

EDUCATOR GUIDE

Story Theme: Masterworks
Subject: Terry Riley
Discipline: Music

SECTION I - OVERVIEW	2
SECTION II – PROFILE & CONTEXT	3
ARTIST PROFILE	
CONTEXT: THE BIG PICTURE	4
SECTION III – RESOURCES	6
TEXTS & PERIODICALS	
AUDIO RECORDINGS	
WEB SITES	
VIDEOS	
SECTION IV – BAY AREA FIELD TRIPS	9
SECTION III – VOCABULARY	10
SECTION IV – ENGAGING WITH SPARK	12



Composer Terry Riley reflects on a long, successful career.
Still image from SPARK story June 2005.

SECTION I - OVERVIEW

EPISODE THEME

Masterworks

SUBJECT

Terry Riley

GRADE RANGES

K-12, Post-Secondary

CURRICULUM CONNECTIONS

Music

OBJECTIVE

To introduce students to the work of contemporary composer and musician Terry Riley by exploring his composing process, from conception to performance, of “The Cusp of Magic,” a commission for the Kronos Quartet

STORY SYNOPSIS

For over 40 years, Terry Riley has been seeking new ways of composing and performing music. Credited with pioneering the minimalist movement in music in the 1960s with colleague La Monte Young, Riley developed his own style of composition blending acoustic instruments with audio tape manipulation of sampled sounds in live performance. SPARK follows Riley as he works with David Harrington and the Kronos Quartet on “The Cusp of Magic,” a new commissioned work on the eve of Riley’s 70th birthday.

INSTRUCTIONAL OBJECTIVES

- To educate students about minimalism and expression through music
- To illuminate the compositional process
- To entice students to explore minimal, electronic and acoustic music
- To better understand how musical inspiration can come from everyday objects and familiar things

INSTRUCTIONAL STRATEGIES

- Individual and group research
- Individual and group exercises
- Written research materials
- Group oral discussion, review and analysis

EQUIPMENT NEEDED

- TV & VCR with SPARK story “Masterworks,” about Terry Riley and Kronos Quartet
- Computer with Internet access, navigation software, speakers and a sound card, printer
- Cassette player, CD player, or computer audio program

MATERIALS NEEDED

- Access to libraries with up-to-date collections of periodicals, books, research papers and videos
- Different examples of contemporary and minimalist music (see Resource section)
- Pens, pencils and paper

INTELLIGENCES ADDRESSED

- Logical-Mathematical – the ability to detect patterns, reason deductively and think logically
- Musical – the ability to read, understand and compose musical pitches, tones, and rhythms
- Bodily-Kinesthetic - the ability to use one’s mind to control one’s bodily movements
- Interpersonal – the ability to understand the feelings and motivations of others
- Intrapersonal – the ability to understand one’s own feelings and motivations



See more information on [Multiple Intelligences](http://www.kqed.org/spark/education) at www.kqed.org/spark/education.

SECTION II – PROFILE & CONTEXT

PROFILE

How might one interweave the sounds of children’s talking toys into a string quartet? In the episode “Masterworks,” SPARK follows legendary composer **Terry Riley** in celebration of his 70th birthday with the creation of an exciting new work commissioned by the **Kronos Quartet** entitled “The Cusp of Magic.”

Although not a composer who necessarily identifies himself as a minimalist, Riley’s seminal 1964 composition In C was heralded as the beginning of the minimalist movement in music, which stripped music of many of its conventional forms and decorations and focused on repetition and drones. In C centers around the steady pulse of a C note and 53 tonal variations passed between instruments. The result is a wonderfully meditative work that established Riley as one of the most important composers of the 20th century. His career spans forty years and his peers include renowned avant-garde musicians like Pauline Oliveros, La Monte Young, and Morton Subotnick, to name a few.

“Minimalism is a return to looking at detail in music, and appreciating the small things, what they are, and how powerful they are,” Riley states. “To me, it’s more about the magic of what’s in the notes themselves.”

Riley first met David Harrington, founder and violinist for the immensely successful experimental string ensemble the Kronos Quartet when they were both teaching at Mills College in Oakland, California in the 1970s. Harrington requested a composition from Riley, and a musical partnership was born.

The six-movement “The Cusp of Magic” is Riley’s sixteenth commissioned work for the quartet and an extraordinary seamless blend of Eastern and Western classical music styles. The concert-length

work is written for string quartet, highlighting the Chinese lute, or *pipa*, and featuring pre-recorded toy and bell samples and one vocal. Wu Man, a pipa virtuoso known around the world for her colorful and emotional interpretations, was specifically selected for the composition. The piece had its world premiere on Sunday, May 1, 2005 at UC Berkeley’s Zellerbach Hall presented by Cal Performances.

Born in Colfax, California in 1935, composer Terry Riley is now based in northern California. He studied music at San Francisco State University and the University of California at Berkeley where he met and began collaborating with classmate La Monte Young. In the early 1970s, Riley traveled to India to study raga with Pandit Pran Nath. His work has been performed by the Rova Saxophone Quartet, the California EAR Unit, and the Amati String Quartet, among others, and can be heard on the New Albion, CBS Masterworks, Nonesuch, and Cantaloupe record labels. His influence can be heard in the work of a wide range of performers including Can, Kraftwerk, Brian Eno, Silver Apples, Suicide, and Stereolab.



Composer Terry Riley surveys a score.
Still image from SPARK story, 2005.

CONTEXT: THE BIG PICTURE

Technological advancements in the post-war 1950s inspired a range of musicians and composers to make significant innovations in music, forging new genres such as noise art, musique concrete, sound poetry, serialism, and indeterminacy. These sophisticated forms ran the gambit in terms of structure and style, impacted by an eclectic range of influences from music and ethnomusicology. Highly controlled serialism (based on a 12 tone system) is a system of composing through which elements are ordered according to a pre-determined set or sets and variations. By contrast, in indeterminacy composers leave one or more elements of the composition undetermined or left to chance, to be improvised by performers.

These innovations set the stage for what is now referred to as the beginning of a minimalist genre in music. In 1958 La Monte Young, a musician and composer living in California composed a piece called Trio for Strings. At the time, Young's fascination with static harmonies, sustained tones in a drone-based musical setting, and unchanging dynamics were highly innovative, even revolutionary in that they created musical environments rather than just a musical score.

Music historians define minimalism in music, which borrows its name from the visual art world, as having evolved as a reaction to the intellectual abstractions of the earlier Modern trends of serialism and indeterminacy. Highly influenced by non-Western music, jazz, and rock and roll, many minimalist composers sought to create works that were more accessible to audiences by revealing the true essence of music and sounds. Generally, minimalist music is based on simplified rhythmic, melodic and harmonic vocabularies, and it is tonal or modal, maintaining continuous or regular rhythmic pulsing. It also adheres to a simple structure and texture.

La Monte Young also pioneered new ways of conceptualizing music. His series Compositions 1960 from this period were nearly devoid of musical notation, instead, performers followed direction (like stage actors taking cues from a director) such as "Build a fire in front of the audience..." or "Draw a straight line and follow it." Sometimes Young's

musical notation consisted merely of two notes, like B and F#, creating an open fifth with the instruction "To be held for a long time."



La Monte Young and Marian Zazeela, Dream House: Seven + Eight Years of Sound and Light. Photo © Marian Zazeela 1993.

Young left California in the 1960s and landed in New York where he founded a performing ensemble called the Theatre of Eternal Music. The company performed "dream music" – structure-based improvisatory musical performances – in a Manhattan loft called the "dream house" under lighting installations created by his wife Marian Zazeela that lasted for hours.

Young was also fascinated with a concept called *Just Intonation*. A deviation from Western classical tuning systems, *just intonation* is based on a system through which every note in the musical scale is tuned to an overtone or a harmonic of a fundamental randomly chosen by the musician in response to the sounds of his or her environment.¹ The system is based on simple-ratio intervals – the fundamentals of melody and harmony – which the human ear recognizes as consonance. *Just Intonation* is a set of principles which can be used to create an endless variety of musical intervals, scales, and chords for use in any style of tonal or atonal music.

In 1964 Young composed The Well-Tuned Piano, on a piano retuned to *just intonation*. To Western ears, the piano initially sounds out of tune, but as the piece progresses, one can hear the harmonics illuminated through the system. The piece is improvisatory although it is based on strict rules. It is also considered to be a work perpetually "in progress" since it is different every time it is played.

¹ A full explanation of the just intonation system is available on the Just Intonation Web site, a site designed and maintained by musicians and composers who use the system, at <http://www.justintonation.net>.

Over time, the piece has expanded from its original 45 minute-length to over 6 hours.

Young's music was profoundly influential on a host of his contemporaries, including Philip Glass, Steve Reich, and Terry Riley. Riley was a friend and supporter of Young when they both attended the University of California at Berkeley. Riley was also an early member of Young's Theatre of Eternal Music in New York before embarking on a solo career. What distinguished Riley from other composers is his use of repetition as the primary organizing principle, the primary vehicle for which was recorded sounds, namely speech, piano sounds, and found sounds continuously repeated on a tape loop. Riley had noticed that "[...] things didn't sound the same when you heard them more than once. And the more you heard them, the more different they did sound."²

Riley realized this idea and gained international notoriety in his composition In C (1964) in which 14 musicians played a score containing 53 different motifs. Each musician individually chose how and when to move from one motif to the next. The overall effect is slowly shifting, pulsing motifs moving over a constant modal background. The length and experience of a performance of In C depends upon the how the musicians play and how they move through the score.

Riley has influenced many contemporary composers and musicians, including Philip Glass (Koyaanisqatsi, Einstein on the Beach, et al), and Steve Reich (Drumming, et al), who both sought to create a codified process or identifiable structure by which to create the music. Both wanted audiences to understand and be able to hear clearly the structures underlying the work. Reich uses phasing as a central concept, "a method of gradually shifting relationships that result when modal musical material is deployed against itself contrapuntally."³ Glass uses a rhythmic structure of adding or subtracting composed units in the larger context of repetition and an unchanging harmonic background.

² Robert Schwartz. Minimalists (20th Century Composers), New York: Phaidon Press, 1996: p 35.

³ Stanley Sadie and John Tyrrell, eds. New Grove Dictionary of Music and Musicians, Vol. 16, Grove's Dictionaries (2nd edition), 2001: p 717.

In addition to inspiring a generation of art rock as well as many popular musicians such as The Velvet Underground, The Who, and Brian Eno, Young, Riley, Glass, Reich and others such as Pauline Oliveros⁴ and Michael Nyman continue to compose and push the boundaries of minimalist music.



David Harrington, musician and founding member of Kronos Quartet (top), composer Terry Riley, and the full Kronos Quartet playing "The Cusp of Magic" commissioned from Riley. Still image from SPARK story, 2005.

⁴ Watch the SPARK story on Pauline Oliveros at <http://www.kqed.org/spark/artists-orgs/paulineoli.jsp>.

SECTION III – RESOURCES

TEXTS & PERIODICALS

Anderson, E. Ruth. Contemporary American Composers: A Biographical Dictionary. Boston: G.K. Hall, 1976.

Basart, Ann. Serial Music: A Classified Bibliography of Writings on Twelve-Tone and Electronic Music. Berkeley: University of California Press, 1961.

Cardew, Cornelius. "One Sound: La Monte Young" in The Musical Times, Vol. 107, No. 1485 (November 1966) p.959.

Carlson, Effie B. A Bio-bibliographical Dictionary of Twelve-Tone and Serial Composers. Metuchen: Scarecrow, 1970.

Gann, Kyle. American Music in the Twentieth Century. New York, Schirmer Books. London: Prentice Hall International, 1997.

Gann, Kyle. "La Monte Young's The Well-Tuned Piano" in Perspectives of New Music, Volume 31 Number 1 (Winter 1993).

Griffiths, Paul. Modern Music: A Concise History. Thames and Hudson, NY, 1994.

Griffiths, Paul. Modern Music – The Avant-Garde Since 1945. JM Dent and Sons Ltd., London, 1981.

New Grove Dictionary of Music and Musicians, Second Edition, Vol. 16. Ed. by Stanley Sadie. Macmillan Publishers Ltd., 2001.

Potter, K. Four Musical Minimalists: LaMonte Young, Terry Riley, Steve Reich, Philip Glass. Cambridge University Press, 2000.

Salzman, Eric. Twentieth-Century Music: An Introduction. Prentice-Hall, Inc., 1974.

Shaw-Miller, Simon. Visible Deeds of Music: Art and Music From Wagner to Cage. New Haven: Yale University Press, 2002

Schwartz, Robert. Minimalists (20th Century Composers). London: Phaidon Press, 1996.

Vinton, John, ed. Dictionary of Contemporary Music. New York: Dutton, 1974.

AUDIO RECORDINGS (DISCOGRAPHY)

SELECTED TERRY RILEY RECORDINGS

Salome Dances for Peace. Nonesuch 9 79217 1.1989

June Buddhas (Lou Harrison 7 Pastorales) Music Masters 67089-2. 1991

The Padova Concert. Amiatia Arnn 0292. 1992

Persian Surgery Dervishes. (re-issue) New Tone 129806715 2. 1993

Cactus Rosary (NEW WORLD) Artifact Music ART 006. 1993

In C 25th Anniversary Concert. New Albion NA 071. 1993

Chanting the Light of Foresight. New Albion NA 064. 1994

No Man's Land. (revised/reissue) Plainisphere 1267-93. 1996

Lisbon Concert. New Albion NA087. 1996

Poppy Nogood. All Night Flight V.1 Organ of Corti 4. 1996

A Lazy Afternoon Among the Crocodiles. AIAI 008. 1997

The Piano Music of John Adams and Terry Riley. Telarc Cd80513. 1998

Reed Streams. Organ of Corti 2. 1999

Olson III. Organ of Corti 3. 1999

The Book of Abbeyozzud. New Albion Records NA 106. 1999

Tread on The Trail. In Good Company/Jon Gibson Point Records 434-873-2. 1992

Vigil of the Snow Clam. Solar/Helios Sol y Samba Records 001. 1998

Music for the Gift. Organ of Corti 1. 2000

Cortejo Funebre en el Monte Diablo. Kronos Caravan Nonesuch 79490-2. 2000
In C Ictus Live. Cypres 5601. 2000
In C SMCQ live with Walter Boudreau. ATMA ACD22251. 2000
Good Medicine. The Smith Quartet 779-003-2. 2000
In C. The Bang on a Can All Stars. Cantaloup 21004. 2001
Requiem for Adam. Kronos Quartet Nonesuch 79639-2. 2001

SELECTED KRONOS QUARTET RECORDINGS

Kronos Quartet Plays Terry Riley: Salome Dances for Peace. Elektra/Nonesuch 9 79217. 1989.
Kronos Quartet Plays Music of Thelonious Monk. Landmark LLP – 1505. 1985
Kronos Quartet: 25 Years (ten-CD box set) Nonesuch 79504. 1998

SELECTED STEVE REICH RECORDINGS

Drumming. Performed by So Percussion. Cantaloupe Records CA21026
Steve Reich: Works 1965-95, Various artists. Nonesuch Records 79451 (10-CD set)
Including: The Cave (excerpts); City Life; Come Out; Clapping Music; The Desert Music; Different Trains; Drumming; Eight Lines; Electric Counterpoint; Four Organs; The Four Sections; It's Gonna Rain; Music for 18 Musicians; Music for Mallet Instruments, Voices, and Organ; Nagoya Marimbas; New York Counterpoint; Piano Phase; Proverb; Sextet; Six Marimbas; Tehillim; Three Movements.

SELECTED LA MONTE YOUNG RECORDINGS

The Well-Tuned Piano - Young, piano; Gramavision, 18-8701-2 (five CDs).
Just Stompin' (Young's Dorian Blues in G) - Forever Bad Blues Band; Gramavision R2 79487

SELECTED PHILLIP GLASS RECORDINGS

Uakti – Aguas da Amazonia. Point Music, 1999.
The Essential Philip Glass. Sony Masterworks, 1993.

GENERAL INTEREST

Minimal Tendencies (compilation; various artists) Clarinet Classics CC0024 (1998, UK). – Includes Terry Riley's "Tread on the Trail" (7:29).

WEB SITES

Kyle Gann – Scholar, music critic, writer and musician Kyle Gann has written texts and articles on contemporary music and has a section on his site dedicated to La Monte Young and *Just Intonation* - <http://www.kylegann.com>

Kronos Quartet – Concert schedule, biographies, collaborations, history, recordings and more - <http://www.kronosquartet.org>

MELA Foundation – Founded in 1985 in New York City, MELA is a not-for-profit interdisciplinary arts organization designed to encourage creative work in the fields of music, the visual arts, and other media; to explore the applications of advanced technologies to artistic expression; and to present major contemporary works and extended duration art installations that eliminate the boundaries between artistic disciplines. The Foundation is also devoted to the development and maintenance of extensive archives documenting the work of some of the central figures in the world of contemporary art. - <http://melafoundation.org>

New Albion – A Bay Area record label and on-line warehouse for new music - <http://www.newalbion.com>

Steve Reich – Biography, discography, news, articles works - <http://www.steverreich.com>

JEMS: Online Journal of Experimental Music Studies – <http://www.users.waitrose.com/~chobbs/jems.html>, including "Following a Straight Line: La Monte Young" by Dave Smith, originally published in *Contact* 18 (Winter 1977-78), pp 4-9 at <http://www.users.waitrose.com/~chobbs/smithyoung.html>

Obsolete.com – A music Web Site with a section describing the 120-year history of electronic music, including a good bibliography and a links page to all types of electronic instruments, manufacturers, and musicians throughout the genre's history. - http://www.obsolete.com/120_years

Philip Glass Web Site, with a biography, complete works listing, ongoing performances of his work and more. <http://www.philipglass.com>

Pauline Oliveros Foundation – Web site maintained by the Foundation, which is committed to the support of all aspects of the creative process for a worldwide community of artists and was inspired by Pauline Oliveros' philosophy that "Creativity is the vital spirit of public and personal growth" - <http://www.pofinc.org>

Terry Riley - A comprehensive Web site listing his biography, complete works, discography, commissioned pieces, performance schedule, links, contact and CD information. - <http://www.terryriley.com>

VIDEOS

John Adams: Minimalism and Beyond (1992); Produced by Jim Berro; directed by Barrie Gavin. Princeton, NJ: Films for the Humanities and Sciences.

Music with Balls (1969) (10 minutes); Produced and directed by John Coney - Minimalist composer Terry Riley and sculptor Arlo Acton along with director John Coney collaborated to produce one of the most revolutionary Hi-band videos ever made for TV—the masterpiece A Rainbow in Curved Air.

Pandit Pran Nath: In Between The Notes (1986) (30 minutes); Directed by William Farley and photographed by Bill Marpet. Produced by Jim Newman. - Travel to India to discover the roots of the legendary Indian singer, Pandit Pran Nath (1918-1996). The last master of the stately Kirana classical vocal style, Pran Nath profoundly influenced important western avant-garde composers such as Terry Riley and LaMonte Young.

West Coast Story: Frontiers Of New Music (1986) (75 minutes); Directed by Michael MacIntyre; produced by Eva Soltes. - Lou Harrison, John Cage, Henry Cowell...where would contemporary music be without them? Rare footage of these pioneer California composers and their spiritual descendants Robert Erickson, Morton Subotnick, Pauline Oliveros, Terry Riley, Daniel Lentz, Paul Drescher, John Adams, Janis Mattox, and others present a capsule overview of a revolution that rocked the classical world.

BRUCE CONNER FILMS - RILEY SOUNDTRACKS
Looking For Mushrooms (1964, 1976, 1996, 2003) (14 ½ Min; Color) By Bruce Conner; Music by Terry Riley
Crossroads (1976) (36 min; B&W) By Bruce Conner; Music by Patrick Gleeson and Terry Riley

Film Rental Information: CANYON CINEMA, 145 Ninth St., Suite 260, San Francisco California 94103; (415) 626-2255; www.canyoncinema.com

Purchase Information: Michael Kohn Gallery; 8071 Beverly Blvd.; Los Angeles, CA 90048; (323) 658-8088; www.kohngallery.com

SPARK ON CONTEMPORARY MUSIC

Pauline Oliveros, contemporary composer, SPARK story, 2004. Viewable online at <http://www.kqed.org/spark/artists-orgs/paulineoli.jsp>.

Loren Chasse, sound artist, SPARK story, 2003. Viewable online at <http://www.kqed.org/spark/artists-orgs/lorenchass.jsp>, with educational materials.

SECTION IV – BAY AREA FIELD TRIPS

BAY AREA FIELD TRIPS

Center for Contemporary Music at Mills College,
Oakland – One of the country’s foremost
contemporary music programs, including regular
performances for the public –

Center for Contemporary Music
Mills College
5000 MacArthur Blvd.
Oakland, California 94613-1399
510.430.2187

http://www.mills.edu/academics/undergraduate/music/center_contemporary_music.php

Luggage Store – San Francisco-based gallery and
music venue offering experimental and
improvisational music programs–

1007 Market Street
San Francisco, CA 94103
415/255.5971

<http://www.luggagestoregallery.org>

Yerba Buena Center for the Arts – San Francisco art
center hosting contemporary visual art exhibitions,
performing artists, films and videos reflecting the San
Francisco Bay Area’s diverse cultural populations as
well as international artists –

701 Mission Street (@ 3rd)
San Francisco, CA 94103-3138
415/321.1345

<http://www.yerbabuenaarts.org>

Transbay Creative Music Calendar – Event listings
for experimental, improvised, noise, electronic, free-
jazz, avant-garde, modern composition, and other
forms of contemporary sound in the San Francisco
Bay Area – <http://www.transbaycalendar.org>

Meridian Music: Composers in Performance – A
program of the Society for Art Publications of the
Americas, along with Meridian Gallery and Meridian
Interns Program

545 Sutter Street,
San Francisco, CA 94102
415/398.7229

<http://www.meridiangallery.org/MGMusic.htm>

SECTION III – VOCABULARY

Atmosphere

The predominant mood or tone of a work of art

Backing Track

An underlying track or layer of music over which other sounds are expressed

Chordal

Of chords in music, as opposed to rhythmic or melodic content; a chord is a stack of three or more notes played simultaneously or outlined through a segment of time.

Counterpoint

The combination of two or more melodies into one harmonic experience with each melody retaining its own character (**Contrapuntally** - Of or relating to counterpoint)

Cusp

In math, the point at which a curve crosses itself; the point at which the two tangents to a curve coincide. In astrology, the transition between two successive signs or houses. In music, the term cusp can be metaphorically applied to the gradual development of musical or compositional ideas that, like a curve, arise and eventually become codified and named in a structure or system.

Drone

A single sustained note.

Ecstatic

To be in a state of ecstasy or enraptured

Electronic track

In music, this is a layer of music or sound that is used as a compositional element.

Ethnomusicology

The study of music in a socio-cultural context

Evolve

To develop or achieve slowly over time

Foremost

First in time or place

Guru

A personal spiritual teacher

Improviser

Someone who spontaneously invents, composes or recites without preparation

In-Sync

To be in alignment, or synchronous –operating at the same time

Minimalism

A genre of music that emerged in the 1960's, and featured a simplified approach to composition, focusing on pure sound centered around repetition and phasing of musical motives, rhythms, chords or other materials, without changing tempo and making subtle changes over long periods of time.

Movement

A musical term denoting a self-contained section of music in a composition

Multi-Media Piece

A work of art that includes two or more disciplines of media, such as electronic music and video

Note

A tone of definite pitch

Peyote Rattle

A gourd or shaker used by some indigenous populations in rituals and/or ceremonies

Phasing

A method of gradually shifting relationships that result when modal musical material is deployed against itself contrapuntally

Pipa

A Chinese lute

Pundit

A scholar or learned person

Rhythmic cycling

The repetition of a rhythmic motive

Sample

In electronic music, a recorded sound bite used as a compositional element, such as manipulated in timbre, tempo, through repetition or by layering it with other sounds.

Synthesizer

A machine with a simple keyboard that employs solid-state circuitry to create sounds and music, and/or duplicate the sounds of other instruments

SECTION IV – ENGAGING WITH SPARK

STANDARDS-BASED ACTIVITIES & DISCUSSION POINTS

Exploring Minimalism

One of the primary motivations of minimalism was to get to the essence of sound, simplifying music to its essential harmonic and rhythmic states, and thereby eliminating metaphor, so that basically, what you hear is...what you hear.

Select discography recordings by Young, Riley, Reich and Glass. Compare and contrast the different compositional devices they explore and listen for the basic principles of each piece. Listen for:

- ❑ Unchanging harmonic movement
- ❑ Rhythmic repetition
- ❑ Unchanging dynamics
- ❑ Repetition of melodic movement
- ❑ Phasing

Lead a discussion and in-class analysis of minimalist music. Consider the following questions.

- *Can students identify which composer's music is being played?*
- *What kind of instrumentation is being used?*
- *What are the tempos like?*
- *How does this notion of "eliminating metaphor" express itself? Is this true for them as listeners?*
- *How does your appreciation for the music and sounds change over time?*
- *What aspects of the actual sounds do they hear over the course of time? Can they detect overtones?*
- *What is their emotional reaction to the music?*
- *Which compositions do they like best and why?*

Have students choose a minimalist composer to research and prepare a short presentation to the class. Have students include their background, significant contributions to the movement, musical historical background and context, and select one recording of music to be played for the class, to demonstrate the composer's style.

The magic of small things

Watch the Spark episode 21 and pay careful attention as Terry Riley and David Harrington of Kronos Quartet go shopping for objects to use in addition to the toys of David's for the musical score. Using found objects or objects in the classroom, explore the sound of each. Use Riley's notion of the "magic of small things" to uncover unusual or simply unknown aspects of the sound of each object.

Using his piece as inspiration, make a minimalist composition using spoken word and found object sounds. After coming up with a set of interesting sounds from the found objects, see what happens when they are struck together. Are any additional overtones created? As a class, create a simple rhythm that will be continuously repeated using these "instruments". Have one group of students play the rhythmic cycle. Have another individual or small group recite a short phrase or just one word – maybe from some poetry or a writing assignment – on top of the sonic repetition. Keep going for as long as the students are able to keep it together. Have the remaining students observe and take stock of their feelings, emotions, and observations. Change groups so that everyone gets a chance to play and listen.

RELATED STANDARDS

MUSIC

Grade 1 – Artistic Perception

1.2 Identify simple musical forms (e.g. phrase, AB, echo)

1.3 Identify common instruments visually and aurally in a variety of music.

Grade 5 – Aesthetic Valuing

4.1 Identify and analyze differences in tempo and dynamics in contrasting music selections.

Grade 8 - Historical and Cultural Context

3.4 Compare and contrast the distinguishing characteristics of musical genres and styles from a variety of cultures.

SPARKLERS!

- * Explore the physics of sound. What makes an overtone? Every sound that we hear consists of a fundamental tone and also a number of overtones or harmonics. Examine this phenomenon together as a class.
- * Listen to samples of Tuvan throat singers (<http://www.fotuva.org/music>) and hear how they are able to create piercing whistle-like overtones with their mouths while singing. Try this with your students, having them sing a continuous note and gradually changing the placement or shape of their tongue and lips. Examine how overtones are created merely by changing the shape of one's mouth and lips.

Minimalism and Concept Art

La Monte Young's Composition 1960 No. 7 is a musical composition that consists of two notes, B and F# at the bottom of the treble clef, written as whole-notes with ties. Young's instructions for how to play it are: "...to be held for a long time." In 1963 Young organized a 5-hour performance of this piece.

Young also wrote a piece called X for Henry Flynt (1960) in which the performer is to repeat a loud, heavy sound every one to two seconds as uniformly and as regularly as possible, for a long period of time.

These are two examples of minimalism and concept art. Young's underlying theory was that we only begin to appreciate certain aspects of sound after experiencing these single activities over a long period of time.

In Composition 1960 No. 7, one starts to hear some of the fundamentals in addition to the two notes being played. As Terry Riley said, "I was noticing that things didn't sound the same when you heard them more than once. And the more you heard them, the more different they did sound." (Minimalists, Robert Schwartz. p. 35) With each repetition, one is attracted to different permutations and elements of the sound, and even within one room, the acoustics can create different perceptions in different areas.

Try performing one or both of these compositions with your class. In the first, instrumentation doesn't matter, the notes just need to be sustained – even

voices could work. Listen for overtones, but more importantly, tune in to how the music or sounds make you feel. Challenge students to consider the following:

- How does this feeling change over time? Expect it to feel at times exciting, at times boring, sometimes exacerbating, sometimes hypnotic or meditative.
- How does the simplification of the musical event affect your expectations either as a performer or listener?
- What is it like to perform this music?
- Is this music? Why?

Expand this activity with a writing assignment in which students compare and contrast minimalism and concept(ual) movements in music and visual arts. See SPARK stories on Conceptual visual artists:

David Ireland - <http://www.kqed.org/spark/artists-orgs/davidirela.jsp>

Jim Denevan - <http://www.kqed.org/spark/artists-orgs/jimdenevan.jsp>

RELATED STANDARDS

MUSIC

Grade 2

Artistic Perception, Aesthetic Valuing

4.3 Identify how musical elements communicate ideas or moods.

Grades 9-12, Proficient –

Artistic

Perception, Creative Expression, Historical & Cultural Context

1.5 Identify and explain a variety of compositional devices and techniques used to provide unity, variety, tension, and release in aural examples.

2.6 Compose music, using musical elements for expressive effect.

Grade 5 – *Aesthetic Valuing*

4.2 Develop and apply appropriate criteria to support personal preferences for specific musical works

Grade 8

Historical and Cultural Context

Perform music from various cultures and time periods

Grade 9-12, Proficient

Compose, Arrange, and Improvise

2.7 Compose and arrange music for voices or various acoustic or digital/electronic instruments, using appropriate ranges for traditional sources of sound.

Creative Expression

2.6 Compose music in distinct styles