3, B-4, A-4, G#-4, F#-4, E-4, D-4, C#-4, B-5, A-5, G#-5, F#-5, E-5, D-5, C#-5, B-6, A-6, G#-6, F#-6, E-6, D-6, C#-6, B-7, A-7, G#-7, F#-7, E-7, D-7, C#-7, B-8, A-8, G#-8, F#-8, E-8, D-8, C#-8, B-9, A-9, G#-9, F#-9, E-9, D-9, C#-9, B-10, A-10, G#-10, F#-10, E-10, D-10, C#-10, B-11, A-11, G#-11, F#-11, E-11, D-11, C#-11, B-12, A-12, G#-12, F#-12, E-12, D-12, C#-12, B-13, A-13, G#-13, F#-13, E-13, D-13, C#-13, B-14, A-14, G#-14, F#-14, E-14, D-14, C#-14, B-15, A-15, G#-15, F#-15, E-15, D-15, C#-15, B-16, A-16, G#-16, F#-16, E-16, D-16, C#-16, B-17, A-17, G#-17, F#-17, E-17, D-17, C#-17, B-18, A-18, G#-18, F#-18, E-18, D-18, C#-18, B-19, A-19, G#-19, F#-19, E-19, D-19, C#-19, B-20, A-20, G#-20, F#-20, E-20, D-20, C#-20, B-21, A-21, G#-21, F#-21, E-21, D-21, C#-21, B-22, A-22, G#-22, F#-22, E-22, D-22, C#-22, B-23, A-23, G#-23, F#-23, E-23, D-23, C#-23, B-24, A-24, G#-24, F#-24, E-24, D-24, C#-24, B-25, A-25, G#-25, F#-25, E-25, D-25, C#-25, B-26, A-26, G#-26, F#-26, E-26, D-26, C#-26, B-27, A-27, G#-27, F#-27, E-27, D-27, C#-27, B-28, A-28, G#-28, F#-28, E-28, D-28, C#-28, B-29, A-29, G#-29, F#-29, E-29, D-29, C#-29, B-30, A-30, G#-30, F#-30, E-30, D-30, C#-30, B-31, A-31, G#-31, F#-31, E-31, D-31, C#-31, B-32, A-32, G#-32, F#-32, E-32, D-32, C#-32, B-33, A-33, G#-33, F#-33, E-33, D-33, C#-33, B-34, A-34, G#-34, F#-34, E-34, D-34, C#-34, B-35, A-35, G#-35, F#-35, E-35, D-35, C#-35, B-36, A-36, G#-36, F#-36, E-36, D-36, C#-36, B-37, A-37, G#-37, F#-37, E-37, D-37, C#-37, B-38, A-38, G#-38, F#-38, E-38, D-38, C#-38, B-39, A-39, G#-39, F#-39, E-39, D-39, C#-39, B-40, A-40, G#-40, F#-40, E-40, D-40, C#-40, B-41, A-41, G#-41, F#-41, E-41, D-41, C#-41, B-42, A-42, G#-42, F#-42, E-42, D-42, C#-42, B-43, A-43, G#-43, F#-43, E-43, D-43, C#-43, B-44, A-44, G#-44, F#-44, E-44, D-44, C#-44, B-45, A-45, G#-45, F#-45, E-45, D-45, C#-45, B-46, A-46, G#-46, F#-46, E-46, D-46, C#-46, B-47, A-47, G#-47, F#-47, E-47, D-47, C#-47, B-48, A-48, G#-48, F#-48, E-48, D-48, C#-48, B-49, A-49, G#-49, F#-49, E-49, D-49, C#-49, B-50, A-50, G#-50, F#-50, E-50, D-50, C#-50, B-51, A-51, G#-51, F#-51, E-51, D-51, C#-51, B-52, A-52, G#-52, F#-52, E-52, D-52, C#-52, B-53, A-53, G#-53, F#-53, E-53, D-53, C#-53, B-54, A-54, G#-54, F#-54, E-54, D-54, C#-54, B-55, A-55, G#-55, F#-55, E-55, D-55, C#-55, B-56, A-56, G#-56, F#-56, E-56, D-56, C#-56, B-57, A-57, G#-57, F#-57, E-57, D-57, C#-57, B-58, A-58, G#-58, F#-58, E-58, D-58, C#-58, B-59, A-59, G#-59, F#-59, E-59, D-59, C#-59, B-60, A-60, G#-60, F#-60, E-60, D-60, C#-60, B-61, A-61, G#-61, F#-61, E-61, D-61, C#-61, B-62, A-62, G#-62, F#-62, E-62, D-62, C#-62, B-63, A-63, G#-63, F#-63, E-63, D-63, C#-63, B-64, A-64, G#-64, F#-64, E-64, D-64, C#-64, B-65, A-65, G#-65, F#-65, E-65, D-65, C#-65, B-66, A-66, G#-66, F#-66, E-66, D-66, C#-66, B-67, A-67, G#-67, F#-67, E-67, D-67, C#-67, B-68, A-68, G#-68, F#-68, E-68, D-68, C#-68, B-69, A-69, G#-69, F#-69, E-69, D-69, C#-69, B-70, A-70, G#-70, F#-70, E-70, D-70, C#-70, B-71, A-71, G#-71, F#-71, E-71, D-71, C#-71, B-72, A-72, G#-72, F#-72, E-72, D-72, C#-72, B-73, A-73, G#-73, F#-73, E-73, D-73, C#-73, B-74, A-74, G#-74, F#-74, E-74, D-74, C#-74, B-75, A-75, G#-75, F#-75, E-75, D-75, C#-75, B-76, A-76, G#-76, F#-76, E-76, D-76, C#-76, B-77, A-77, G#-77, F#-77, E-77, D-77, C#-77, B-78, A-78, G#-78, F#-78, E-78, D-78, C#-78, B-79, A-79, G#-79, F#-79, E-79, D-79, C#-79, B-80, A-80, G#-80, F#-80, E-80, D-80, C#-80, B-81, A-81, G#-81, F#-81, E-81, D-81, C#-81, B-82, A-82, G#-82, F#-82, E-82, D-82, C#-82, B-83, A-83, G#-83, F#-83, E-83, D-83, C#-83, B-84, A-84, G#-84, F#-84, E-84, D-84, C#-84, B-85, A-85, G#-85, F#-85, E-85, D-85, C#-85, B-86, A-86, G#-86, F#-86, E-86, D-86, C#-86, B-87, A-87, G#-87, F#-87, E-87, D-87, C#-87, B-88, A-88, G#-88, F#-88, E-88, D-88, C#-88, B-89, A-89, G#-89, F#-89, E-89, D-89, C#-89, B-90, A-90, G#-90, F#-90, E-90, D-90, C#-90, B-91, A-91, G#-91, F#-91, E-91, D-91, C#-91, B-92, A-92, G#-92, F#-92, E-92, D-92, C#-92, B-93, A-93, G#-93, F#-93, E-93, D-93, C#-93, B-94, A-94, G#-94, F#-94, E-94, D-94, C#-94, B-95, A-95, G#-95, F#-95, E-95, D-95, C#-95, B-96, A-96, G#-96, F#-96, E-96, D-96, C#-96, B-97, A-97, G#-97, F#-97, E-97, D-97, C#-97, B-98, A-98, G#-98, F#-98, E-98, D-98, C#-98, B-99, A-99, G#-99, F#-99, E-99, D-99, C#-99, B-100, A-100, G#-100, F#-100, E-100, D-100, C#-100, B-101, A-101, G#-101, F#-101, E-101, D-101, C#-101, B-102, A-102, G#-102, F#-102, E-102, D-102, C#-102, B-103, A-103, G#-103, F#-103, E-103, D-103, C#-103, B-104, A-104, G#-104, F#-104, E-104, D-104, C#-104, B-105, A-105, G#-105, F#-105, E-105, D-105, C#

3

[illegible]

5

6 *What is this melody?*



Finger-String    —    —    —    —    —    —    —    —    —    —    —    —    —    —    —    —

# Eighth Notes

One quarter note equals two eighth notes.



We still name each beat but the second eighth note is called "and" or &.

The name of the second eighth note is based on the beat it is next to.



For example:

"the **and** of 3" means the second eighth note of the third beat.

Notice the beam helps you see the beat.

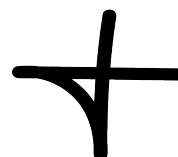
When you clap and count out loud, clap each note and say the beat name and the "and" for each beat. Here is an example:



## BIG HINTS:

- \* Every measure starts with the number 1.
- \* The second eighth note is always &.

Here is one way to draw the "and" symbol



Try writing in the counting, then clap and count.

