

A cartoon illustration of a young girl with brown hair in pigtails, wearing a yellow pith helmet, a yellow short-sleeved shirt, yellow shorts, and brown boots. She has binoculars hanging from her neck and her hands on her hips. The background is a lush green jungle with various plants and a yellow flower in the bottom right corner.

TEACHER'S GUIDE

LET'S EXPLORE!

Chicago Symphony Orchestra School Concerts • MARCH 16, 2018, 10:15 & 12:00



NEGAUNEE MUSIC INSTITUTE at the
CHICAGO SYMPHONY ORCHESTRA



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Dear Teachers,

Welcome to the Chicago Symphony Orchestra's **Let's Explore** concert. Co-hosted by Emily Graslie, Chief Curiosity Correspondent of The Field Museum, this concert will embark on a journey to discover the connections between field research and musical compositions, explore two iconic specimens—SUE the *T. rex* and Beethoven's Symphony No. 5—and reveal the natural world which exists in our own backyards. We are so pleased the amazing Chicago Symphony Orchestra can be a musical, social and emotional resource for the development of your students.

The live performance will be even more exciting for your students if they are familiar with the repertoire prior to the concert. In addition to exposing your students to this music through the lessons included in this Teacher's Guide, consider additional opportunities for them to hear it during your school day: at the start of your morning routine or during quiet activities, such as journaling. Depending on your teaching schedule, some of the activities in this guide could be completed after your concert, rather than before. Students' enjoyment of this music doesn't have to stop after the performance!

The intent of this curriculum is to engage students with the music and guide them to listen for specific things in each piece. In this document, you will find two lesson plans that can be easily executed by a classroom or music teacher, plus a reflection page for you and your students to complete after you have attended the concert. Our hope is that these lesson plans will serve as an important resource leading up to your day at Symphony Center.

Please look through this document and consider how and when you will use these lesson plans. Some activities may require you to gather materials, so plan accordingly. This document also includes historical content that will help you teach the lessons.

For additional support preparing your students for their concert experience, please request a visit from one of our skilled [Docents](#).

We look forward to seeing you soon at Symphony Center.

Sincerely,
Staff of the Negaunee Music Institute at the
Chicago Symphony Orchestra

LET'S EXPLORE!

ABOUT THE CONCERT:

Can an orchestra save the Peruvian rainforest? Is Beethoven's Symphony No. 5 the *Tyrannosaurus rex* of the classical music world? Co-hosted by Emily Graslie, Chief Curiosity Correspondent of The Field Museum, this program will investigate the fascinating connections between music and the natural world.

The Chicago Symphony Orchestra
Edwin Outwater *conductor*
Emily Graslie *co-host*

Program to include selections from:

FRANK The Mestizo Waltz from Three Latin-American Dances

BEETHOVEN Symphony No. 5

SMETANA The Moldau from *Má vlast*

BATES *Desert Transport*

The engaging activities on the following pages will prepare your students for a fun and rewarding visit to Symphony Center.

LESSON 1: Musical Expeditions



FEATURED REPERTOIRE*

FRANK The Mestizo Waltz from
Three Latin-American Dances

BEETHOVEN Symphony No. 5

SMETANA The Moldau from *Má vlast*

BATES Desert Transport



* **You can access the entire
Spotify® playlist here.**

(free account required) or play
Tracks 14–17 on the provided CD.

ESSENTIAL QUESTIONS:

- How do musical elements (melody, harmony, texture, instrumentation, etc.) depict places and phenomena in our natural world?
- How do composers do field research for their music?
- What do we learn by examining a musical “fossil”?

OBJECTIVES

Students will be able to:

- Analyze how musical elements convey sounds from Perú.
- Compare scientific field research with musical analysis.
- Compare natural resources with musical representations of these places and objects.

EVALUATION

Successful achievement of all activities includes students: analyzing musical elements, comparing field research with musical analysis, comparing natural resources with musical representations and responding expressively to a piece of music through a written or visual art activity.

KEY VOCABULARY

- **Composer** – a person who writes music
- **Composition** – an original piece of music created by a composer
- **Conductor** – a person who leads or directs the performance of an orchestra
- **Dynamics** – how loudly or softly music is played
- **Empathy** – the ability to understand, share the feelings and have curiosity of other people, places and times
- **Expedition** – a journey or voyage undertaken by a group of people with a particular purpose, especially that of exploration or scientific research
- **Field Research (or fieldwork)** – the collection of information outside a laboratory, library or workplace setting
- **Fossil** – an antiquated or stubbornly unchanging person or thing (humorous definition)
- **Harmony** – a combination of pitches sounding together, such as a chord
- **Melody** – a sequence of notes that make a tune
- **Rhythm** – a strong, regular, repeated pattern of sound
- **Specimen** – an example of something, such as a product or piece of work, regarded as typical of its class or group
- **Tempo** – the speed of the music’s beat



MATERIALS

- Musical **recordings** of the featured repertoire listed on the previous page
- **Sound system** for musical excerpts of the concert repertoire (e.g., laptop and speakers, iPhone® dock, Spotify®, etc.)
- **Viewing/Projection Device:** Elmo, overhead, SmartBoard, projectors, whiteboard/chalkboard, laptop for video, etc.
- **Explorer’s Journal**
- **Costume Items** for enhancing the “expedition” adventure, making the educational journey more engaging through Creative Dramatics
- Pencils

Introduction

1. **Hook** the students by asking: “What does it mean to EXPLORE?” (Explore = travel in or through an unfamiliar country or area in order to learn about or familiarize oneself with it). Then **ask** “What is CURIOSITY?” (Curiosity = a quality related to inquisitive thinking such as exploration, investigation and learning, evident by observation in human and animal species.) “Must an explorer have curiosity”? Discuss.
2. **Ask** the students to name things or places they have explored, and then have them list things or places they would like to explore someday. Does curiosity drive their dreams of exploration?
3. **Tell** students that today’s exploration will lead to discoveries about a Peruvian composer and her music, Beethoven’s 5th Symphony, an endangered species river-cruise-adventure and an original sound composition—all forming curious connections between The Field Museum and Chicago Symphony Orchestra.
4. **Engage** the students by introducing them to Emily Graslie, The Field Museum’s Chief Curiosity Correspondent and CSO Concert Co-host, via the [Brain Scoop video clip, Into Perú](#) (stop at 2:37).
5. As a class, **create** an “Expedition Team” name, just like Emily Graslie’s team calls themselves THE ACTION TEAM.



Teaching Steps:

Part I. Let's Explore through Inspiration!

Meet the Composer

1. **Introduce** students to the composer Gabriela Lena Frank by showing a [short video](#) (timing 2:47)
2. Using the **Explorer's Journal**, have students write down their observations about Gabriela Lena Frank. To elicit higher-level thinking, use these prompts:
 - What special gifts does she have?
 - As she explores music composition, what challenges does she face?
 - What Field Research Expedition did she take to help create her Latin music?
 - How does her heritage influence her compositions?
3. **Share** observations with fellow explorers.

Music Connection

4. Let's do some Field Research by pretending to travel to Perú. **Listen** to Gabriela Lena Frank's [Mestizo Waltz from Three Latin-American Dances for Orchestra](#).
5. While listening to the music, list in your **Explorer's Journal** the musical elements that reflect the Peruvian (Latin) musical sounds that inspired Gabriela. To elicit higher-level thinking, use these prompts:
 - What instruments do you hear?
 - Do any instruments remind you of a Peruvian animal that you might see during field research?
 - Does the music's tempo and melody suggest any special activities or sites you might see while in Perú?
6. **Share** observations with fellow explorers.
7. **Ask** students, "Does this music inspire you to tell a story, like Gabriela does through her music?"
8. **Write** a short poem or story inspired by the music or draw a picture showing what you heard.
9. **Display** and **share** students' work.



Part II. Let's Explore through Interpreting Specimens

Meet the Composer

1. **Introduce** students to the composer Ludwig van Beethoven by showing a short video titled "[Beethoven: A Musical Prodigy Who Composed the Sounds of the Modern World](#)" (timing 7:46).
2. As you **watch** the documentary, have students write down their observations about Beethoven in their **Explorer's Journal**. To elicit higher-level thinking, use these prompts:
 - What might his personality have been like?
 - What special gifts did he have?
 - What challenges did he face?
 - How was Beethoven an explorer?
 - What new discoveries did he make?
 - What lasting impression or contribution did he make to our musical history?

Music Connection

3. **Listen** to a short sample of the [first movement of Beethoven's Fifth Symphony](#).
4. While listening to a short excerpt, **ask** students to list observations about the musical specimen in their **Explorer's Journal**. To elicit higher-level thinking, use these prompts:
 - What observations can you make about this musical specimen?
 - Can you hear the "short-short-short-long" note pattern throughout the piece?
 - Count how many times you hear the "short-short-short-long" pattern in this piece.
 - How does this specimen allow music historians to learn more about Beethoven?
 - How and why has this opening rhythm pattern become so famous and memorable?
5. **Share** observations with fellow explorers.
6. **Tell** students, "A field researcher draws sketches of their discoveries. Pretend you have just discovered Beethoven's Fifth Symphony for the very first time! While listening to the Fifth Symphony, **draw** a visual representation of the symphony's "short-short-short-long" melodic pattern.
7. **Ask** students to explore all the ways they can represent the melodic sound by using the following visual graphics: repetition; stronger, darker and lighter lines; straight lines and jagged lines; over-lapping shapes and designs.
8. **Share** observations and visual sketches with fellow explorers.



ASSESSMENT

- **Observe** whether students are analyzing the elements of music from Perú.
- **Observe** whether students are comparing field research with musical analysis.
- **Observe** whether students are able to visually represent the melodic motif in Beethoven's Fifth Symphony.

Common Core Anchor Standards

CCSS.ELA-LITERACY.CCRA.SL.1 Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.

CCSS.ELA-LITERACY.CCRA.SL.2 Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively and orally.

CCSS.ELA-LITERACY.CCRA.SL.4 Present information, findings and supporting evidence such that listeners can follow the line of reasoning and the organization, development and style are appropriate to task, purpose and audience.

Illinois Arts Learning Standards

Music

Anchor Standard 4 Select, analyze and interpret artistic work for presentation.

[MU: Pr4.1.2.d](#) Demonstrate understanding of expressive qualities and how performers use them to convey expressive intent.

Anchor Standard 7 Perceive and Analyze artistic work.

[MU: Re.7.1.2.a](#) Explain and demonstrate how personal interests and experiences influence musical selection for specific purposes.

ILLINOIS SOCIAL AND EMOTIONAL LEARNING STANDARDS:

Goal 1, Standard 1 Develop self-awareness and self-management skills to achieve school and life success

1A.1a: Recognize and accurately label emotions and how they are linked to behavior.

Goal 2, Standard 2 Use social awareness and interpersonal skills to establish and maintain positive relationships.

2A.1b: Use listening skills to identify the feelings and perspectives of others.

EXPLORER'S JOURNAL



Musical Expedition Team Member:

Use this explorer journal to log your ideas, observations and curious thoughts.

First Expedition: *Let's Explore Through Inspiration!*

.....

Meet the composer: Gabriela Lena Frank

Music Connection:
Field Research Inspiration — Poem/Story

Future Research:
What are you still curious about?

Second Expedition: *Let's Explore Through Interpreting Specimens!*

.....

Meet the composer:
Ludwig Van Beethoven

Music Connection:
Fossil Specimen Drawing

Future Research:
What are you still curious about?

LESSON 2: Composition Expedition



FEATURED REPERTOIRE*

SMETANA *The Moldau from Má vlast*

BATES *Desert Transport*



***You can access the entire Spotify® playlist here.**

(free account required) or play Tracks 16–17 on the provided CD.

ESSENTIAL QUESTIONS:

- How do musical elements (melody, harmony, texture, instrumentation, etc.) depict places and phenomena in our natural world?
- How does music help us understand and explore our natural world?
- What are the natural resources around me?
- What can I do to protect and support my natural resources?
- How do composers depict sounds or images from the natural world?

OBJECTIVES

Students will be able to:

- Compare natural resources with musical representations of these places and objects.
- Demonstrate musical moments that depict natural elements through movement.
- Discuss the ways that museums and symphony orchestras are “living” organizations.
- Identify natural elements in their own worlds that make them curious.
- Create a storyboard for an original composition.
- Create original music depicting natural resources.

EVALUATION

Successful achievement of all activities includes students: analyzing musical elements, comparing field research with musical analysis, comparing natural resources with musical representations and responding expressively to a piece of music through a written or visual art activity.

KEY VOCABULARY

- **Composer** – a person who writes music
- **Composition** – an original piece of music created by a composer
- **Curiosity** – the source of inspiration for musicians and scientists.
- **Empathy** – the ability to understand, share the feelings and have curiosity of other people, places and times
- **Excerpt** – a short sample from a piece of music.
- **Field Research, Field Recording, Fieldwork** – the collection of information outside a laboratory, library or workplace setting.



MATERIALS

- Musical **recordings** of the featured repertoire listed on the previous page
- **Sound system** for musical excerpts of the concert repertoire (e.g., laptop and speakers, iPhone® dock, Spotify®, etc.)
- **Viewing/Projection Device:** Elmo, overhead, SmartBoard, projectors, whiteboard/chalkboard, laptop for video, etc.
- **Props** (optional): Scarves, ribbons, flowing fabric.
- Pencils

Introduction


1. **Hook** the students by asking, “What do you think composers are curious about in their worlds?”
2. **Tell** students that two composers, Bedřich Smetana and Mason Bates, were very curious about the parts of the world where they lived so they wrote pieces of music, more than 100 years apart, that sounded like the natural world that surrounded them.
3. **Engage** the students by playing a short excerpt of [The Moldau](#).
4. Have students turn and talk to a partner about what they heard in the music and what kind of natural elements they think are being described in the music. Encourage them to use musical terms to emphasize their ideas.
5. **Invite** students to consider what a modern day composer might use for inspiration when writing music. Explain how living, American composer Mason Bates was very curious about a part of the United States in Arizona called Sedona and Montezuma’s Castle, a cliff dwelling. He wanted to write a composition that would make the listener think of man-made things like machinery and helicopter rotors, and then change it to sound like natural things such as mountains, desert and the music of the native Pima Indian Tribe.

Teaching Steps

Part I.A Let’s Explore through Moving and Imagining

6. **Explain** to the students that they are going to be leaves falling from a tree into a small mountain stream. As the stream goes down the hill toward the river the music will change. The students can use their bodies or ribbons and scarves as they move about the room, demonstrating the flowing of the water past woods, parties, castles and mermaids.
7. **Play** [The Moldau](#) and MOVE to the music!
8. When the piece is over, **discuss** with students what they imagined as they listened to and moved with the music. If this is the first time you’ve asked students to move to music in this way, set up the expectation that the students are demonstrating their listening while they move so they need to focus on what they hear and show it in their bodies. Scarves and ribbons can sometimes help a shy student feel more secure in their movements.

Part I.B Fly Over the Desert


- 
9. **Read** the quote from the composer Mason Bates about how and why he created his piece:
“The piece opens on a desert helipad, with the tempo decisively accelerating like the rotors of the copter, and ultimately travels to the mystical space of Sedona and Montezuma’s Castle (the Indian cliff dwelling). The entire progression is from the mechanistic and industrial to the natural and spiritual. To root the piece properly, I poured over hours of Field Recordings of Indians local to the area, hoping to find some striking melody to include in the piece. The message is that, ultimately, the soul of the Pimas will continue to permeate the Arizona desert long after the helicopters, cars and cities disappear.”
 10. **Play** [Desert Transport](#) and MOVE to the music! Ask the students to pretend to be in a helicopter looking out over the desert. Use your imagination: have the students wear headphones and sit on top of their desks imagining the world below as they fly, or let the students pretend to be the helicopter itself as they lift off the ground and slowly fly through the room.
 11. **Compare** the two pieces of music. **Ask** the students, “How does the music of Mason Bates differ from Smetana’s music?”

Part II Connecting to Our Curiosity: My Composition

Teaching Steps

1. **Display** and **explain** the definition for empathy. **Empathy** — *the ability to understand, share the feelings and have curiosity of other people, places and times.*
2. **Introduce** students to the Kankakee Mallow River Expedition by viewing the following portions of Emily Graslie’s Brain Scoop [video](#). In Emily’s words, this is a “story of hope, a story of action.”
 - Meet the explorers (timing 0:00-49)
 - Part 1 (timing 0:50-2:19) Langham Island
 - Part 2 (timing 2:20-3:07) Signage
 - Part 3 (timing 3:08-4:56) Invasive Species
 - Part 4 (timing 4:57-8:59) The Kankakee Mallow

About the Kankakee mallow: *Here’s some background information from The Field Museum. The Kankakee mallow (*Iliamna remota*) is a rare flower that is endemic to Illinois—meaning, it only grows in the wild in Illinois. And it’s not just found anywhere; the last population was discovered on an island in the Kankakee River. But ten years ago when some botanists went to look for it, they couldn’t find the mallow and feared it had gone extinct. In the last decade volunteers have been working to restore the island to see if the mallow could come back.*
3. **Describe** to students how the Kankakee mallow is an endangered species being protected by a group of concerned people who have formed an organization to preserve a natural resource. They are showing empathy to our environment.

- 
4. **Explain** to students that museums and environmental organizations are led by a group of people who wish to preserve natural resources and historical specimens for the purpose of protecting our world's cultural heritage. **Ask** students, "are these museums and organizations showing empathy to our environment and history?"
 5. **Make** a connection to the orchestra by **displaying** the following questions:
 - How is an orchestra similar to museums and environmental organizations?
 - What is an orchestra attempting to preserve?
 - In what ways do orchestras, museums and environmental organizations show empathy?
 6. **Ask** students to discuss and share in pairs their opinions and observations to the questions.
 7. **Prepare** for the composition activity by **asking** students to brainstorm something they are curious about in the natural world.
 8. **Distribute** the **Curiosity Leads to Empathy** composition template.
 9. **Tell** students to plan a four part story board demonstrating a journey to or through their chosen natural place. Use the **Curiosity Leads to Empathy** composition template to tell the story with words or pictures.
 10. When the template is complete, **ask** students to compose rhythms, sounds or melodies to go with each section of their template.
 11. Have students **present** their compositions to each other, either in small groups or as a class.

***Teacher Tip:** Student compositions can be as simple as a sound effect made on the students' bodies, or letting them use small percussion instruments or xylophones to compose more complex music. Limiting each student's composition to a specified time may help keep this project manageable.*



ASSESSMENT

- **Observe** whether students are successfully analyzing the musical elements in the featured music.
- **Observe** whether students understand that orchestras and museums promote and foster empathy.
- **Observe** whether students are able to plan and implement ideas for an original composition depicting the natural world.

Common Core Anchor Standards

CCSS.ELA-LITERACY.CCRA.SL.1 Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.

CCSS.ELA-LITERACY.CCRA.SL.2 Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively and orally.

CCSS.ELA-LITERACY.CCRA.L.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

Illinois Arts Learning Standards

Music

Anchor Standard 2: Organize and develop artistic ideas and work.

MU:Cr2.1.3 Demonstrate selected musical ideas for a simple improvisation or composition to express intent and describe connection to a specific purpose and context.

Anchor Standard 7: Perceive and analyze artistic work.

MU:Re7.1.4a Demonstrate and explain how selected music connects to and is influenced by specific interests, experiences, purposes or contexts.

ILLINOIS SOCIAL AND EMOTIONAL LEARNING STANDARDS:

Goal 1, Standard 1 Develop self-awareness and self-management skills to achieve school and life success

1A.1a: Recognize and accurately label emotions and how they are linked to behavior.

Goal 2, Standard 2 Use social awareness and interpersonal skills to establish and maintain positive relationships.

2A.1b: Use listening skills to identify the feelings and perspectives of others.

~~~~~

Name: \_\_\_\_\_

# COMPOSITION EXPEDITION



What natural phenomenon makes you curious? \_\_\_\_\_  
In the boxes below write or draw 4 aspects of your choice.

|  |  |
|--|--|
|  |  |
|  |  |



Name: \_\_\_\_\_

Date: \_\_\_\_\_

## ***Let's Explore* POSTCONCERT REFLECTION**

My Expedition Team went to the concert, met the co-host Emily Graslie and heard the Chicago Symphony Orchestra perform.

I remember hearing or seeing these three things:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

This is something I learned at the concert that I didn't know before:

\_\_\_\_\_

I would like to know more about:

\_\_\_\_\_

If I could ask a member of the CSO one thing, I would ask:

\_\_\_\_\_

Write or draw something special that you heard or saw at *Let's Explore!*




# Composer History

**GABRIELA LENA FRANK** is an American composer who was born in 1972. Her father is of Lithuanian and Jewish heritage and her mother is Peruvian and of Chinese descent. Frank's music frequently pulls from her multicultural background and showcases her fascination with identity. Similar to Bela Bartók's exploration of folk music from Hungary and Romania, Frank has traveled throughout South America and incorporates pieces of Latin American culture (poetry, mythology, native musical styles, etc.) into her Western music, creating a truly one-of-a-kind style.

The Mestizo Waltz is the third and final movement of *Three Latin-American Dances*, which the Utah Symphony premiered in 2004. According to Gabriela Lena Frank "this final movement is a lighthearted tribute to the mestizo or mixed-race music of the South American Pacific coast. In particular, it evokes the *romancero* tradition of popular songs and dances that mix influences from indigenous Indian cultures, African slave cultures and western brass bands."

**LUDWIG VAN BEETHOVEN** (say: LOOD-vig van BAY-toe-ven) was born in Bonn, Germany, in 1770. Despite his young age, Beethoven's talent allowed him to travel extensively for performances, and eventually, he was financially supporting his entire family. Beethoven moved to Vienna, Austria, in his early twenties to study with the famous composer Franz Joseph Haydn. While living there, Beethoven also became well-known as a concert pianist. Unfortunately, Beethoven began losing his hearing in his late twenties, which ended his performance career, but as a true testament to his genius, the deafness did not end his composition career. By the last decade of the composer's life, he was almost completely deaf, yet some of Beethoven's most revered works were written during the last fifteen years of his life.

Beethoven's Symphony No. 5 was written between 1804 and 1808, soon after the composer first noticed his hearing deteriorating. Despite the stress and hardship this caused, Beethoven completed what is perhaps the most famous symphony of all time—who hasn't heard the illustrious "short-short-short-long" motif that begins the symphony? This four-note motif is also known as the Fate motif because it is perhaps a symbolic representation of Fate knocking at the door, according to Beethoven's secretary Anton Schindler.



**BEDŘICH SMETANA** (say: BED-reek SMET-ah-nah) was a Czech composer whose music mimicked his country's revolutionary spirit. He was born in 1824 near Prague and was a naturally gifted composer and musician, giving his first public performance at age six. Smetana was unable to establish himself as a performer in Prague and left his politically unstable homeland for Sweden, where he began teaching and composing large-scale orchestral works. A more stable political climate encouraged Smetana to return to Prague in the early 1960s, where he championed the new genre of Czech opera. Like Beethoven, Smetana was deaf for the last decade of his life, but continued to compose until his death in 1884.

The Moldau is the second of six symphonic poems in *Má vlast* ("my homeland"). The six symphonic poems are often performed as *Má vlast*'s six movements, but Smetana actually composed each as an individual work, with each having a separate premiere. The Moldau tells the story of the Vltava River, which is the longest river in the Czech Republic. The music follows the river through the mountains and forests, through the countryside and into the city of Prague, all the while painting pictures of various scenes that the river rushes past: a farmer's wedding celebration, mermaids dancing, castles, ruins and St. John's Rapids.

**MASON BATES** is an American composer who was born in 1977 and grew up in Richmond, Virginia. He studied both composition and piano from a young age and later earned a BA in English literature and an MM in music composition through the Columbia University-Juilliard School program. He received his PhD in composition from the University of California-Berkeley, and while working on his PhD, Bates worked as a DJ in San Francisco clubs. He is one of the most-performed composers of his generation and is especially known for adding electronics to the standard orchestral instrumentation. Bates has composed many notable works, including *Alternative Energy*, which was premiered in 2012 by the Chicago Symphony Orchestra under Zell Music Director Riccardo Muti.

*Desert Transport* premiered at the Arizona Music Festival in 2011 and was inspired by a helicopter flight over the Arizona landscape. Mason Bates describes the music on his blog: "The piece opens on a desert helipad, with the tempo decisively accelerating like the rotors of the copter, and ultimately travels to the mystical space of Sedona and Montezuma's Castle (the Indian cliff dwelling). The entire progression is from the mechanistic and industrial to the natural and spiritual. To root the piece properly, I poured over hours of field recordings of Indians local to the area, hoping to find some striking melody to include in the piece. What I found was astonishing: a group of Pima Indians singing "Mountain By the Sea" in such an earthy, heartfelt manner that I decided not only to quote the melody, but to include the recording itself in the piece. Near the end of *Desert Transport*, when the music retreats into a mystical, ambient space, the field recording floats in from an offstage speaker. The message is that, ultimately, the soul of the Pimas will continue to permeate the Arizona desert long after the helicopters, cars and cities disappear."

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## Resources from the Negaunee Music Institute at the CSO:

In addition to creating this Teacher's Guide, the CSO has also created a Parent Guide. Send [this link](#) to your students' families so they can continue their preparation for the concert at home.

## Additional Resources

Enrichment and Connections:

Beethoven Lives Upstairs – Book and DVD

Book: *The 39 Apartments of Ludwig Van Beethoven*, by Jonah Winter

Book: *The Field Mouse and the Dinosaur Named Sue*, by Jan Wahl

Video: [Emily's Recommended Reading List](#) to "broaden your horizons and pique your curiosity."

[The Brain Scoop](#)

[SUE Educator Guide](#) from The Field Museum

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