



music dance theater

2012-2013  
SEASON

# SchoolTime Study Guide



Photo by Zoran Orlic

## Kronos Quartet

Tuesday, October 2, 2012 at 11 a.m.

Zellerbach Hall, University of California, Berkeley

# Welcome to *SchoolTime*!

On Tuesday, October 2, at 11am your class will attend the **Kronos Quartet's** performance of *Around the World with Kronos* at Cal Performances' Zellerbach Hall.

San Francisco-based Kronos Quartet – David Harrington, John Sherba (violins), Hank Dutt (viola), and Jeffrey Zeigler (cello) – “has been reinventing the quartet concert” (*Telegraph*) for almost 40 years. Founding member Harrington explains, “I’ve always wanted the string quartet to be vital, and energetic, and alive, and cool.” Kronos is admired world-wide for their “vibrant musical performances... saturated with humanity, pathos and soul” (BBC). The SchoolTime program features commissioned works and arrangements from all over the world.

## Using This Study Guide

You can use these materials to engage your students and enrich their Cal Performances field trip. Before attending the performance, we encourage you to:

- Copy the student Resource Sheet on pages 3 & 4 and give it to your students several days before the show.
- Discuss the information in About the Performance (pages 5 - 9), and About the Artists (pages 10 - 12) with your students.
- Read to your students from About the String Quartet on page 13, and About Instruments in a String Quartet on page 16.
- Engage your students in two or more activities on pages 20-22.
- Reflect with your students by asking them guiding questions, found on pages 3, 5, 10, 13 & 16.
- Immerse students further into the subject matter and art form by using the Resource section on page 23.

## At the performance:

Your class can actively participate during the performance by:

- LISTENING CAREFULLY to the melodies, harmonies and rhythms.
- OBSERVING how the musicians and singers work together, sometimes playing in solos, duets, trios and as an ensemble.
- THINKING ABOUT the different cultures, ideas, and emotions expressed through the music.
- MARVELING at the skill of the musicians.
- REFLECTING on the sounds and sights experienced at the theater.

We look forward to seeing you at *SchoolTime*!

Laura Abrams

Director, Education & Community Programs

Rica Anderson

Education Programs Administrator

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# 1 Theater Etiquette

## Be prepared and arrive early.

Ideally you should arrive at the theater 30 to 45 minutes before the show. Allow for travel time and parking, and plan to be in your seats at least 15 minutes before the performance begins. Your group will be seated once your entire group has arrived.

## Be aware and remain quiet.

The theater is a “live” space—you can hear the performers easily, but they can also hear you, and you can hear other audience members, too! Even the smallest sounds, like rustling papers and whispering, can be heard throughout the theater, so it’s best to stay quiet so that everyone can enjoy the performance without distractions. The international sign for “Quiet Please” is to silently raise your index finger to your lips.

## Show appreciation by applauding.

Applause is the best way to show your enthusiasm and appreciation. Performers return their appreciation for your attention by bowing to the audience at the end of the show. It is always appropriate to applaud at the end of a performance, and it is customary to continue clapping until the curtain comes down or the house lights come up.

## Participate by responding to the action onstage.

Sometimes during a performance, you may respond by laughing, crying or sighing. By all means, feel free to do so! Appreciation can be shown in many different ways, depending upon the art form. For instance, an audience attending a string quartet performance will sit very quietly, while the audience at a gospel concert may be inspired to participate by clapping and shouting.

## Concentrate to help the performers.

These artists use concentration to focus their energy while on stage. If the audience is focused while watching the performance, they feel supported and are able to do their best work. They can feel that you are with them!

## Please note:

*Backpacks and lunches are not permitted in the theater. However, in the event you bring these with you, bags will be provided for lobby storage. There is absolutely no food or drink permitted in the seating areas. Recording devices of any kind, including cameras, cannot be used during performances. Please remember to turn off your cell phone before the performance begins.*





Kronos Quartet in rehearsal with Terry Riley (center) : Photo by Christina Johnson



# 2 Student Resource Sheet

## Questions to Think About

- Name some of the composer's native countries in *Around the World with Kronos*.
- Why did Haydn choose violin, viola and cello for his string quartet compositions?
- How has string quartet music changed over time?



## What You'll See

On Tuesday, October 2, your class will come to Zellerbach Hall where the Kronos Quartet will perform *Around the World with Kronos*. This performance features new and traditional music by composers from all over the world including: India, Syria, Sweden, Canada, Mexico, Serbia, Nubia (now Egypt) and the United States.

## About the Artists

Kronos Quartet is made up of musicians David Harrington, John Sherba (violins), Hank Dutt (viola), and Jeffrey Zeigler (cello). For nearly 40 years, Kronos Quartet has led the way in expanding the range of the string quartet by performing exciting and creative new music

from all over the world. The group has made more than 45 recordings, worked with a large variety of composers and performers, and helped create more than 750 works and arrangements for string quartet. The group's many awards also include a Grammy for Best Chamber Music Performance (2004) and "Musicians of the Year" (2003) from Musical America.

## About the String Quartet

A string quartet is like a family of four instruments. There are two violins, one viola, and one cello. The viola is a little larger than the violin, and the cello is the largest of all. The bigger the instrument, the lower the sound; the cello has the deepest voice and the violin has the highest. Together the four

instruments have musical conversations, like a family at dinner or a group of friends talking together.

## History of the String Quartet

### *Father of the String Quartet*

Composer Franz Joseph Haydn is often called the “father of the string quartet”. In the 18th century, Haydn began creating music for an ensemble of two violins, a viola, and a cello. He called his compositions string quartets. Some think he chose to write for this combination of instruments because they sound like the four voices in a choir: soprano, alto, tenor and bass.

Haydn’s string quartets then influenced other classical composers like Mozart, Beethoven, Schubert and Brahms and they created their own unique string quartets.

### *Influence of Folk and World Music*

In the late 19th and early 20th centuries, the Czech composer Dvořák and the Hungarian composer Bartók began weaving folk music from their native lands into their string quartets. String quartet music composed in the 20th century began to reflect the diversity of world cultures and environments. French composers Debussy and Ravel took inspiration from Indonesian gamelan music to add Asian sounds and rhythms to their compositions. American composer George Crumb is known for blending sounds from many cultures. He combines instruments such as Tibetan prayer stones, Japanese Kabuki blocks, African thumb piano (mbira), and Chinese temple gongs with tambourines and cymbals. In *Black Angels: Thirteen Images from the Dark Land*, Crumb reflected on the horrors of the Vietnam War in his music. This was the piece that inspired the formation of the Kronos Quartet.

### *Quartet Music Today*

Despite technological advances, the same four instruments have stayed together since the days of Haydn. Yet today’s string quartets also perform music originally composed for other instruments and many composers now incorporate electronic sounds into live performances. String quartet musicians also may perform on other instruments in addition to their regular instruments, and even sing and speak while playing.

Today, the Kronos Quartet regularly plays music by a variety of international composers from Asia to Africa, South America to Europe. As David Harrington, Kronos’ founder, has said, “I started playing string quartets when I was 12, and one day when I was 14, I was gazing at a map of the world and suddenly realized that all the quartet music I’d ever heard—Haydn, Mozart, Beethoven, Schubert—came from a single city: Vienna. A simple question came to me: What did music from other cities and countries sound like? A door of curiosity opened to the world’s music, and over the years, this door has opened wider and wider.” Since then, the Kronos Quartet has had 750 new pieces written or arranged for string quartet, more than any quartet since Haydn’s time, and is leading the string quartet into the 21st century.



The Phonoharp (above) by instrument builder Walter Kitundu, is one of the instruments invented for Kronos to play.

# 3 About the Performance

## Questions to Think About

- Describe some of the songs that Kronos will play in their SchoolTime show.
- What themes does Aleksandra Vrebalov explore in her composition ...*hold me, neighbor, in this storm...*?
- What is composer Hamza El Din trying to evoke in his piece *Escalay*?



Photo by Zoran Orlic

## *Around the World with Kronos*

### *La Sidounak Sayyada / I'll Prevent the Hunters from Hunting You*

Composer: Omar Souleyman, (born 1966)  
arranged by Jacob Garchik, Country: Syria

Omar Souleyman is a Syrian musical legend. Since 1994, he and his musicians have been known widely in folk-pop throughout Syria. He was born in rural Northeastern Syria, and the myriad musical traditions of the region are

evident in his music. Classical Arabic *mawāl*-style vocalization gives way to high-octane Syrian Dabke (the regional folkloric dance and party music), Iraqi Choubi and a variety of Arabic, Kurdish and Turkish styles, among others. This amalgamation is truly the sound of Syria. Souleyman's popularity has risen steadily and his ensemble tirelessly performs concerts throughout Syria and has accepted invitations to perform abroad in Saudi Arabia, Dubai and Lebanon.



***Tusen Tankar / A Thousand Thoughts***  
(arranged in 2005)

Traditional, arranged by Kronos, transcribed by Ljova, Country: Sweden



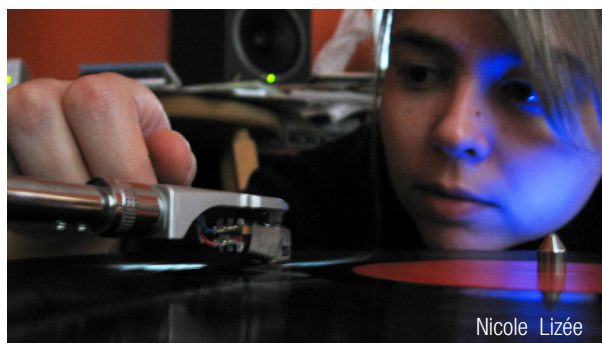
Triakel: Photo by Karin Alfredsson

*Tusen Tankar* is a traditional Scandinavian folk song, which recounts a timeless, mournful tale of unrequited love. The English translation of the original lyrics reads, in part: “A thousand thoughts oppress me/ For love of one who can’t be mine./ ...All I can feel is the pain I bear/ And it’s all for you, my dear.”

Kronos’ arrangement is based on a recording by the Swedish folk band, Triakel, built around Emma Härdelin’s haunting vocals. Triakel consists of Emma Härdelin (vocals and fiddle), Kjell-Erik Eriksson (fiddle) and Janne Strömstedt (harmonium). All three are well-established in Swedish folk music. According to Triakel, the first two verses of *Tusen Tankar* were taken from a version by Swedish singer Thyra Karlsson, while the third verse can be traced back to Danish origins.

***Death to Kosmische* (2010)**

Composer: Nicole Lizée (born 1973),  
Country: Canada



Nicole Lizée is a composer, sound artist and keyboardist based in Montreal, Quebec. Her compositions range from works for large ensemble and solo turntablist featuring DJ techniques fully notated and integrated into a concert music setting, to other unorthodox instrument combinations that include the Atari 2600 video game console, Simon and Merlin handheld games, and karaoke tapes.

About this music, Lizée writes: “*Death to Kosmische* is a work that reflects my fascination with the notion of musical hauntology and the residual perception of music, as well as my love/hate relationship with the idea of genres. The musical elements of the piece could be construed as the faded and twisted remnants of the Kosmische style of electronic music. To do this, I have incorporated two archaic pieces of music technology (the Stylophone and the Omnicord) and have presented them through the gauze of echoes and reverberation, as well as through imitations of this technology as played by the strings. I think of the work as both a distillation and an expansion of one or several memories of music that are irrevocably altered by the impermanence of the mind. Only ghosts remain.”

***Raga Mishra Bhairavi: Alap***

Composer: Ram Narayan (born 1927),  
arranged by Kronos, transcribed by Ljova,  
Country: India



Ram Narayan

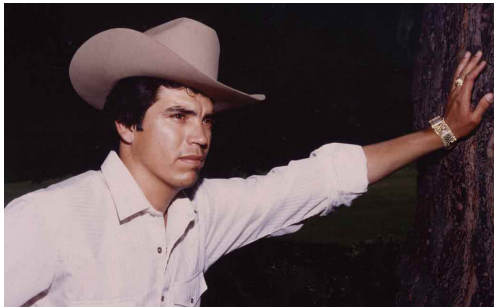
Ram Narayan is one of the world’s most revered masters of the sarangi, the bowed string instrument from northern India renowned for its vocal expressiveness.

Over the course of his long career, Narayan has been the person most responsible for bringing this ancient chordophone into the foreground of classical

Hindustani music. In the early 1950s his ragas were some of the first to be recorded on LPs produced in India, and by the end of the decade Narayan became widely acknowledged as a soloist. Many innovations made by Narayan to bowing and fingering techniques on the sarangi have now become standard.

Ram Narayan is known for his vivid interpretations of traditional Indian ragas. A specified combination of notes played and embellished within a parent framework called a *thaat*, each different raga has the power to evoke a unique emotional transcendence. This feeling was termed by music scholars as *Rasavadhana*: a mystic state completely unrelated to desire, which is purely compounded of joy and consciousness. This arrangement of *Raga Mishra Bhairavi* is based on a performance by Narayan, recorded in 1989.

***Nacho Verduzco*** (circa 1992, arranged 2001)  
Composer: Chalino Sánchez (1961-1992),  
arranged by Osvaldo Golijov, Country: Mexico



Chalino Sanchez

In the early part of the twentieth century, legendary events and famous revolutionaries like Pancho Villa were chronicled in corridos, narrative ballads that had their roots in Spanish romances. After peaking in popularity around the Mexican Revolution, the *corrido* genre fell dormant, but has experienced a rebirth in recent years as the *narco-corrido*—still an anti-authoritarian narrative ballad, but now featuring drug-smugglers in Sinaloa, the heart of Mexico’s drug industry. They are often incongruously

cheerful polkas or waltzes with an upbeat accordion, with lyrics that tell of the exploits (and demises) of traffickers. Despite getting almost no radio play—*narco-corridos* were banned from the Sinaloan airwaves in early 2001—they are very popular in northwest Mexico and southern California. Chalino Sánchez has become one of the most influential *narco-corrido* singers, especially after his murder at age 31. He has been mythologized as a *valiente*, a tough, independent man who lived under his own rules. His *corrido* about Nacho Verduzco tells the story of another *valiente*, who was killed in a confrontation with U.S.-supported law enforcement officials at his house, but not before taking out one of the policemen with a .45.

***Two Selections from The Dead Man:  
Nocturne & Fantasy* (1990)**

Composer: John Zorn (born 1953), Country:  
United States



John Zorn

Turning a self-described short attention span into a creative asset, the ever-daring composer, saxophonist, MacArthur Fellow, and New York “Downtown” music czar John Zorn developed a unique approach to composition in the 1980s and early ’90s. Starting with discrete musical ideas—or “moments”—jotted down on file cards whenever inspiration struck, Zorn would create a new work by assembling the cards in a specific order. The resulting music is both endlessly surprising and relentlessly pulse-quickenings—an experience often compared to

rapidly pushing the pre-set buttons on a car radio, or to the constantly shifting, “jump cut” imagery of modern films and music videos.

Zorn has long drawn stylistic inspiration from Carl Stalling’s soundtracks to Warner Brothers cartoons of the 1940s and ’50s. Zorn says when you listen to Stalling’s music apart from the animated visuals, you “enter a completely new dimension: you are constantly being thrown off balance, yet there is something strangely familiar about it all.”

John Zorn dedicated *The Dead Man* to the photographer Robert Mapplethorpe.

### ***Escalay / Water Wheel* (1989)**

Composer: Hamza El Din (1929-2006),  
Realized by Tohru Ueda, Country : Nubia



Hamza El Din

In the society of what once was Nubia, the waterwheel was the oldest mechanical device used for farmland irrigation. Nubian musician Hamza El Din sought to recreate both the sounds and the images of that ancient culture. “My country was flooded after the construction of the Aswan dam,” El Din explained, “and we lost it after a recorded history of 9,000 years, so I have a nostalgia for that place. *Escalay* is a representation of how to start the waterwheel and let it run.” In this music, he drew upon both the musical and the cultural traditions of his homeland. “Our music system is Afro-Arab—we are a bridge, musically and culturally between Africa

and the Middle East. I wanted the Quartet to represent the sound of my instrument, the oud. The challenge was to make audible the overtones that only the musician can hear from a solo instrument—the ‘unheard’ voice. Amazingly, Kronos perform it as if they are from that place.”

### ***...hold me, neighbor, in this storm...First Movement* (2007)**

Composer: Aleksandra Vrebalov (born 1970),  
Country: Serbia



Aleksandra Vrebalov: Photo by Sasha Jancic

Aleksandra Vrebalov, a native of the former Yugoslavia, left Serbia in 1995 and continued her education in the United States. About “... *hold me, neighbor, in this storm...*,” Vrebalov writes:

“The Balkans, with its multitude of cultural and religious identities, has had a troubled history of ethnic intolerance. For my generation of Tito’s pioneers and children of Communists, growing up in the former Yugoslavia meant learning about and carrying in our minds the battles and numberless ethnic and religious conflicts dating back half a millennium, and honoring ancestors who died in them. By then, that distant history had merged with the nearer past, so those we remember from World War II are our grandparents. Their stories we heard firsthand. After several devastating ethnic wars in the 1990s we



entered a new century, this time each of us knowing in person someone who perished. As I write this in November 2007, on YouTube a new generation of Albanians and Serbs post their war-songs bracing for another conflict, claiming their separate entitlements to the land and history, rather than a different kind of future, together.

“Strangely, the cultural and religious differences that led to enmity in everyday life produced—after centuries of turbulently living together—most incredible fusions in music. It is almost as if what we weren’t able to achieve through words and deeds—to fuse, and mix, and become something better and richer together—our music so famously accomplished instead.

“...hold me, neighbor, in this storm...” is inspired by folk and religious music from the region, whose insistent rhythms and harmonies create a sense of inevitability, a ritual trance with an obsessive,

dark energy. Peaceful passages of the work grew out of the delicately curved, elusive, often microtonal melodies of prayers, as well as escapist tavern songs from the region, as my grandmother remembers them.

“For me, ...hold me, neighbor... is a way to bring together the sounds of the church bells of Serbian orthodox monasteries and the Islamic calls for prayer. It is a way to connect histories and places by unifying one of the most civilized sounds of Western classical music—that of the string quartet—with ethnic Balkan instruments, the *gusle* [a bowed string instrument] and *tapan* [large double-headed drum]. It is a way to piece together our identities fractured by centuries of intolerance, and to reach out and celebrate the land so rich in its diversity, the land that would be ashen, empty, fallow, if any one of us, all so different, weren’t there.”



Above: Gusles

Below: Tapan





# 4 About the Artists

## Questions to Think About

- What inspired David Harrington to form the Kronos Quartet?
- Who are some of the artists with whom Kronos Quartet has collaborated?
- Describe the ways the Kronos Quartet is demonstrating their commitment to new music.



From left to right: John Sherba, Jeffrey Zeigler, David Harrington, Hank Dutt. Photo by Jay Blakesberg.

## Kronos Quartet

For nearly 40 years, the Kronos Quartet—David Harrington, John Sherba (violins), Hank Dutt (viola), and Jeffrey Zeigler (cello)—has pursued a singular artistic vision, combining a spirit of fearless exploration with a commitment to expanding the range and context of the string quartet. In the process, Kronos has become one of the most celebrated and influential groups of our time, performing thousands of concerts worldwide, releasing more than 45 recordings of extraordinary breadth and creativity, collaborating with many of the world’s most eclectic composers and performers, and commissioning more than 750 works and arrangements for string quartet. In 2011, Kronos became the only recipients of both the Polar Music Prize and the Avery Fisher Prize, two of the most prestigious awards given to

musicians. The group’s numerous awards also include a Grammy for Best Chamber Music Performance (2004) and “Musicians of the Year” (2003) from *Musical America*.

## Beginnings

Kronos’ adventurous approach dates back to the ensemble’s origins. In 1973, David Harrington was inspired to form Kronos after hearing George Crumb’s *Black Angels*, a highly unorthodox, Vietnam War-inspired work featuring bowed water glasses, spoken word passages, and electronic effects. Kronos then began building a compellingly diverse repertoire for string quartet, performing and recording works by 20th-century masters (Bartók, Shostakovich, Webern), contemporary composers (Aleksandra Vrebalov, John Adams, Alfred Schnittke), jazz legends (Ornette Coleman, Charles Mingus, Thelonious Monk), and artists from even

farther afield (rock guitar legend Jimi Hendrix, Azeri vocalist Alim Qasimov, interdisciplinary composer/performer Meredith Monk).

### Collaborations

Integral to Kronos' work is a series of long-running, in-depth collaborations with many of the world's foremost composers. One of the quartet's most frequent composer-collaborators is "Father of Minimalism" Terry Riley, whose work with Kronos includes the early *Sunrise of the Planetary Dream Collector*; *Cadenza on the Night Plain* and *Salome Dances for Peace*; 2002's *Sun Rings*, a multimedia, NASA-commissioned ode to the earth and its people, featuring celestial sounds and images from space; and *Another Secret eQuation* for youth chorus and string



Sun Rings

quartet, premiered at a concert celebrating Riley's 75th birthday. Kronos commissioned and recorded the three string quartets of Polish composer Henryk Mikolaj Górecki, with whom the group worked for more than 25 years. The quartet has also collaborated extensively with composers such as Philip Glass, recording his string quartets and scores to films like *Mishima* and *Dracula* (a restored edition of the Bela Lugosi classic); Azerbaijan's Franghiz Ali-Zadeh, whose works are featured on the full-length 2005 release *Mugam Sayagi: Music of Franghiz Ali-Zadeh*;

Steve Reich, whose Kronos-recorded *Different Trains* earned a Grammy for the composer; Argentina's Osvaldo Golijov, whose work with Kronos includes both compositions and extensive arrangements for albums like *Kronos Caravan* and *Nuevo*; and many more.

In addition to composers, Kronos counts numerous artists from around the world among its collaborators, including the Chinese pipa virtuoso Wu Man; legendary Bollywood "playback singer" Asha Bhosle, featured on Kronos' Grammy-nominated CD, *You've Stolen My Heart: Songs from R.D. Burman's Bollywood*; Inuit throat singer Tanya Tagaq; Mexican rockers Café Tacuba; genre-defying sound artist and instrument builder Walter Kitundu; the Romanian gypsy band Taraf de Haïdouks; renowned American soprano Dawn Upshaw; and the unbridled British cabaret trio, the Tiger Lillies. Kronos has performed live with the likes of icons Allen Ginsberg, Zakir Hussain, Modern Jazz Quartet, Noam Chomsky, Rokia Traoré, Tom Waits, David Barsamian, Howard Zinn, Betty Carter, and David Bowie, and has appeared on recordings by such diverse talents as Nine Inch Nails, Amon Tobin, Dan Zanes, DJ Spooky, Dave Matthews, Nelly Furtado, Joan Armatrading, and Don Walser.

Kronos' music has also featured prominently in other media, including film (*Requiem for a Dream*, *The Fountain*, *21 Grams*, *Heat*, *True Stories*) and dance, with noted choreographers such as Merce Cunningham, Paul Taylor, Twyla Tharp, and Eiko & Koma setting pieces to Kronos' music.

### Tours & Recordings

The quartet spends five months of each year on tour, appearing in concert halls, clubs, and festivals around the world including BAM Next Wave Festival, Carnegie Hall, the Barbican in London, WOMAD, UCLA's Royce Hall, Amsterdam's Concertgebouw, Shanghai Concert Hall, and the Sydney Opera House. Kronos is equally prolific and wide-ranging on recordings. The ensemble's expansive

discography on Nonesuch Records includes collections like *Pieces of Africa* (1992), a showcase of African-born composers, which simultaneously topped Billboard's Classical and World Music lists; 1998's ten-disc anthology, *Kronos Quartet: 25 Years; Nuevo* (2002), a Grammy- and Latin Grammy-nominated celebration of Mexican culture; and the 2003 Grammy-winner, Alban Berg's *Lyric Suite*. The group's latest releases are *Floodplain* (Nonesuch, 2009), spotlighting music from regions of the world riven by conflict; *Rainbow* (Smithsonian Folkways, 2010), in collaboration with musicians from Afghanistan and Azerbaijan; and *Uniko* (Ondine, 2011) with Finnish accordion/sampler duo Kimmo Pohjonen and Samuli Kosminen.

**Commitment to New Music and Mentorship**  
Kronos' recording and performances reveal only a fraction of the group's commitment to new music. As a non-profit organization based in San Francisco, the Kronos Performing Arts Association has commissioned more than 750 new works and arrangements for string

quartet. Music publishers Boosey & Hawkes and Kronos have released sheet music for three signature works, all commissioned for Kronos, in the first volume of the *Kronos Collection*, a performing edition edited by Kronos. The quartet is committed to mentoring emerging professional performers, and in 2007 Kronos led its first Professional Training Workshop with four string quartets as part of the Weill Music Institute at Carnegie Hall. Subsequent workshops at Carnegie Hall and other venues have expanded this aspect of the quartet's work. One of Kronos' most exciting initiatives is the Kronos: Under 30 Project, a unique commissioning and composer-in-residence program for composers under 30 years old, launched in conjunction with Kronos' own 30th birthday in 2003. By cultivating creative relationships with such emerging talents and a wealth of other artists from around the world, Kronos reaps the benefit of decades of wisdom while maintaining a fresh approach to music-making inspired by a new generation of composers and performers.



Photo by Jay Blakesberg.



# 5 About the String Quartet

## Questions to Think About

- How is the performance of a string quartet like a conversation?
- Who is the “father of the string quartet” and why?
- How did string quartet music evolve?



Photo by Robert Hantzsche.

## About the String Quartet

With material adapted from San Francisco Performances' Study Guide, *The Story of the String Quartet*

A string quartet is like a family of four instruments. There are two violins, one viola, and one cello. The viola is a little larger than the violin, and the cello is the largest of all. The bigger the instrument, the lower the sound; the cello has the deepest voice and the violin has the highest. Together the four instruments have musical conversations, like a family at dinner or a group of friends talking together.

## History of String Quartet Music *Haydn and Mozart*

In the 18th century, composer Franz Joseph Haydn (1732–1809) began creating music for an ensemble of two violins, a viola, and a

cello, calling his compositions string quartets. The “father of the string quartet” may have chosen to write for this combination of instruments because it resembles the four choral voices: soprano, alto, tenor and bass.

Haydn's early string quartet music can be compared to a conversation between four people in the manner of the 18th Century aristocracy – refined, restrained and witty. As Haydn continued to write for the string quartet, his music became more dramatic and imaginative.

At the same time Haydn was composing string quartets a young composer named Wolfgang Amadeus Mozart (1756–1791) was also busy writing music. Mozart was greatly impressed and inspired by Haydn's music, and he composed a set of six quartets which he dedicated to Haydn.



### ***Beethoven and Schubert***

While string quartets written by Haydn and Mozart followed a standard and familiar musical form, Ludwig van Beethoven (1770–1827) broke the rules and created his own forms. Each quartet is unique and full of emotions like anger, fear, passion and sadness. Beethoven’s musical conversations often reflect a sense of impatience, anger, and confrontation.

German composer Franz Schubert (1797–1828) wrote over 600 songs and blended melodies from his song compositions into his string quartets and other chamber music. Schubert’s String Quartet in D minor, subtitled “Death and the Maiden,” is based on the narrative from his own song of the same title which tells the story of a young woman who is visited by Death in several disguises. The string quartet attempts to tell the story through music alone.

### ***Dvořák & Bartók***

Late 19th and early 20th century composers often used folk melodies and motifs to introduce the sounds and rhythms of their cultures into a standard musical form. Fragments of Czech and American folk songs can be heard in many of Czech composer Antonín Dvořák’s (1841–1904) compositions. Other Dvořák quartets incorporate the syncopated rhythms and patterns of repetition of Czech dumka, or slow sad folk ballads. Composer Béla Bartók (1881–1945) methodically collected and recorded folk tunes of his native Hungary and based his compositions on them, adding highly developed techniques of music theory and performance to these rustic melodies and rhythms.

### ***Debussy & Ravel***

Claude Debussy (1862–1918) and Maurice Ravel (1875–1937) attended the 1889 World Exposition in Paris and were impressed by

the unusual sounds they heard, particularly the Indonesian gamelan orchestra, which is comprised of gongs and other percussion instruments. Excited by hearing something totally new and different, the two composers immediately began to experiment with producing complex rhythmic sounds on traditional string instruments.

### ***Contemporary String Quartet Music***

Much string quartet music being composed now reflects the diversity of cultures, environments, and circumstances that surround us. In spite of technological advances, the same four instruments have stayed together since the days of Haydn, yet today’s string quartets also perform music composed for other instruments and many composers now incorporate electronic sounds into live performances.

American composer George Crumb’s (b.1929) compositional style is known for its blending of sounds from Western and non-Western cultures. He combines instruments such as Tibetan prayer stones, Japanese Kabuki blocks, alto African thumb piano (mbira), and Chinese temple gongs with vibraphone, tambourine, cymbals and tamtams. The music he writes also explores the mystical qualities and meaning of life experiences as well as 20th century global events and culture. His string quartet *Black Angels: Thirteen Images from the Dark Land*, for electric string quartet, written in 1970, is probably the first quartet to be inspired by the Vietnam War and includes unusual and amplified sounds that are very different from the soothing music of the 18th century court.

In today’s international music community, ensembles commission works by composers from around the world, from Asia to Africa, South America to Europe. As David Harrington, Kronos’ founder, has said, “I started playing string quartets when I was 12, and one day when I was 14, I was gazing at a map of the world and suddenly realized that all the quartet music I’d ever heard—

Haydn, Mozart, Beethoven, Schubert—came from a single city: Vienna. A simple question came to me: What did music from other cities and countries sound like? A door of curiosity opened to the world's music, and over the years, this door has opened wider and wider.” The Kronos Quartet has pursued their commitment to expanding the range and context of the string quartet by regularly collaborating with many of the world's most eclectic composers and performers and commissioning 750 new works and arrangements for string quartet, more than any quartet since Haydn's time, and leading the string quartet into the 21st century.



# 6 Instruments in a String Quartet

## Questions to Think About

- What are the traditional instruments of a string quartet and why were they chosen?
- Describe the viola's "voice."
- What are some examples of different techniques used on the violin?



Photo by Zoran Orlic.

## Instruments in a string quartet

In the second half of the 18th century, the emergence of chamber music (pieces written for a small group of instruments and performed in a small room or chamber) created the demand for the string quartet. Mimicking the range of voices in a vocal choir, the string quartet includes two violins and a viola for the soprano, alto and tenor voices,

and a cello for the bass or low end. String quartets create a sound profile that is comparable in expression to a full orchestra but that offer greater independence for each musician. Together, these "voices" create musical conversations in which every instrument has something to say. Although string quartets can include any combination of instruments, most classical quartets feature a cello, a viola and two violins.



## Violin

The violin is a small four-stringed instrument that you hold under the chin and play with a bow, or pluck with your fingers. The strings stretch from the tailpiece across the bridge to the tuning pegs. A string quartet uses two violins, and they are the smallest instruments in the quartet, offering the highest voice. The soaring sound the violin produces allows melodies and harmonies to stand out. Players also use techniques such as vibrato, tremolo, and pizzicato to create a rich musical voice.



## Viola

The viola is slightly larger than the violin, with strings that are tuned five notes lower. Violas offer a unique voice in the string quartet, providing a rich dark tone, which is in direct contrast to the bright tone of the violin. A viola can play notes that are almost as high as a violin; however, these notes will not have the same penetrating tone, making for a more distinct voice in the ensemble.



## Cello

Adding the lowest voice to the string quartet, the cello provides a smooth and rich sound. Cellos are twice as big as the viola or violin, with a thick body and thick strings that are bowed to produce deep low notes. Traditionally, the cello was held between the knees; however, at the end of the 20th century, a spike was added to the cello, allowing it to stand on the floor. The cello produces the bass voice in the string quartet.





# 7 Glossary

**alto**—a vocal range that is the lower female voice in choral music. In a four-part chorus it is below soprano and above tenor. Alto is also used to describe the range of many instruments. In the quartet, one of the violins acts as the alto voice.

**arrangement**—an adaptation of a piece of music for performance in a different way, especially on different instruments from those for which it was originally composed.

**bass**—the lowest male voice in a choir, also the largest and lowest string instrument. In the quartet, the cello acts as a bass voice.

**bow**—a long piece of wood with horsehairs stretched from one end to the other, used for playing stringed instruments.

**cello**—the second largest member of the string family and the lowest sounding member of the string quartet. It has four strings, is held between the knees and played with a bow while being supported on the floor with a metal peg.

**chamber music**—music written to be performed by a select group of players in a small concert hall or room by a small group of musicians. String quartet is a common form of chamber music.

**classical music**—a broad term, referring to music rooted in the traditions of European art, ecclesiastical and concert music, particularly between 1000 and 1900.

**composer**—someone who writes music.

**corridos**—narrative ballads with roots in Spanish romances.

**folk music**—music native to a region, passed on by oral tradition.

**harmony**— the simultaneous sounding of two or more tones. The basis of classical music.

**instrumental music**—music performed on instruments without text or words.

**mawal**—an traditional Arabic style of music that is usually played before the actual song begins. It is sung in colloquial Arabic and has links to historical forms of Arabic poetry.

**melody**—a succession of notes that form a complete musical statement or idea.

**motif**—a recurring theme, subject, or idea in art, music, literature, or dance.

**musical ensemble**—a group of musicians performing together.

**oud**—a pear-shaped musical instrument of the Middle East and Northern Africa in the lute family.

**pizzicato**—playing a string instrument by plucking the strings with the finger rather than using the bow.

**polka**—a lively couple dance in 2/4 time from Central Europe. Polka is also the type of music that is written for this dance style.

raga—one of the melodic formulas of Indian classical music having the melodic shape, rhythm, and ornamentation prescribed by tradition; it literally means “color” or “mood”.

rhythm—the patterns of time and beats in music.

sonata form—also known as sonata-allegro form, is a musical form typically used in the first movement of classical works.

soprano—the highest female (or boy's) voice in a choir. In the quartet, one of the violins acts as the soprano voice.

string quartet—a musical ensemble for four string instruments, usually it consists of two violins, one viola, and one cello. Also a piece of music written for this combination of instruments.

tenor—the highest male voice. In the quartet, the viola acts as the tenor voice.

tremolo—Italian for “trembling.” Very fast repetition of a note.

vibrato—Italian for “vibrating.” A musical effect produced by fluctuation or moving the intensity of a pitch.

viola—the second smallest member of the string family. The viola makes middle range sounds, comparable to that of the tenor voice.

violin—the smallest member of the string instrument family. The violin makes the highest sounds and is like the soprano or alto in a choir.

waltz—a ballroom dance in 3/4 time that started in the 16th century and became very popular in 19th century Austria. Waltz is also a type of music that is written for this type of dance.

# 8 Learning Activities

## Music / Visual Art (Grades 2- 12)

### *Instrument Graphing*

#### *Materials*

- Computer (with speakers)
- Projector (if available)
- Large paper (individual pieces or a long piece of butcher paper all the students can work on together)
- 4 different colored markers, pencils or crayons for each student

#### *Engagement*

- Show a You Tube video of Kronos Quartet performing one of the songs on the SchoolTime program, like Ram Narayan: <http://www.youtube.com/watch?v=7TWslvJYiPs>
- Identify each of the instruments (in this piece you'll notice some of the musicians play the shruti box and tambura instead of their string instruments.) Describe each instrument's role. For example, which one carries the melody, which ones provide rhythms and harmonies?
- Go to the Kronos Quartet's website: [kronosquartet.org](http://kronosquartet.org), and play *Tusen Tankar*, *Martynov: The Beatitudes* or one of the other songs available.

#### *Activity*

- Play the song again and this time as the students listen have them focus on only one of the instruments, like one of the violins, the viola or the cello.
- As they are listening, ask students to choose a colored marker and follow the instruments process by "graphing" it on their paper. (Allow for differences in how students choose to graph, one student may draw peaks and valleys, one may create abstract shapes, one may make lines or dots, etc.)
- Play the song three more times. Each time have students choose a different colored marker and on the same piece of paper graph a different instrument's progress.
- Reflect with students on what they heard, noticed and discovered during this activity.
- If there's time, repeat the activity using a different song.

## **Music & Life Skills (Grades K-12)**

### ***Musical Conversations***

#### *Materials*

- Found objects

#### *Engagement*

- Have students watch a You Tube video of Kronos Quartet and notice how the musicians play together, at times in solos, duets, trios and as a quartet.
- Discuss as a class or in smaller groups: How is the interaction between the instruments like a conversation? Do the “conversations” always go smoothly or are there also arguments and silences?

#### *Activity*

- Ask students to find a partner. In their pairs, have one student create a clapping or other body rhythm and the other student make a rhythm with their feet.
- Challenge students to really make a conversation with their rhythms; this means they need to listen and pay attention to the speed and quality of the rhythm they hear and create a response to that. (The response aspect is important, they aren’t just taking turns demonstrating different rhythms.)
- Now, have students each find an object and make a rhythm conversation using sounds these objects can create.
- Next, ask students to experiment with vocal sounds, then melodies in their conversations.
- Invite pairs to find another pair and make a group of four. In their groups, students should choose who will communicate via body language, foot rhythms, found object sounds and vocals.
- Ask students to have sound/music conversations in their groups of four.
- Students may then choose to mix up their “voices”. For example, they might all try vocals or found object sounds, or the combination they wish.
- Reflect with students on their experience creating these conversations.

## **Music / Literacy / Visual Art (Grades 3-12)**

### ***Music Around the World***

Part of the Kronos Quartet’s artistic mission is to spark interest in world cultures through music, therefore they chose the pieces for their SchoolTime concert with geographical diversity in mind.

#### *Materials*

- CD player
- Computer (with speakers)

#### *Engagement*

- As homework, ask students to bring in and share a song from another country. They might bring in a CD from home or the library, or they might find a clip online.



### *Activity*

- Listen to the clips and identify the different instruments (or ask students to research this.)
- Discuss together:
  - Where the music comes from
  - The kind of song it is, i.e. love song, folk song, spiritual, work song, protest song, etc.
  - The parts of the song, i.e. introduction, chorus, call & response, etc.
  - The different melodies, harmonies and rhythms
  - How are the songs different; how are they similar?
  - What emotions, ideas or images come to mind for each song?
- Invite students to write descriptive words down as they listen to the pieces.
- Ask students to select words and images that emerged when listening to one of the songs, and using these words and images, write a poem inspired by this song.
- Students may also draw a picture to accompany their poem.
- Share poems and pictures and reflect on the process of listening to the songs, taking inspiration from them and creating poems and pictures.

## Additional Resources

Kronos Quartet: <http://kronosquartet.org/>

(For Kronos Quartet information, upcoming performances, music clips, discography and more.)

### Video Clips:

<http://www.youtube.com/watch?v=7TWslvJYiPs>

<http://www.youtube.com/watch?v=yJdb-bNZokA>

<http://www.youtube.com/watch?v=UP7rjppeRA0>

<http://www.youtube.com/watch?v=gbcBmLmR5Ko>

<http://www.youtube.com/watch?v=5lqlOt9vAlg&feature=relmfu>

Kronos on Sesame Street: [http://www.youtube.com/watch?v=Qj\\_MzFstr6c](http://www.youtube.com/watch?v=Qj_MzFstr6c)

### Books about String Quartets:

Eisler, Edith. 21st Century String Quartets Book. String Letter Publishing, 2000.

Griffiths, Paul. The String Quartet: A History. Thames and Hudson, 1985.

Griffiths, Paul. Modern Music and After. Oxford University Press, 2011.

### Children's Books:

Ardley, Neil. DK Eyewitness Books: Music. DK Children, 2004.

Elliott, Katie. The Fun Factory Violin Book: Fun, Facts, and Puzzles for Violin Players Everywhere. Boosey and Hawkes, 2004.

Wilson, Clive. The Kingfisher Young People's Book of Music. Kingfisher, 1999.

### Other Local String Quartets:

Cypress String Quartet – <http://cypressquartet.com/>

Alexander String Quartet – <http://www.asq4.com/>

### Local Organizations Presenting Quartets and Similar Styles of music:

Cal Performances – [Calperformances.org](http://calperformances.org)

San Francisco Performances – <http://performances.org/>

Berkeley Symphony – [www.berkeleysymphony.org](http://www.berkeleysymphony.org)

Oakland East Bay Symphony – <http://oebs.org/>

San Francisco Symphony – [www.sfsymphony.org](http://www.sfsymphony.org)

# 9 California State Standards

## Music Grades K-12

### 1.0 ARTISTIC PERCEPTION

Processing, Analyzing, and Responding to Sensory Information Through the Language and Skills Unique to Music

Students read, notate, listen to, analyze, and describe music and other aural information, using the terminology of music.

### 2.0 CREATIVE EXPRESSION

Creating, Performing, and Participating in Music

Students apply vocal and instrumental musical skills in performing a varied repertoire of music. They compose and arrange music and improvise melodies, variations, and accompaniments, using digital/electronic technology when appropriate.

### 3.0 HISTORICAL AND CULTURAL CONTEXT

Understanding the Historical Contributions and Cultural Dimensions of Music

Students analyze the role of music in past and present cultures throughout the world, noting cultural diversity as it relates to music, musicians, and composers.

Role of Music

3.1 Describe the social functions of a variety of musical forms from various cultures and time periods (e.g., folk songs, dances).

Diversity of Music

3.2 Identify different or similar uses of musical element sin music from diverse cultures.

3.4 Describe the influence of various cultures and historical events on musical forms and styles.

### 4.0 AESTHETIC VALUING

Responding to, Analyzing and Making Judgments about Works of Music

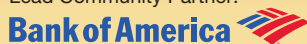
Students critically asses and derive meaning from works of music and the performance of musicians according to the elements of music, aesthetic qualities, and human response.



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## About Cal Performances and *SchoolTime*

The mission of Cal Performances is to inspire, nurture and sustain a lifelong appreciation for the performing arts. Cal Performances, the performing arts presenter of the University of California, Berkeley, fulfills this mission by presenting, producing and commissioning outstanding artists, both renowned and emerging, to serve the University and the broader public through performances and education and community programs. Cal Performances celebrates over 100 years on the UC Berkeley Campus.

Our *SchoolTime* program cultivates an early appreciation for and understanding of the performing arts amongst our youngest audiences, with hour-long, daytime performances by the same world-class artists who perform as part of the main season. *SchoolTime* has become an integral part of the academic year for teachers and students throughout the Bay Area.





From left to right: John Sherba, Hank Dutt, David Harrington, Jeffrey Zeigler. Photo by Jay Blakesberg.

This Cal Performances *SchoolTime* Study Guide was written, edited and designed by Laura Abrams, Rica Anderson and David McCauley with sections adapted from Kronos Quartet's promotional materials and San Francisco Performances' study guide, *The Story of the String Quartet*.  
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