MONACO VIOLIN STUDIO

Counting

THE COMPLETE SERIES

Three workbooks. Fifty pages. Every answer key included.

WHAT'S INSIDE

BOOK ONE

Reading Time Signatures

page 2

2/4, 3/4 and 4/4 — what the two numbers mean, and counting out loud.

BOOK TWO

Pickups, Ties and Cut Time

page 18

Incomplete first bars, notes held across barlines, and 2/2.

BOOK THREE

Compound Meter

page 35

6/8, 9/8 and 12/8 — when the beat divides in three.

HOW TO USE THESE

Work through them in order. Each book assumes the one before it, and each ends with games and a full teacher answer key.

FREE RESOURCE • COUNTING, BOOK ONE

Reading Time Signatures

WHAT THE TWO NUMBERS MEAN · AND HOW TO COUNT THEM



“The time signature tells you how to count. Everything else follows.”

START HERE

The Notes You Need

♫

A one-page refresher. This book is about counting, not about learning the notes — so here they all are, in one place, to point back to.

The seven values

Counted in quarter notes, because that is the note most time signatures are built around. Every number in this book is measured in these units.

NOTE	REST	NAME	QUARTERS
		**Whole**	4
	—	**Dotted half**	3
		**Half**	2
	—	**Dotted quarter**	1½
		**Quarter**	1
		**Eighth**	½
		**Sixteenth**	¼

Two rules worth carrying

A dot adds half again. A dotted note is worth the note plus half of itself, so a dotted quarter is a quarter plus an eighth.



A beam is a bundle, not a change. Joining fast notes with a beam never alters what they are worth. It groups them so you can see where the beats are — which is exactly what this book is about.



Rests are silences with a value

A rest is worth exactly what its matching note is worth; you simply stay quiet and keep counting. Keeping the count running through a rest is one of the things this book drills hardest, because it is where most players lose their place.

The two dotted rows show a dash because dotted rests, though they exist, are rare in beginner music: a dotted-half silence in the middle of a measure is normally written as a half rest plus a quarter rest. And when a whole measure is silent, you write a **whole rest** — whatever the time signature, and even in 3/4, where the measure is only three quarter notes long.

This page is the whole prerequisite. If these seven values and two rules look familiar, you are ready for every page that follows.

START HERE

What a Time Signature Tells You

♫

Two stacked numbers at the start of the music. They are not a fraction, and the bottom one is not a count.

Two numbers, two jobs

$\frac{4}{4}$

The top number counts. It tells you how many beats live in one measure. Four on top means four beats per measure.

The bottom number names. It tells you which note is worth one of those beats. It is not a count — it is a name, written as a number: 2 means the half note, 4 the quarter, 8 the eighth.

So 4/4 is read "four quarter-note beats in every measure." Read every time signature that way and most of the confusion disappears.

What the bottom number names

BOTTOM NUMBER	2	4	8
means this note			
called	half note	quarter note	eighth note

It behaves like the bottom of a fraction in one way only: the bigger the number, the shorter the note. That is about which note is written, not about speed — how fast to play is a separate instruction entirely.

Read it as a sentence

Every time signature can be read the same way: "*this many — beats of this note — in every measure.*" A measure can of course be filled with smaller notes; what the signature fixes is how much it holds.

WRITTEN	SAID OUT LOUD
$\frac{4}{4}$	4 quarter-note beats in every measure
$\frac{3}{4}$	3 quarter-note beats in every measure
$\frac{2}{4}$	2 quarter-note beats in every measure

One warning, kept for later. "The bottom number is the beat" is true for every meter in this book and the next one. It stops being true in compound meter, which is what Book Three is for.

START HERE

Counting Out Loud

♫

One set of words, used on every page of this book and in every answer key.

Say the beat numbers first

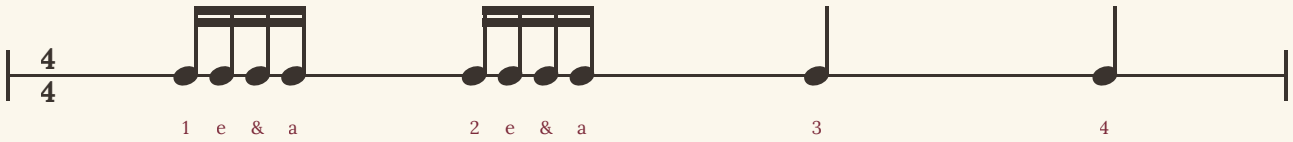
Counting out loud is the single most useful habit in rhythm. The numbers are the beats; everything faster gets a syllable that fits between them. Use the same words every time and your ear starts doing the work for you.



Then fill in between



Two per beat — say **and**, written &



Four per beat — **1 e & a**, said evenly

Keep counting through a rest

A rest gets a count like anything else. The number is still said; you simply do not play on it.



Say **1 2 3 & 4** out loud, but play only on 1, 3, & and 4.

Count out loud, not in your head. Saying it aloud forces an even beat in a way that thinking it never does.

START HERE

Three Simple Meters to Start

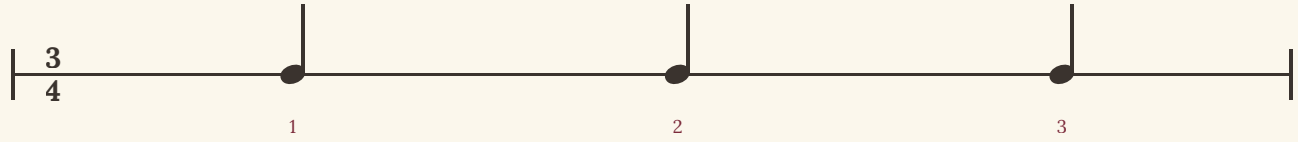
♫

Three time signatures that cover most of the music you will meet. In all three the beat splits neatly in two, which is what the word *simple* means here.

2/4 2 quarter-note beats in a measure, each splitting into 2 eighth notes



3/4 3 quarter-note beats in a measure, each splitting into 2 eighth notes
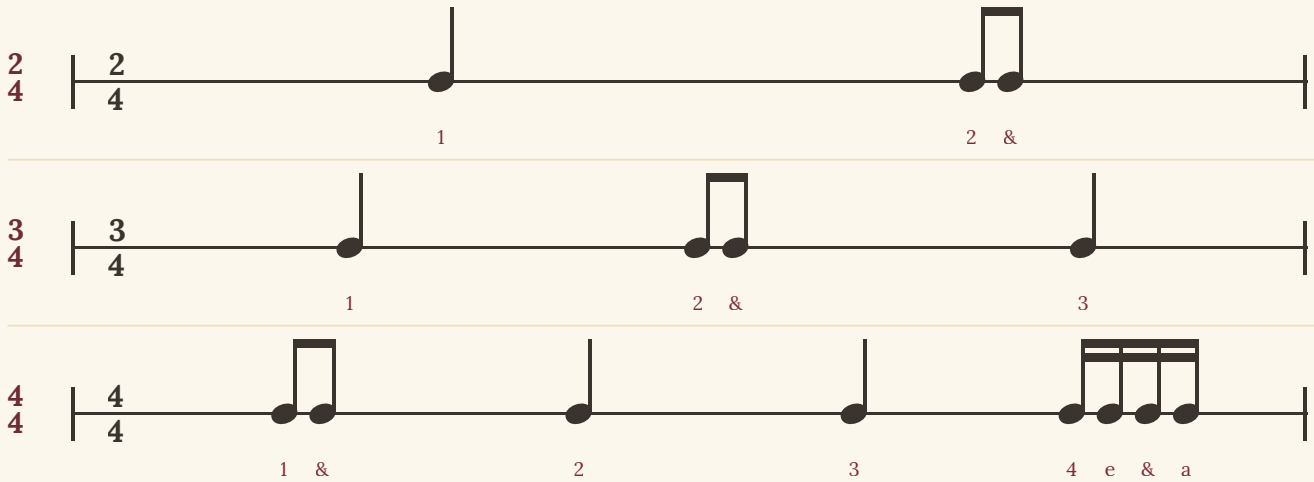


4/4 4 quarter-note beats in a measure, each splitting into 2 eighth notes



The same meters, with real rhythms

Plain quarter notes make the beat obvious. Here is what each meter looks like once the beats start dividing — the numbers still land in exactly the same places.



These three share one habit. In all three the quarter note gets the beat, so the counting words are identical — only how far you count before starting again changes.

START HERE

Strong and Weak Beats

♫

Why 4/4 and 2/4 are not the same thing, even when every note on the page is identical.

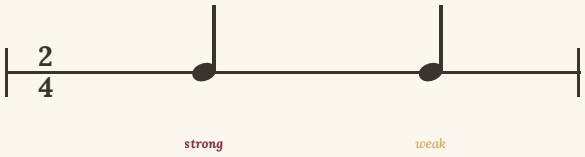
Not every beat is equal

Beat one is the strongest beat in any measure — it is called the **downbeat**, and it is what a conductor's hand points at on the way down. In four, beat three gets a smaller push of its own.

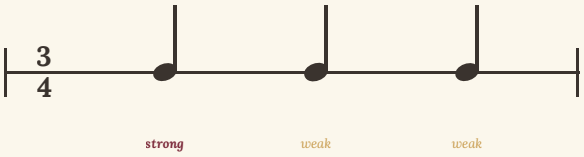


Natural stress is something you feel, not something written down — these words are here to describe the beats, and you will not see them printed in music.

2/4 strong · weak



3/4 strong · weak · weak



Why it matters

Play four even quarter notes in 2/4 and the strong beat lands every two: **STRONG** weak **STRONG** weak. Play the identical four in 4/4 and it lands every four, with a smaller push on beat three: **STRONG** weak *medium* weak. Same notes; you lean in different places.

The same trick turns a march into a waltz. Lean on every third clap instead of every second and you have 3/4 — still the same notes, still a different piece.

These stresses are built into the meter, so nobody writes them down. There are marks a composer can add to ask for a particular note to be leaned on, cut short or held full length — but those belong to a book about how music is played, not one about how it is counted.

GAME ONE

Count It Out

♫

Write the counting syllables under each note and each rest: the beat numbers, and **&**, **e** or **a** for anything in between. Watch the time signature on every line.

NAME _____ DATE _____

METER MAP · THE NOTE THAT GETS ONE BEAT, AND HOW MANY FIT

2/4 ♩ ×2 3/4 ♩ ×3 4/4 ♩ ×4

#1



#2



#3



#4



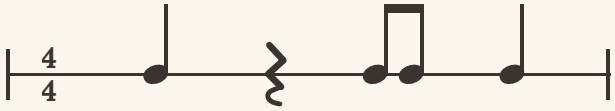
#5



#6



#7



#8



#9



#10



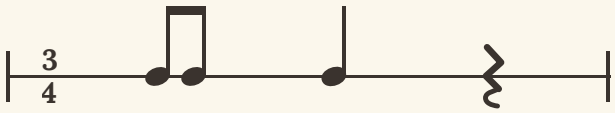
#11



#12



#13



#14



Say the whole measure out loud before you write anything. The count never stops just because the sound does — a rest gets a number like any note.

GAME TWO

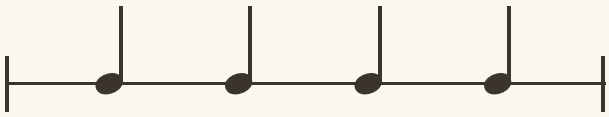
Name That Meter

♫

Each measure is complete but its time signature is missing. Work out how much music the measure holds, then circle the only time signature it could be.

NAME _____ DATE _____

#1



2/4 3/4 4/4

#2



2/4 3/4 4/4

#3



2/4 3/4 4/4

#4



2/4 3/4 4/4

#5



2/4 3/4 4/4

#6



2/4 3/4 4/4

#7



2/4 3/4 4/4

#8



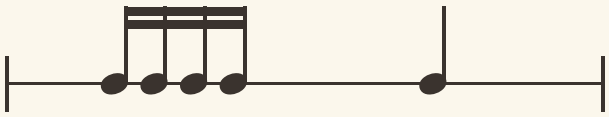
2/4 3/4 4/4

#9



2/4 3/4 4/4

#10



2/4 3/4 4/4

Add up the measure, then test each option. Work out how many quarter notes' worth the measure holds, then ask which time signature wants exactly that much. Only one of the three fits.

GAME THREE

Fill the Measure

♫

Every measure is one note short. Draw the single note that completes it, then write its name on the line.

NAME _____ DATE _____

METER MAP · THE NOTE THAT GETS ONE BEAT, AND HOW MANY FIT

2/4 ♩ ×2 3/4 ♩ ×3 4/4 ♩ ×4

#1



missing note: .....

#2



missing note: .....

#3



missing note: .....

#4



missing note: .....

#5



missing note: .....

#6



missing note: .....

#7



missing note: .....

Subtract, do not guess. Add up what is already in the measure, take it away from what the time signature asks for, and draw the note that is left. Exactly one note works every time.

Fill the Measure

♫

Seven more, with the time signature changing on every card. Same method: add up what is there, take it away from what the meter asks for, and draw what is left.

NAME _____ DATE _____

METER MAP · THE NOTE THAT GETS ONE BEAT, AND HOW MANY FIT

2/4 ♩ ×2 3/4 ♩ ×3 4/4 ♩ ×4

#1



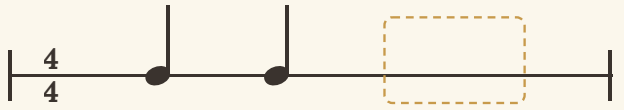
missing note: .....

#2



missing note: .....

#3



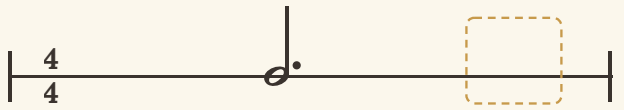
missing note: .....

#4



missing note: .....

#5



missing note: .....

#6



missing note: .....

#7



missing note: .....

Some of these are missing a dotted note. If the gap does not match any plain note value, try adding a dot to the next one down — a dot adds half the note again.

GAME FOUR

Spot the Broken Measure

♫

Some of these measures do not add up to what their time signature asks for. For every card, write what the measure holds and what it needs, then tick whichever box is true.

NAME _____ DATE _____

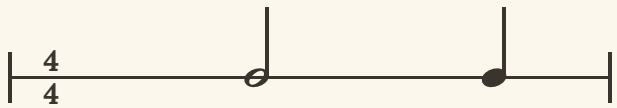
#1



holds _____ needs _____

☐ correct ☐ broken

#2



holds _____ needs _____

☐ correct ☐ broken

#3



holds _____ needs _____

☐ correct ☐ broken

#4



holds _____ needs _____

☐ correct ☐ broken

#5



holds _____ needs _____

☐ correct ☐ broken

#6



holds _____ needs _____

☐ correct ☐ broken

#7



holds _____ needs _____

☐ correct ☐ broken

#8



holds _____ needs _____

☐ correct ☐ broken

Measure in quarter notes. Write how many quarter notes the measure actually holds, then how many it needs. Some of these are already correct.

In Your Own Words

♫

No notes to draw on this page — just sentences. Explaining an idea is the surest way to find out whether you really have it.

NAME _____ DATE _____

Explain it

#1 A friend has never seen a time signature before. In your own words, tell them what the **top** number is for.

#2 Now tell them what the **bottom** number is for, and why it is not a count.

#3 4/4 and 2/4 can contain exactly the same notes. Explain what makes them sound different.

Finish the sentence

#1 In 3/4 there are _____ beats in a measure, and the note that gets one beat is the _____ note.

#2 The strongest beat in any measure is beat _____, which is called the _____.

#3 In 2/4 a measure holds _____ quarter notes' worth of music; in 4/4 it holds _____.

#4 When there is a rest, you still say the _____, but you do not _____.

Spot the mistake

#1 Sam is counting a piece in 3/4 and writes this under the first measure. Write what has gone wrong.

> "1 & 2 & 3 & 4 &"

#2 Ravi says the bottom number of a time signature tells you how fast to play. Write what you would tell him.

> *"It says 8 on the bottom, so it must be a fast piece."*

FOR THE TEACHER

Answer Key

♫

Game One · Count It Out

#1 4/4 1 2 3 & 4
#2 4/4 1 3 & 4
#3 3/4 1 2 & 3
#4 4/4 1 e & a 2 3
#5 2/4 1 & 2
#6 3/4 1
#7 4/4 1 2 3 & 4
#8 4/4 1 & 2 3 e & a 4
#9 3/4 1 2 3 &
#10 2/4 1 2 e & a
#11 4/4 1 2 3 & 4
#12 4/4 1 2 & 3 4 e & a
#13 3/4 1 & 2 3
#14 4/4 1 4

Game Two · Name That Meter

#1 4/4 — measure holds 4
#2 3/4 — measure holds 3
#3 2/4 — measure holds 2
#4 3/4 — measure holds 3
#5 2/4 — measure holds 2
#6 3/4 — measure holds 3
#7 2/4 — measure holds 2
#8 4/4 — measure holds 4
#9 3/4 — measure holds 3
#10 2/4 — measure holds 2

Game Three · Fill the Measure

#1 quarter note (4/4)
#2 quarter note (3/4)
#3 quarter note (4/4)
#4 quarter note (2/4)
#5 quarter note (3/4)
#6 half note (4/4)
#7 quarter note (3/4)

Continued

#1 quarter note (2/4)
#2 quarter note (3/4)
#3 half note (4/4)
#4 dotted half note (4/4)
#5 quarter note (4/4)
#6 half note (4/4)
#7 dotted half note (4/4)

Game Four · Spot the Broken Measure

#1 correct (4/4, holds 4)
#2 broken (4/4: holds 3, needs 4 — −1)
#3 correct (3/4, holds 3)
#4 correct (2/4, holds 2)
#5 broken (3/4: holds 4, needs 3 — +1)
#6 broken (4/4: holds 4½, needs 4 — +½)
#7 correct (4/4, holds 4)
#8 broken (2/4: holds 3, needs 2 — +1)

Lengths are given in quarter notes.

FOR THE TEACHER

Answer Key — The Writing Page

♫

The writing page

Explain it — answers vary. Look for: the top number counts the beats in a measure; the bottom number names which note is worth one beat, so it is a name written as a number, not a count; and 4/4 and 2/4 differ because the strong beat lands every four rather than every two.

Finish the sentence

#1 three; quarter
#2 one; downbeat
#3 2; 4
#4 number; play

Spot the mistake — 1. There is no beat 4 in 3/4; the count should stop at “3 &” and start again at 1. 2. The bottom number names a note, not a speed. An 8 means the eighth note gets the beat; how fast to play is a separate instruction.

REFERENCE

Everything on One Page

♫

The three meters in this book

TIME	BEATS	BEAT	WHICH IS A	COUNTED
2/4	2	♩	quarter note	1 e & a 2 e & a
3/4	3	♩	quarter note	1 e & a 2 e & a 3 e & a
4/4	4	♩	quarter note	1 e & a 2 e & a 3 e & a 4 e & a

How to read any time signature

Top number — how many beats in a measure.
Bottom number — which note is worth one beat. 2 is the half note, 4 the quarter, 8 the eighth.

Say it as a sentence: *four quarter-note beats in every measure.*

A measure is also called a **bar** — the two words mean the same thing, and you will meet both.

The counting words

1 e & a — the numbers are the beats, **&** is halfway between two of them, and **e** and **a** are the points either side of the **&**.

A rest is counted like anything else. You say the number and stay quiet.

For the teacher

The START HERE pages are reference, not homework. Read them together once and leave them open. Everything the games ask for is on them.

Count out loud, every time. Every game here is arithmetic on paper, but the answer only sticks once it has been said at a steady beat. Say the measure, then write it.

Sequence. The reference pages and Count It Out make a first session; Name That Meter and Fill the Measure a second; Spot the Broken Measure and the writing page a third. The writing page is the one that shows whether it has really landed.

Next. Book Two adds the other bottom numbers, cut time, pickup notes and ties. Book Three is compound meter, where the beat splits in three.



Once you know where beat one is, everything else has somewhere to be.

Take any piece of music you own and read only the time signature before you play a note. How many beats in a measure, and which note gets one? Two questions, every time, until you stop having to ask them.



FREE RESOURCE • COUNTING, BOOK TWO

Pickups, Ties and Cut Time

THE BOTTOM NUMBER · MUSIC THAT STARTS EARLY · HOLDING ACROSS A BARLINE



“A barline is a place to count, not a wall the sound stops at.”

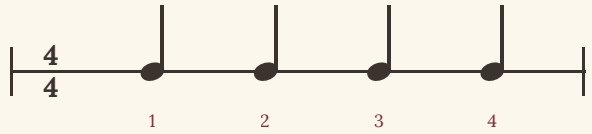
START HERE

What You Already Know

A page to check against before you begin. If any of this is unfamiliar, Book One covers it.

Reading a time signature

Top number — how many beats in a measure.
Bottom number — which note is worth one of those beats.



Four quarter-note beats in every measure, counted 1 2 3 4.

The counting words

The numbers are the beats. **&** is halfway between two of them; **e** and **a** are the points either side of it.



And three note values this book leans on

the half note — 2 quarter notes

the dotted half — 3 quarter notes

the whole note — 4 quarter notes

Cut time counts in half notes, and a tie will often add up to one of these, so they are worth having at your fingertips.

Nothing here is new. If this page reads easily you are ready; if it does not, Book One is the place to start.

START HERE

The Bottom Number at Work

♫

What changes when the bottom number changes — and the two time signatures that get their own symbol.

Two beats, written three ways

Each line below is two beats long. Only the bottom number changes, so only the *note* that carries the beat changes. Counted aloud, all three are identical: **1 2**.



beat = half note



beat = quarter note



beat = eighth note

Which note is written depends on what the composer chose. It says nothing about how fast the music goes; tempo is a separate instruction.

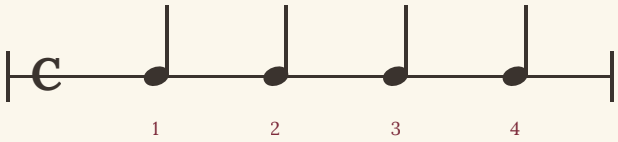
Common time and cut time

Two time signatures are so common they have their own symbols, and you will meet both constantly.

C

Common time

Another way of writing 4/4 — four quarter-note beats.

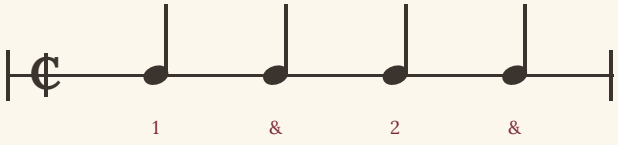


¢

Cut time

Another way of writing 2/2 — the same measure, felt in two.





Quarter notes in cut time fall on the beat and the **&**

Cut time is a feel, not a trick. A 2/2 measure holds exactly as much as a 4/4 measure — four quarter notes' worth. The difference is that you count it in two broad beats instead of four, which is why marches and fast pieces use it.

START HERE

The Top Number at Work

♫

More time signatures, and no new rule — the bottom still names the beat, and the top still counts how many.

Same two questions, new pairs

Once you can read the bottom number, every other time signature in this book reads the same way: the bottom names the beat, the top counts how many. Nothing new to learn — only new pairs.

WRITTEN	MEANS
$\frac{3}{2}$	3 half-note beats in a measure, each splitting into 2 quarter notes
$\frac{4}{2}$	4 half-note beats in a measure, each splitting into 2 quarter notes
$\frac{4}{8}$	4 eighth-note beats in a measure, each splitting into 2 sixteenth notes
$\frac{3}{8}$	3 eighth-note beats in a measure, each splitting into 2 sixteenth notes
$\frac{5}{4}$	5 quarter-note beats in a measure, each splitting into 2 eighth notes

5/4 is the odd one: five beats will not split evenly into equal groups, so it is usually felt as 3 + 2 or 2 + 3. Count it straight through as **1 2 3 4 5** and that will do for now.

None of these is a special case. Read the bottom number first to find the beat, then the top number to count them. That works for every time signature in this book. There is exactly one family where it stops working — compound meter, where the bottom number names the *division* instead of the beat — and Book Three is about that.

START HERE

Pickup Notes

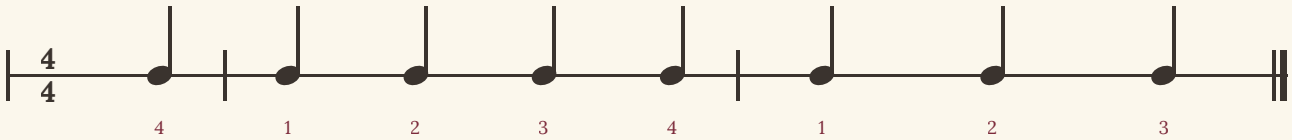
♫

The short measure before the first full one — what to call it, and why the last measure of a piece looks wrong until you know about it.

Music that starts early

Not every piece begins on beat one. A **pickup** is a short incomplete measure at the very start — one or two notes leading into the first full measure. You hear them constantly: *Happy Birthday* starts with one.

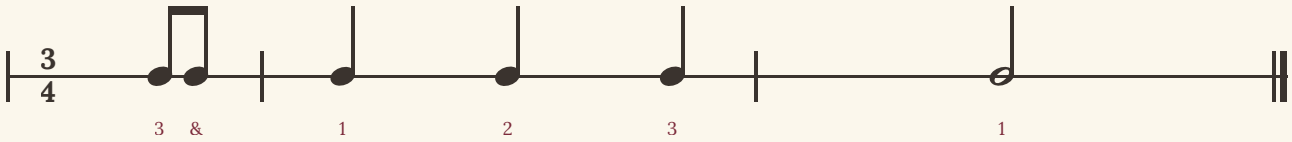
The trick is knowing what to count. A pickup is measured from the *end* of a measure backwards, so a single quarter-note pickup in 4/4 is beat four, not beat one.



Count the pickup as "4", then the first full measure as 1 2 3 4. Notice the last measure: it is one beat short, because the pickup already used that beat.

The borrowed beat

In properly written music the pickup and the final measure add up to one complete measure between them. The pickup borrows from the end, and the end pays it back.



A two-eighth pickup in 3/4 fills the whole of beat three, so you count **3 &**. It is worth one beat, so the final measure is one beat short: a half note where a full measure would hold three beats.

Find the downbeat first. When you meet an unfamiliar piece with a pickup, work out which beat the first note lands on before you play a thing. Count backwards from the barline: the note just before it is the last beat of the measure.

START HERE

Ties Across the Barline

♫

How a note keeps sounding past the end of a measure, and why that is the only way to write it.

One sound, two notes long

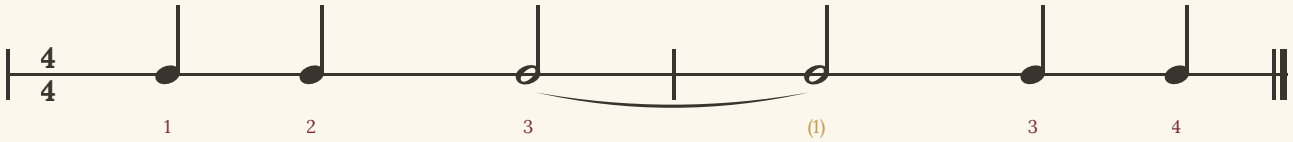
A **tie** is a curved line joining two notes. You play the first and hold it through the second — one sound, lasting as long as both added together. The count keeps running underneath, but you do not play again.



Counts in brackets are beats you count but do not play. Here you play on 1 and 2, hold through 3, and play again on 4.

Crossing the barline

This is what ties are really for. A note cannot be written across a barline, so when a sound needs to continue into the next measure you write two notes and tie them. The barline is still there; the sound simply ignores it.

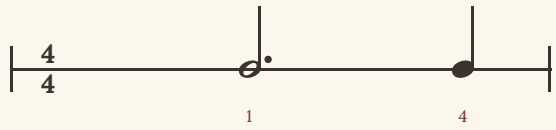


The tied note starts on beat 3 and is held for four beats in total — through the barline, through beats 1 and 2 of the next measure.

Why not just use a dot?

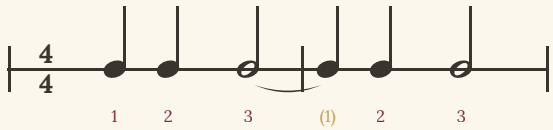
A dot and a tie both make a note longer, and where a dot will do the job a dot is tidier. But a dot can only ever add half the note again, and it cannot reach across a barline. A tie can join any two lengths, anywhere.

A dot can do this



Three beats held, written with one dot.

Only a tie can do this



A sound crossing the barline.

Keep counting through the hold. The most common tie mistake is losing the beat while the note rings. Say every count out loud, including the bracketed ones — just do not play them.

GAME ONE

Pickup Patrol

♫

Each line begins with a pickup. Work out which count it starts on, and how long the final measure of the piece would have to be to balance it.

NAME _____ DATE _____

METER MAP · THE NOTE THAT GETS ONE BEAT, AND HOW MANY FIT

2/4 ♩ ×2 3/4 ♩ ×3 4/4 ♩ ×4 2/2 𝅗𝅥 ×2

#1



starts on _____ last measure holds _____ quarter notes' worth

#2



starts on _____ last measure holds _____ quarter notes' worth

#3



starts on _____ last measure holds _____ quarter notes' worth

#4



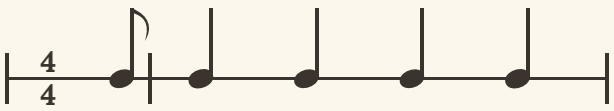
starts on _____ last measure holds _____ quarter notes' worth

#5



starts on _____ last measure holds _____ quarter notes' worth

#6



starts on _____ last measure holds _____ quarter notes' worth

#7



starts on _____ last measure holds _____ quarter notes' worth

#8



starts on _____ last measure holds _____ quarter notes' worth

The pickup is never beat one. That is the whole point of it — the music arrives at beat one, it does not start there. Measure backwards from the barline, and give the last measure whatever the pickup borrowed.

GAME TWO

Tie Breaker

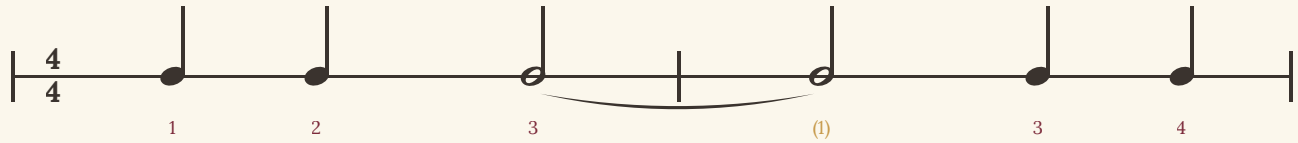
♫

Each line has one tie. Work out how long the tied note is held altogether, counted in the beats of that time signature.

NAME _____ DATE _____

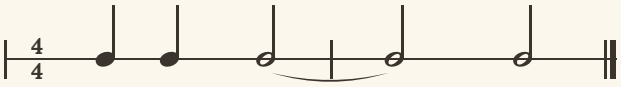
How to work one out

Add the two tied notes together to get the total length, then ask how many beats of *this* meter that is. The second step is the one people skip.



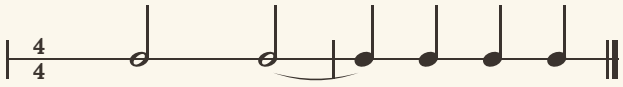
Half note plus half note is four quarter notes' worth. In 4/4 a quarter note is one beat, so the answer is **4 beats**.

#1



held for _____ beats of 4/4

#2



held for _____ beats of 4/4

#3



held for _____ beats of 3/4

#4



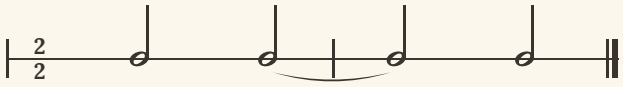
held for _____ beats of 4/4

#5



held for _____ beats of 2/4

#6



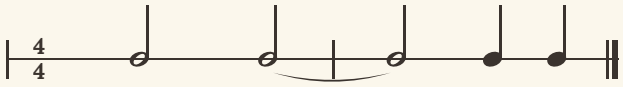
held for _____ beats of 2/2

#7



held for _____ beats of 3/4

#8



held for _____ beats of 4/4

#9



held for _____ beats of 2/4

#10



held for _____ beats of 3/4

GAME THREE

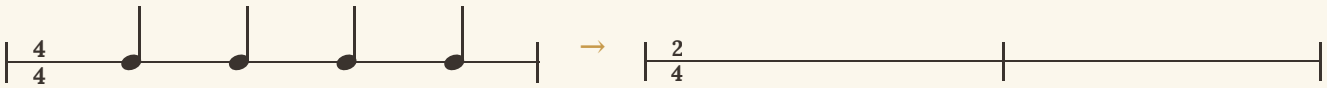
Re-bar It

♫

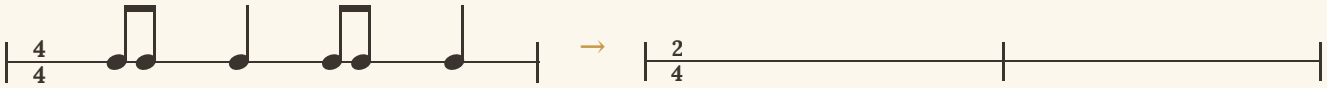
The same rhythm, written in a new time signature. Copy the notes onto the empty staff, filling each measure before you move past its barline.

NAME _____ DATE _____

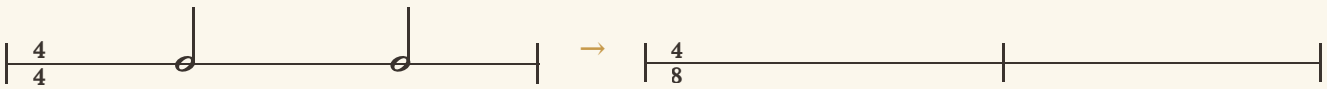
#1



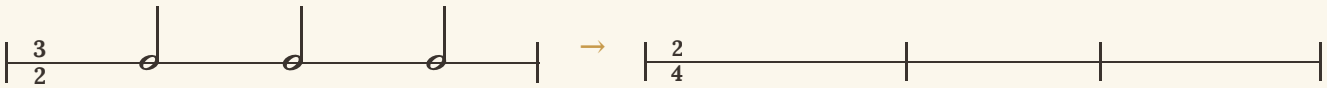
#2



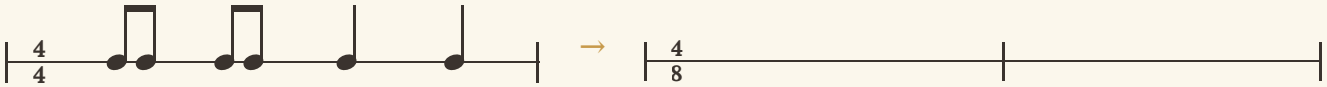
#3



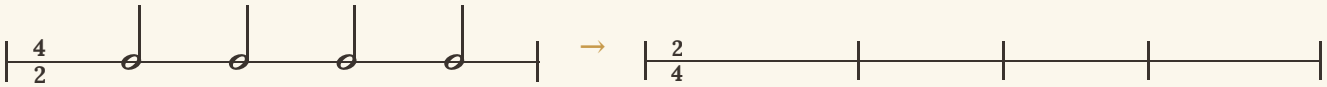
#4



#5



#6



The note values do not change — the barlines move. Write the same notes in the same order, stopping at each barline when that measure is full. The number of empty measures tells you how many the rhythm needs.

GAME FOUR

Counting in Cut Time

♫

Three short jobs, all in cut time. Count the first two lines, draw the missing note in the next five, then check the last four measures against what cut time asks for.

NAME _____ DATE _____

Write the counts underneath

#1



#2



Draw the missing note

#1



missing note: .....

#2



missing note: .....

#3



missing note: .....

#4



missing note: .....

#5



missing note: .....

Correct or broken?

Measure in quarter notes: a cut-time measure needs four.

#1



holds ..... needs .....

☐ correct ☐ broken

#2



holds ..... needs .....

☐ correct ☐ broken

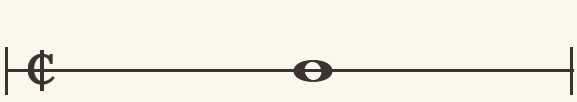
#3



holds ..... needs .....

☐ correct ☐ broken

#4



holds ..... needs .....

☐ correct ☐ broken

GAME FIVE

Name That Meter

♫

Each measure is complete but its time signature is missing. Add it up in quarter notes, then circle the only time signature that wants exactly that much. These all use the bottom numbers from this book.

NAME _____ DATE _____

#1



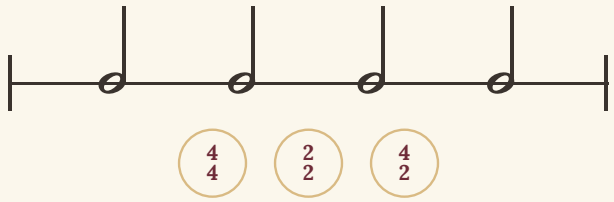
2/4 3/4 2/2

#2



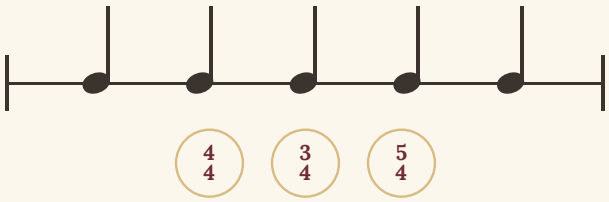
3/8 2/4 3/4

#3



4/4 2/2 4/2

#4



4/4 3/4 5/4

Remember what the bottom number does

4/4 and 2/2 hold exactly the same amount — four quarter notes' worth — so length alone can never separate those two. Where both are offered, one of them is ruled out because the measure is not four quarter notes long at all. Add up first, and only one choice on each card will survive.

Work in quarter notes. A cut-time measure wants four of them, a 3/4 measure three, a 2/4 measure two. Convert first, then compare.

WRITE IT DOWN

In Your Own Words

♫

No notes to draw on this page — just sentences. Explaining an idea is the surest way to find out whether you really have it.

NAME _____ DATE _____

Explain it

#1 What is a **pickup**, and why is its first note never beat one?

#2 A tie and a dot both make a note longer. Describe one thing a tie can do that a dot cannot.

#3 A 2/2 measure and a 4/4 measure hold the same amount of music. Explain what is different about them.

Finish the sentence

#1 In cut time the beat is the _____ note, and there are _____ beats in a measure.

#2 If a piece in 4/4 opens with a one-beat pickup, the final measure should hold _____ beats.

#3 A tie joins two notes into _____.

#4 A dot adds _____ of the note again.

Spot the mistake

#1 Mia is counting a 4/4 piece that begins with a one-quarter pickup. Write what has gone wrong.

> *"I counted the first note as beat 1, then the next measure as 2 3 4 1."*

#2 Theo sees a tie across a barline. Write what you would tell him.

> *"There are two notes written, so I played it twice."*

FOR THE TEACHER

Answer Key

♫

Game One · Pickup Patrol

#1 starts on count 4 (counted 4; last measure holds 3 quarter notes' worth)
#2 starts on count 3 (counted 3; last measure holds 2 quarter notes' worth)
#3 starts on count 4 (counted 4 &; last measure holds 3 quarter notes' worth)
#4 starts on the & of beat 2 (counted &; last measure holds 1½ quarter notes' worth)
#5 starts on count 3 (counted 3 4; last measure holds 2 quarter notes' worth)
#6 starts on the & of beat 4 (counted &; last measure holds 3½ quarter notes' worth)
#7 starts on count 3 (counted 3 &; last measure holds 2 quarter notes' worth)
#8 starts on the & of beat 2 (counted &; last measure holds 3 quarter notes' worth)

Game Two · Tie Breaker

#1 4 beats of 4/4 (4 quarter notes' worth)
#2 3 beats of 4/4 (3 quarter notes' worth)
#3 4 beats of 3/4 (4 quarter notes' worth)
#4 2 beats of 4/4 (2 quarter notes' worth)
#5 3 beats of 2/4 (3 quarter notes' worth)
#6 2 beats of 2/2 (4 quarter notes' worth)
#7 2 beats of 3/4 (2 quarter notes' worth)
#8 4 beats of 4/4 (4 quarter notes' worth)
#9 2 beats of 2/4 (2 quarter notes' worth)
#10 5 beats of 3/4 (5 quarter notes' worth)

Game Four · Counting in Cut Time

Lengths are in quarter notes; + means the measure is over, − that it is short.

Counts

#1 1 2 &
#2 1 & 2 &

Missing notes

#1 half note
#2 quarter note
#3 quarter note
#4 quarter note
#5 half note

Correct or broken

#1 broken (holds 3, needs 4 — −1)
#2 correct (holds 4)
#3 broken (holds 5, needs 4 — +1)
#4 correct (holds 4)

Game Five · Name That Meter

#1 2/2 — holds 4
#2 3/8 — holds 1½
#3 4/2 — holds 8
#4 5/4 — holds 5

FOR THE TEACHER

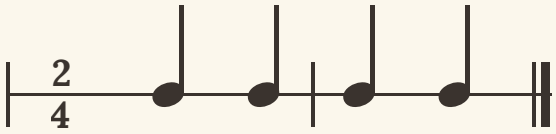
Answer Key — Re-bar It

♫

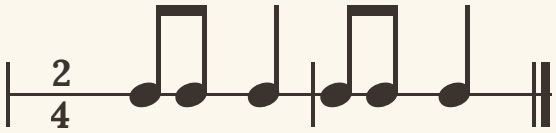
Game Three · Re-bar It

The rhythm as it should look once it is re-barred. Note values never change; the barlines move, and where eighth notes are involved the beams regroup to match the new beat.

#1 2 measures of 2/4 (rhythm is 4; a 2/4 measure holds 2)



#2 2 measures of 2/4 (rhythm is 4; a 2/4 measure holds 2)



#3 2 measures of 4/8 (rhythm is 4; a 4/8 measure holds 2)



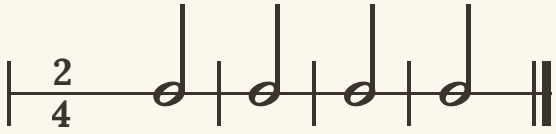
#4 3 measures of 2/4 (rhythm is 6; a 2/4 measure holds 2)



#5 2 measures of 4/8 (rhythm is 4; a 4/8 measure holds 2)



#6 4 measures of 2/4 (rhythm is 8; a 2/4 measure holds 2)



FOR THE TEACHER

Answer Key — The Writing Page

♫

The writing page

Explain it — answers vary. Look for: a pickup is a short incomplete measure before the first full one, counted backwards from the end of a measure, so it is never beat one; a tie can carry a sound across a barline and a dot cannot; and a 2/2 measure holds the same music as a 4/4 one but is counted in two broad beats.

Finish the sentence

#1 half; two
#2 three
#3 one longer sound
#4 half

Spot the mistake — 1. A pickup is never beat one. A one-quarter pickup in 4/4 is beat four, so the count runs 4, then 1 2 3 4. **2.** A tie means play the first note and hold it through the second — one sound, not two.

REFERENCE

Everything on One Page

♫

The bottom number

WRITTEN	THE BEAT IS
$\frac{2}{2}$	half note, 2 per measure
$\frac{2}{4}$	quarter note, 2 per measure
$\frac{3}{4}$	quarter note, 3 per measure
$\frac{4}{4}$	quarter note, 4 per measure
$\frac{3}{8}$	eighth note, 3 per measure
$\frac{4}{8}$	eighth note, 4 per measure
$\frac{3}{2}$	half note, 3 per measure
$\frac{4}{2}$	half note, 4 per measure
$\frac{5}{4}$	quarter note, 5 per measure

And two symbols worth knowing: **C** is 4/4, and a C with a vertical stroke through it is cut time, 2/2.

Pickups and ties

A pickup is counted backwards from the end of a measure, so it is never beat one. Pickup plus final measure makes one complete measure.

A tie joins two notes into one sound as long as both together. Count every beat underneath it; play only the first.

A dot adds half the note again. It cannot cross a barline — only a tie can.

For the teacher

The START HERE pages are reference, not homework. Read them together once and leave them open.

Sequence. The bottom number and cut time make a first session with Game Four; pickups and Pickup Patrol a second; ties and Tie Breaker a third. Name That Meter works any time once the bottom number is secure, and makes a good warm-up. Re-bar It is the hardest thing here and is worth saving until the rest is comfortable.

The two mistakes to expect. Counting a pickup as beat one, and re-playing the second half of a tie. Both are cured by saying the counts out loud and playing only some of them.

Next. Book Three is compound meter — 6/8, 9/8 and 12/8, where the beat splits into three instead of two.



A barline is a place to count, not a wall the sound stops at.

Look through any piece you are playing for a tie that crosses a barline, and for a pickup at the very start. Once you have spotted a few, you will stop being surprised by them.



FREE RESOURCE • COUNTING, BOOK THREE

Compound Meter

THE BEAT THAT SPLITS IN THREE · 6/8 · 9/8 · 12/8



“In 6/8 there are not six beats. There are two.”

START HERE

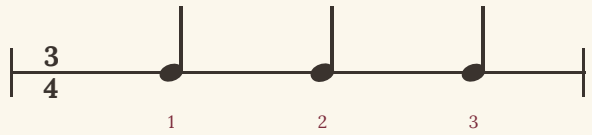
What You Already Know

♫

One page to check against. Most of it comes from Book One; ties and pickups come from Book Two, which Game Six draws on. Everything past this page is new.

Reading a time signature

Top number — how many beats in a measure.
Bottom number — which note is worth one beat. This is the one thing from Books One and Two that is about to change.



Three quarter-note beats, counted 1 2 3.

The dotted note

A dot adds half the note again. This one matters more than anything else in this book: in compound meter the *beat itself* is a dotted note.



worth 1½



three eighths

And beaming

A beam joins fast notes into groups. It never changes what a note is worth — it shows where the beats are. That is the single most useful fact in this whole book.



If the dotted quarter is unfamiliar, stop here. Book One covers the note values. Everything on the next page depends on knowing that a dotted quarter is three eighth notes long.

START HERE

The Beat That Splits in Three

♫

The most important page in the series, and the one place where the rule about the bottom number stops being true.

The rule changes here

Everything so far has had a beat that splits in two. Now meet the other kind. In a **compound** meter the beat splits into **three** — and the bottom number stops naming the beat.

In 6/8 there are not six beats. There are two. The six counts the eighth notes, and eighth notes are the *division*. Three of them make one beat, and a note worth three eighths is a dotted quarter. That is the beat.

One honest footnote: in a very slow 6/8 — a lullaby, an adagio — players often do count all six, because two beats that far apart are hard to hold on to. The meter still has two beats; counting the divisions is a way of subdividing them, not a different time signature.

Six eighths, two beats



Say it: **1 la li 2 la li**. The numbers are the two real beats; *la* and *li* are the second and third of each group of three.

The arithmetic, spelled out

6 eighth notes in the measure ÷ **3** eighths make one beat = **2** beats in the measure

 = one beat in 6/8

How to spot one

	SIMPLE	COMPOUND
Top number	not a multiple of three greater than three — so 2, 3, 4, 5 …	a multiple of three greater than three — 6, 9, 12 …
The beat splits into	two	three
The beat is	the note the bottom names	a *dotted* note, three divisions long
Beats per measure	the top number	the top number divided by three

3/8 is not compound. The top number has to be a multiple of three *greater* than three. 3/8 has three eighth-note beats and splits in two, like any simple meter.

START HERE

Counting Compound Meters

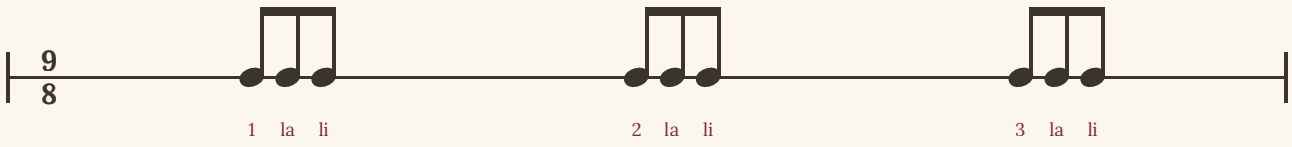
♫

Three compound meters, counted with the same three words. Say **1 la li** for every beat and the rest is just adding up.

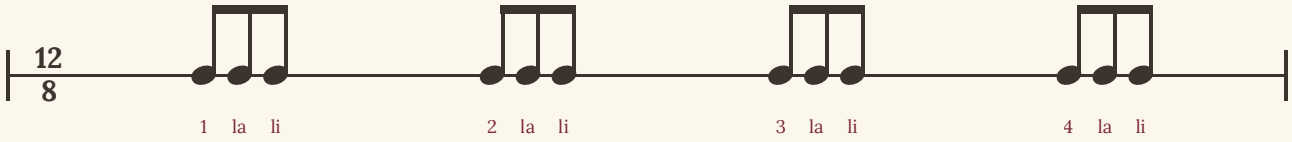
6/8 2 dotted quarter-note beats in a measure, each splitting into 3 eighth notes



9/8 3 dotted quarter-note beats in a measure, each splitting into 3 eighth notes



12/8 4 dotted quarter-note beats in a measure, each splitting into 3 eighth notes



Dividing by three

Take the top number and divide it by three; that is how many beats you have. The beat is always a dotted note, because only a dotted note is three divisions long.

The bottom number can be anything. 6/4 is compound too — two beats of a dotted half — and so is 9/4. Only the top number decides.

6 ÷ 3 = **2** beats **9** ÷ 3 = **3** beats **12** ÷ 3 = **4** beats

12/8 feels like 4/4 with a swing. Four beats to the measure in both — but in 12/8 each beat has three parts instead of two, which is where the lilt comes from.

START HERE
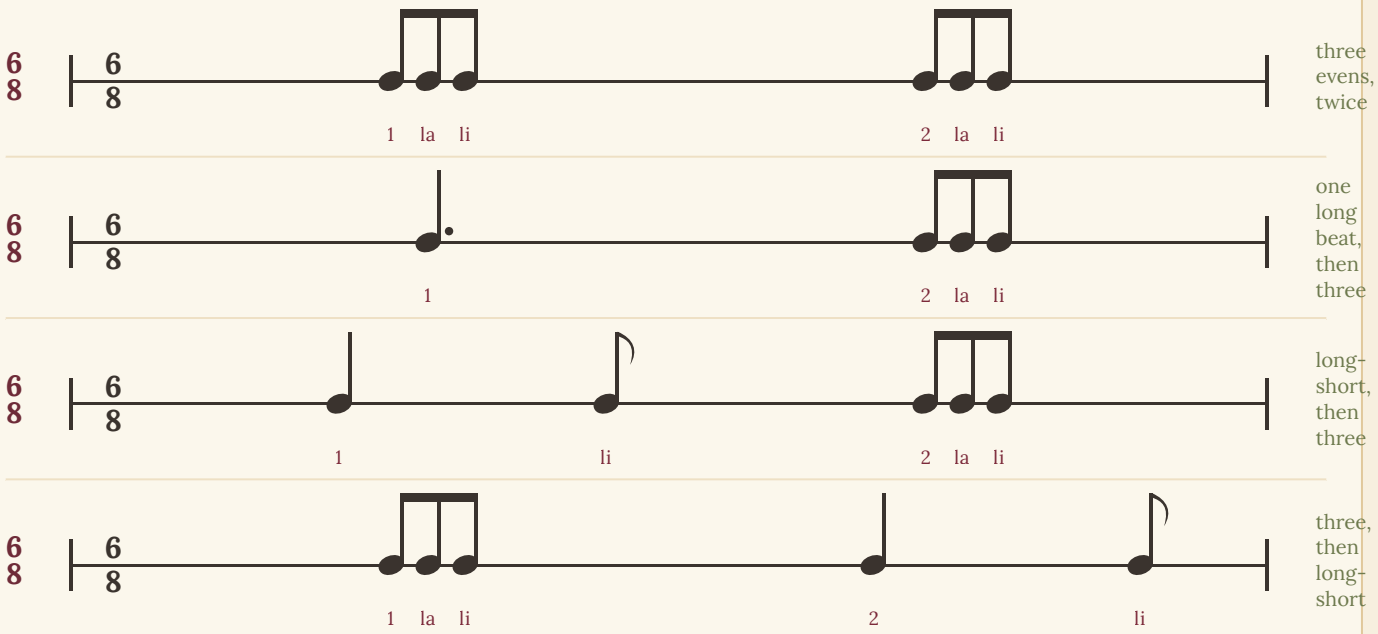
Inside the Compound Beat

♫

A compound beat does not have to be three even eighths. Anything that adds up to a dotted quarter will do — and the numbers still land in exactly the same places.

Four ways to fill a 6/8 measure

Each measure below is 6/8: two beats, each a dotted quarter. Only the inside of the beats changes.



A quarter note inside a compound beat takes the first two-thirds of it, so the note after it lands on *li*. That long-then-short lilt is one of the characteristic sounds of 6/8. The other is the first row above: three even eighths, running.
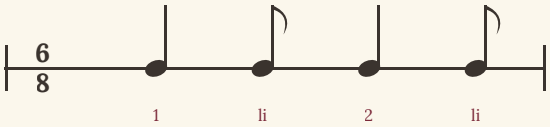
The two you will meet most

A whole beat on one note



The dotted quarter takes the number, the *la* and the *li* by itself.

Long, then short



Quarter then eighth, twice. Count **1 li 2 li**.

Count the beat, not the notes. However a beat is filled, you still say one number for it. If you are saying more numbers than there are dotted quarters in the measure, you have slipped back into counting the divisions.

START HERE

6/8 Against 3/4

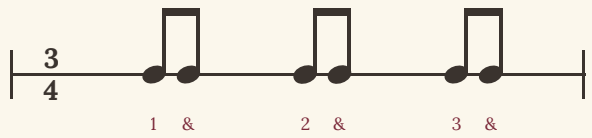
♫

The comparison that makes compound meter click. Same six notes, same total length, two completely different pieces of music.

Six eighth notes, two different pieces

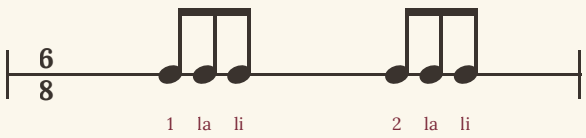
A 6/8 measure and a 3/4 measure hold exactly the same amount of music: six eighth notes. They are the same *length*. They are not the same *meter*, and they do not sound alike at all.

3/4 Three beats, each splitting in two



Beamed in **twos**. Count **1 & 2 & 3 &**.

6/8 Two beats, each splitting in three



Beamed in **threes**. Count **1 la li 2 la li**.

The beaming is the clue

Since both measures hold six eighth notes, length alone can never tell them apart. What tells you is how the notes are **beamed**. Composers beam within the beat — in twos or fours for a simple meter, in threes for a compound one. So beams in threes are the giveaway.

Try it: which meter is this?

Both measures below hold six eighth notes and neither shows a time signature. Only the beaming can tell you. Write 3/4 or 6/8 under each.



this is .....



this is .....

Say them both out loud, back to back. Clap six even eighth notes while counting 1 & 2 & 3 &, then clap the identical six while counting 1 *la li* 2 *la li*. The notes do not change. The music does.

GAME ONE

Count It Out

♫

Say **1 la li** for every beat and write the syllable under each note. The numbers are the dotted-note beats, never the eighth notes.

NAME _____ DATE _____

METER MAP · THE NOTE THAT GETS ONE BEAT, AND HOW MANY FIT

6/8 dotted quarter ×2 9/8 dotted quarter ×3 12/8 dotted quarter ×4

#1



#2



#3



#4



#5



#6



#7



#8



#9



#10



#11



#12



A dotted quarter fills a whole beat on its own. When you meet one it takes the number and the *la* and the *li* all by itself — so it gets just the number written underneath. If you find yourself counting to six, you have slipped back into simple meter.

GAME TWO

Simple or Compound?

♫

Sort each time signature into the right column, then say how many beats are in one of its measures.

NAME _____ DATE _____

	TIME SIGNATURE	SIMPLE	COMPOUND	HOW MANY BEATS?
#1	$\frac{2}{4}$	☐	☐	.....
#2	$\frac{6}{8}$	☐	☐	.....
#3	$\frac{3}{4}$	☐	☐	.....
#4	$\frac{9}{8}$	☐	☐	.....
#5	$\frac{4}{4}$	☐	☐	.....
#6	$\frac{12}{8}$	☐	☐	.....
#7	$\frac{2}{2}$	☐	☐	.....
#8	$\frac{3}{8}$	☐	☐	.....
#9	$\frac{6}{4}$	☐	☐	.....
#10	$\frac{4}{8}$	☐	☐	.....
#11	$\frac{9}{4}$	☐	☐	.....
#12	$\frac{3}{2}$	☐	☐	.....

The test, in one line

Is the top number 6, 9 or 12? Then it is compound: divide the top by three to get the number of beats. Anything else is simple: the top number *is* the number of beats.

Careful with the eighth-note ones: 3/8 and 4/8 look compound because of the 8 on the bottom, and neither is. And 6/4 and 9/4 are compound even though the bottom number is a 4.

Check one box per row, then write the beat count. The beat count is the part that proves you understand it: getting 6/8 into the compound column is easy, but writing **2** next to it is the real answer.

GAME THREE

Name That Meter

♫

Each measure is complete but its time signature is missing. Add the measure up in quarter notes, then find the one time signature that wants exactly that.

NAME _____ DATE _____

#1



2/4 · 6/8 · 9/8

#2



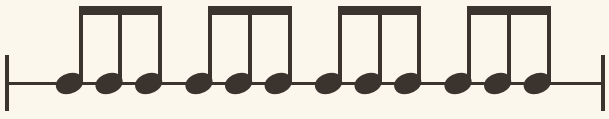
6/8 · 9/8 · 12/8

#3



6/4 · 3/4 · 4/4

#4



6/8 · 9/8 · 12/8

#5



2/4 · 6/8 · 4/4

#6



6/8 · 9/8 · 12/8

#7



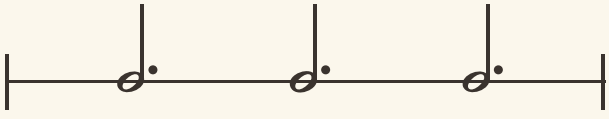
3/4 · 6/4 · 4/4

#8



2/4 · 3/4 · 6/8

#9



6/4 · 9/4 · 4/4

#10



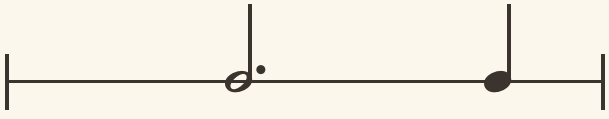
2/4 · 6/8 · 9/8

#11



6/8 · 9/8 · 12/8

#12



3/4 · 4/4 · 6/8

Work in quarter notes. 6/8 wants three quarter notes' worth, 9/8 four and a half, 12/8 and 6/4 six, 9/4 nine. Exactly one choice per card matches.

GAME FOUR

Fill the Measure

♫

Every measure is one note short. Draw the single note that completes it. In compound meter the answer is very often a dotted note.

NAME _____ DATE _____

METER MAP · THE NOTE THAT GETS ONE BEAT, AND HOW MANY FIT

6/8 ♩. ×2 9/8 ♩. ×3 12/8 ♩. ×4 6/4 𝅗𝅥. ×2

#1



missing note: .....

#2



missing note: .....

#3



missing note: .....

#4



missing note: .....

#5



missing note: .....

#6



missing note: .....

#7



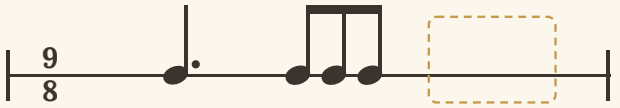
missing note: .....

#8



missing note: .....

#9



missing note: .....

#10



missing note: .....

Subtract, do not guess. Take what the measure already holds away from what the time signature asks for. If the gap does not match any plain note value, try adding a dot to the next one down.

GAME FIVE

Spot the Broken Measure

♫

Some of these measures do not add up to what their time signature asks for. For every card, write what the measure holds and what it needs, then tick whichever box is true.

NAME _____ DATE _____

#1



holds _____ needs _____

☐ correct ☐ broken

#2



holds _____ needs _____

☐ correct ☐ broken

#3



holds _____ needs _____

☐ correct ☐ broken

#4



holds _____ needs _____

☐ correct ☐ broken

#5



holds _____ needs _____

☐ correct ☐ broken

#6



holds _____ needs _____

☐ correct ☐ broken

#7



holds _____ needs _____

☐ correct ☐ broken

Measure in quarter notes. A 6/8 measure needs six eighth notes, which is three quarter notes' worth; a 9/8 measure needs four and a half; a 12/8 measure needs six.

GAME SIX

Ties and Pickups in Compound Meter

♫

Everything from Book Two still works here — the only change is that you count **1 la li** underneath instead of **1 & 2 &**.

NAME _____ DATE _____

How long is the tied note held?

Add the two tied notes together, then ask how many *dotted-note beats* of this meter that makes. The trap is answering in eighth notes instead: in 12/8, a sound six eighths long lasts **two** of the four beats, not six.

#1



held for _____ beats of 6/8

#2



held for _____ beats of 9/8

Where does the pickup start?

Measure it backwards from the end of a measure, exactly as before. In 6/8 the last eighth of a measure is the *li* of beat two.

#1



starts on _____

#2



starts on _____

Re-barring across the divide. Rewriting a compound measure in a simple meter (or the other way round) changes more than the barlines: the beams have to be regrouped too, because the beats are a different size. That is the one case where the notes keep their values but the page really does look different.

WRITE IT DOWN

In Your Own Words

♫

No notes to draw on this page — just sentences. If you can explain compound meter in writing, you have it.

NAME _____ DATE _____

Explain it

#1 A friend says "6/8 means six beats in a measure." Write what you would tell them, and why.

#2 Why is the beat in a compound meter always a **dotted** note?

#3 A 3/4 measure and a 6/8 measure can hold exactly the same six eighth notes. Explain how you can tell which is which by looking.

Finish the sentence

#1 In a compound meter the beat splits into _____ parts; in a simple meter it splits into _____.

#2 In 9/8 there are _____ beats in a measure, and each one is worth a _____ note.

#3 To find the number of beats in a compound meter, divide the top number by _____.

#4 In 6/8 the bottom number names the _____, not the beat.

Spot the mistake

#1 Jo is counting a piece in 6/8 and writes this under the first measure. Write what has gone wrong.

> "1 2 3 4 5 6"

#2 Amara is sorting time signatures and puts 3/8 in the compound column. Write what you would tell her.

> *"The top number divides by three, so it must be compound."*

FOR THE TEACHER

Answer Key

♫

Game One · Count It Out

#1 6/8 1 la li 2 la li
#2 6/8 1 2 la li
#3 6/8 1 la li 2
#4 9/8 1 la li 2 3 la li
#5 6/8 1 li 2 la li
#6 12/8 1 2 la li 3 4
#7 9/8 1 la li 2 li 3
#8 9/8 1 2 3
#9 6/8 1 2 li
#10 12/8 1 la li 2 la li 3 4
#11 6/8 1 la li 2 li
#12 9/8 1 li 2 3 la li

A dotted quarter fills a whole beat, so it carries only the number.

Game Two · Simple or Compound?

#1 2/4 — simple, 2 beats (quarter note)
#2 6/8 — compound, 2 beats (dotted quarter note)
#3 3/4 — simple, 3 beats (quarter note)
#4 9/8 — compound, 3 beats (dotted quarter note)
#5 4/4 — simple, 4 beats (quarter note)
#6 12/8 — compound, 4 beats (dotted quarter note)
#7 2/2 — simple, 2 beats (half note)
#8 3/8 — simple, 3 beats (eighth note)
#9 6/4 — compound, 2 beats (dotted half note)
#10 4/8 — simple, 4 beats (eighth note)
#11 9/4 — compound, 3 beats (dotted half note)
#12 3/2 — simple, 3 beats (half note)

Game Three · Name That Meter

#1 6/8 — measure holds 3
#2 9/8 — measure holds 4½
#3 6/4 — measure holds 6
#4 12/8 — measure holds 6
#5 6/8 — measure holds 3
#6 9/8 — measure holds 4½
#7 6/4 — measure holds 6
#8 2/4 — measure holds 2
#9 9/4 — measure holds 9
#10 6/8 — measure holds 3
#11 9/8 — measure holds 4½
#12 4/4 — measure holds 4

Game Four · Fill the Measure

#1 dotted quarter note (6/8)
#2 eighth note (6/8)
#3 dotted quarter note (9/8)
#4 dotted quarter note (12/8)
#5 quarter note (6/4)
#6 dotted half note (6/4)
#7 dotted quarter note (6/8)
#8 eighth note (6/8)
#9 dotted quarter note (9/8)
#10 dotted quarter note (12/8)

Game Five · Spot the Broken Measure

Lengths are in quarter notes; + means the measure is over, − that it is short.

#1 correct (6/8, holds 3)
#2 broken (6/8: holds 3½, needs 3 — +½)
#3 correct (9/8, holds 4½)
#4 broken (12/8: holds 4½, needs 6 — −1½)
#5 correct (6/8, holds 3)
#6 correct (6/8, holds 3)
#7 broken (9/8: holds 3, needs 4½ — −1½)

Game Six · Ties

#1 2 beats of 6/8
#2 2 beats of 9/8

Game Six · Pickups

#1 the li of beat 2
#2 the li of beat 4

FOR THE TEACHER

Answer Key — The Writing Page

♫

The writing page

Finish the sentence

#1 three; two
#2 3; dotted quarter
#3 three
#4 division

The 6/8 Against 3/4 page, "Try it" — the left measure is beamed in twos, so it is **3/4**; the right is beamed in threes, so it is **6/8**.

Explain it and Spot the mistake: answers vary. **#1** 6/8 has two beats, each a dotted quarter; the six counts eighth notes, which are the division. **#2** Because a beat in a compound meter has to be three divisions long, and only a dotted note is that long. **#3** by the beaming — twos mean 3/4, threes mean 6/8. **Spot the mistake #1** Jo has counted the divisions, not the beats. The meter has two beats, so the counting that shows the meter is 1 la li 2 la li. (If Jo is playing a very slow 6/8 and counting six to keep steady, say so — that is subdividing, and the answer is then that the six are divisions, not beats.) **#2** the top number must be a multiple of three *greater than* three, so 3/8 is simple.

REFERENCE

Everything on One Page

♫

The meters you will meet most

TIME	KIND	BEATS	BEAT	WHICH IS A	COUNTED
2/4	simple	2	♩	quarter note	1 e & a 2 e & a
3/4	simple	3	♩	quarter note	1 e & a 2 e & a 3 e & a
4/4	simple	4	♩	quarter note	1 e & a 2 e & a 3 e & a 4 e & a
3/8	simple	3	♪	eighth note	1 & 2 & 3 &
6/8	compound	2	♩.	dotted quarter note	1 la li 2 la li
9/8	compound	3	♩.	dotted quarter note	1 la li 2 la li 3 la li
12/8	compound	4	♩.	dotted quarter note	1 la li 2 la li 3 la li 4 la li
6/4	compound	2	𝅗𝅥.	dotted half note	1 la li 2 la li
9/4	compound	3	𝅗𝅥.	dotted half note	1 la li 2 la li 3 la li

The two questions

1. Is the top number 6, 9 or 12?
Yes → compound. Divide the top by three for the number of beats; the beat is a dotted note.
No → simple. The top number is the number of beats; the bottom number names the beat.

2. How is it beamed?
Groups of two or four → simple. Groups of three → compound. This is the quickest clue when no time signature is showing.

The counting words

Simple — 1 e & a, 2 e & a …

Compound — 1 la li, 2 la li … the numbers are beats; *la* and *li* are the second and third of each group of three.

And one trap: 3/8 is simple. The top number must be a multiple of three greater than three.

For the teacher

The START HERE pages are reference, not homework. The 6/8 against 3/4 page is the one that makes it land; spend the longest there.

The mistake to expect is counting six in 6/8. It happens because the student is reading the top number as a beat count, which is correct everywhere except here. Clap both meters back to back while counting aloud and it resolves quickly.

Sequence. The reference pages and Count It Out make a first session; Simple or Compound and Name That Meter a second; Fill the Measure and Spot the Broken a third. Ties and Pickups in Compound Meter comes last of the games, and assumes Book Two — skip it if that book has not been done. Do the writing page after that — it is the one that shows whether the idea has really landed.



In 6/8 there are not six beats. There are two.

Find a jig, a slow blues, or a lullaby that rocks in threes, and count it in two or four rather than six or twelve. Once you feel the dotted beat underneath, compound meter stops being arithmetic and starts being a lilt.

