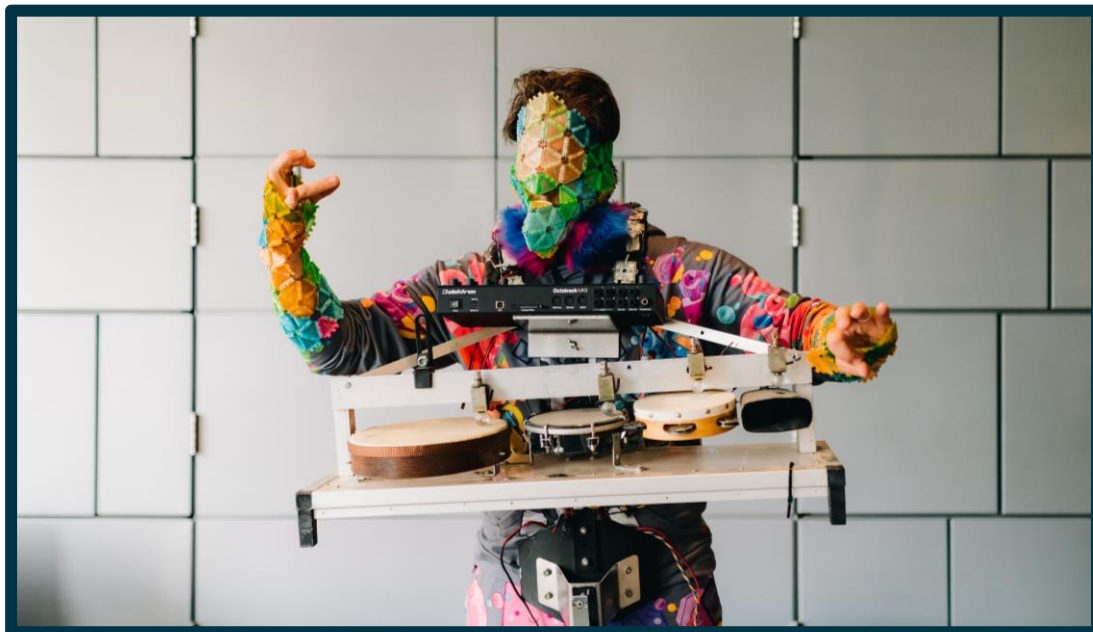


Robot Rickshaw

Supporting Materials Packet



Robot Rickshaw (Troy Rogers)

Photo Credit: Jenny Cvek

About the Performer:

Robot Rickshaw began as a cart full of musical robots designed, built, and operated by their human creator, Troy Rogers. The robot ensemble includes wearable electronic elements that transform their human host into a futuristic persona, through the incorporation of sensors, actuators, and voice modulation technologies.

For the 2024-25 season, Robot Rickshaw descends to earth in the form of an alien from another planet with a special message. The entertaining and educational performance features a suite of experimental love songs "for the robotic remnants of other failed planets" performed by an ensemble of robotic instruments.

Learning Goals:

1. Students will understand that electronic and computational technologies can produce a wide variety of musical sounds.
2. Students will understand basic concepts of acoustics and digital representations of sound.
3. Students will understand that scientifically gathered data can be transformed into sound and used to create music.

Preparing for your Class Notes Concert

Thank you for signing up for a Class Notes Concert, brought to you by YourClassical MPR!

The Class Notes team has created two resources to help prepare for and extend the Class Notes Concerts experience:

1. **Meet the Artist PowerPoint.** Build excitement for the concert by introducing the ensemble in advance. Students will learn key information like instrumentation and style of music.
2. **Supporting Materials Packet.** The lessons in this packet come from the [Class Notes Lesson Library](#). The first lesson is designed to be a starting point for discussing audience behavior prior to the concert. All other lessons align with learning objectives for this artist. Use these before the concert to introduce an important musical concept or after the experience to reinforce learning. Every classroom is different. Teachers should customize all content to fit student needs.

After your Class Notes Concert, please fill out our teacher survey and have your students complete our student survey. Class Notes staff will send a link with instructions after your concert.

PACKET CONTENTS

- 1) What is an AUDIENCE?
- 2) What is MUSIC?
- 3) Virtual Concert: Robot Rickshaw
- 4) Create Your Own Instrument



What is an AUDIENCE?

Age Range:	Elementary, Grades K-3
Learning Objective:	Students will demonstrate active listening and positive audience behavior in a concert setting.
Total Video Time:	5:29

INTRODUCE the concept of audience

1. Ask, "Have you ever been to a concert or performance?" Allow students time to respond.
2. Explain, "There are two main jobs at a concert: the job of the *performer*, and the job of the *audience*."
3. Ask students to share with a classmate about a time they watched a performance. What did the performer do? What did the audience do?

After some time for students to discuss with each other, encourage students to share out their experiences with the class, supporting and validating the variety of experiences.

4. Remind students, "There are many kinds of audiences. The type of concert influences how an audience responds."
5. As a classroom, create a chart listing positive and respectful audience behavior. Use the [sample chart](#) as a starting point.

LEARN about being an audience

1. Explain, "Sometimes an audience will dance and sing along with a performer. Sometimes it's the job of an audience to listen and notice as many sounds as possible. When we need to notice sounds, our own voices and body wiggles can keep us from hearing the performer. So it can be helpful to let out some wiggles and sounds before listening."
2. Learn to sing a song about being in the audience: "We Are The Audience." (Download the score [here](#).)
3. Watch our Class Notes Video: [What to do at a Concert](#).

EXTEND learning about being an audience

Choose one or more activities to extend learning.

1. Practice audience skills by utilizing one of our [Class Notes Virtual Concerts](#). In these lessons, teachers play the role of Concert Host, and students play the role of the audience.
2. Hold your own classroom concert! Assign performers, audience members, and observers. The job of the observers is to notice good audience behavior. (i.e. "I noticed STUDENT was watching the performer and not talking!")



Visuals: What is an AUDIENCE?

We Are the Audience when....

- We **listen to** and **notice** sounds.
- We research in advance: Who is visiting your school? Where are they from? What type of music can you expect?
- We follow directions on where and how to sit so you can see and hear.
- We are curious! What questions would you ask the performer?
- We notice the *timbre*, or unique and special sounds, made by each instrument or voice.
- We make predictions. What do you think will happen next?
- We share your experience with someone at home.
- We show appreciation at the end by clapping.



Visuals: What is an AUDIENCE?

We Are the Audience

K. Condon

Voice

We are the aud - i - ence, it's our job to li - i - sten, Let all your

6

wi - ggles out be - fore the mu - sic be - e - gins. (WIGGLE!!!) We are the

11

aud - i - ence, it's our job to li - i - sten. Feel your bo - dy qui - et down,

16

so sounds can co - ome in.

Suggestion for song usage:

The first time the song is introduced, ask students to watch and listen, and encourage them to keep a steady beat (maybe by rhythmically bouncing one fist on top of another.) Perform just the first half of the song. When you get to the “wiggle” part, ask them to join you. Repeat the first part of the song again- this time they can join you in the singing. After the second wiggle, explain, “This time the song starts the same, but ends differently.” Slow down and get considerably quieter on “Feel your body quiet down...” so that you are at a slow whisper by the end of the song.



MUSIC FUNDAMENTALS: What is MUSIC?

Age Range: Elementary, Grades 2-6

Learning Objective: Students will participate in a discussion about the definition of music and support their opinions with evidence.

Total Listening Time: 11:51

DISCUSS what music is

1. Discuss in class: what is music?
2. The composer John Cage said that music is simply “organization of sound.”
3. All of these objects make sound. Could they all make music? Why, or why not?
 - [Bucket](#)
 - [French horn](#)
 - [Bell](#)
 - [Cannon](#)
4. What about this: do you think this is an instrument? (Show [picture of a washing machine](#).)
5. A band named Matmos decided to create an album using only sounds recorded from a washing machine. You can listen to a little bit of it [here](#). Remember—every sound you hear was originally created by a washing machine.

LISTEN to examples of sound/music

1. Create a journal or log entry template for students. See a sample template on the next page of this packet.
2. Ask students to listen to all or a selection of the following examples:
 - A [baby music box](#)
 - A [hyena laughing](#)
 - A [meadowlark](#) singing
 - This [drum loop](#)
 - This performance of [4'33" by John Cage](#)
 - Include some student ideas
3. After listening to some examples, ask students to create their own list of criteria for music, or write a definition.
4. Share your findings in class. Ask each student to choose one entry to tell a partner or begin or end class with one student reporting to the whole group.
5. For older students, compare and contrast two separate listening entries. What elements do they have in common? What is different? Do those differences make a difference when it comes to deciding about whether something is music or not?

What is MUSIC? Listening Worksheet

Name: _____

Listen to several sounds and write down what you notice.

Name of piece: _____

Description: _____

Is it music? Why or why not? _____

Name of piece: _____

Description: _____

Is it music? Why or why not? _____

Name of piece: _____

Description: _____

Is it music? Why or why not? _____

After listening to all of these, what do you think makes something music?



VIRTUAL CONCERT: Robot Rickshaw

Age Range:	Elementary, Middle School; Grades K-8
Learning Objective:	Students will listen and respond to original music by musician Robot Rickshaw.
Total Video Time:	25:13

HOW TO USE Virtual Concerts

Virtual Concerts give students the opportunity to be an audience and experience a variety of music. The teacher or students play the role of Concert Host narrating between each piece.

Use the provided Concert Host Script to guide students through a series of videos reenacting a concert. Customize the lesson to fit your needs, resources, and teaching style.

CUSTOMIZE the experience

Every classroom is unique. Choose among the following ideas to make the experience fit your teaching style and your students' needs.

- 1. Discuss the role of the audience.** This virtual concert is designed to prepare students to be an audience. For younger kids, use our [Audience Lesson](#) before this concert. For older students, facilitate a discussion on the different kinds of audiences for events such as a rock concert, a hockey game, a piano recital, etc.
- 2. Let the students be the Concert Host.** Cut the script into strips and hand them out to different students. Be sure to number the strips first, so you can call kids up at the appropriate time. *(Recommended for Grades 4 and up.)*
- 3. Make the experience interactive.** Pause for reflection after each video to discuss the reflection questions from the provided worksheet. Invite students to share their thoughts with a neighbor, so everyone gets a chance to talk. Older students can fill out the Concert Reflection Worksheet. *(Recommended for all ages.)*
- 4. Show clips instead of the whole video.** Younger kids may have a hard time focusing on longer pieces. Either show only part of the longer videos, OR offer an activity (like drawing a picture) to help focus their energy while listening. *(Recommended for Grades K-2)*

EXTEND learning

Choose one or more of the following activities to extend learning.

1. Write down or tell someone three things you learned from Robot Rickshaw's concert.
2. Learn more about timbre with [this lesson](#), and about melody with [this lesson](#).

Concert Host Script

ROBOT RICKSHAW

HOST: "Welcome to today's virtual concert. Today's concert features a composer who builds robots that create music. His real name is Troy, but when he performs with his robotic instruments, he is called Robot Rickshaw."

VISUAL: [Picture of Troy Rogers / Robot Rickshaw](#)

HOST: "In this first video, listen as Troy introduces himself and tells a little about Robot Rickshaw."

VIDEO: [Class Notes: Robot Rickshaw – Explainer](#) (4 min.)

HOST: "Let's listen as Robot Rickshaw plays a piece called Mechaglossolalia [meh-kah-gloss-oh-LAY-lee-ah] v.2. As you listen, see how many instruments or parts of instruments you notice."

VIDEO: [Class Notes: Robot Rickshaw – Mechaglossolalia v.2](#) (6 min.)

HOST: "Can anyone name an instrument they saw or heard?" (Pause for students to share.) "Some of the instruments you named are 'unpitched.' Can you predict what that means? Listen as Troy explains what 'unpitched' means and shows us those unpitched instruments."

VIDEO: [Class Notes: Robot Rickshaw – Unpitched Instruments](#) (5 min.)

HOST: "So, if some instruments are 'unpitched,' others are 'pitched.' Next, Troy explains what 'pitched' instruments are and tells us a little more about the pitched instruments on Robot Rickshaw."

VIDEO: [Class Notes: Robot Rickshaw – Pitched Instruments](#) (6 min.)

HOST: "Now, let's hear Robot Rickshaw play one more piece. See if you can notice the difference in sound between pitched and unpitched."

VIDEO: [Class Notes: Robot Rickshaw – Demonstration](#) (4.5 min.)

HOST: "Thank you for attending today's virtual concert. We hope you enjoyed listening to and learning from Robot Rickshaw, and we hope you'll share what you learned with someone else today."



Create Your Own Instrument

Age Range: All Ages, Grades K-12

Introduction: In this activity, you will use everyday objects to explore timbre and create your own instrument. Actively listening to different sounds builds sound discrimination skills.

Total Video Time: 4:50

- Gather as much junk as you can, raiding the recycling bin or cleaning out a closet. Make sure your collection of junk represents a wide variety of materials. Here are a few ideas of things that will work well:
 - Empty yogurt tubs with lids (make sure you clean them out first)
 - Metal coffee cans or any kind of corrugated tin
 - Pencils
 - Rubber bands
 - Cereal boxes
 - Spiral notebooks
 - Wooden spoons
 - Cardboard tubes from a used roll of toilet paper or paper towels
- Explore all the different kinds of sounds you can make with your collections. For example, an easy way to make a sound on the yogurt container like a drum. Can you find other ways to make a sound with the same object? Try filling it with various objects and shaking it. Compare the difference in sound between shaking a container full of pennies and a container full of rubber bands and a container full of cotton balls. (Cotton balls are really quiet - listen carefully and you will hear them.) Using a pencil, tap in different spots on the container to discover different sounds on the same object.
- Sort all of your objects according to sound. Decide on categories, such as "metal," "wood," "plastic," and "paper." Label a box or plastic tub with each category name and store their found-object percussion instruments. Be prepared to make some decisions together: should cardboard be included in the "paper" category or should it have its own category?
- Create an inventory or list of your sorted instruments. A completed example might look like this:

Plastic Sounds	Wood Sounds	Paper Sounds	Metal Sounds
Yogurt tub with lid Empty milk jug Rubber bands	Ruler Pencils Chopsticks	Empty paper towel roll Cereal box Shoe box	Empty soup can Metal spoon Pennies

- Sing a favorite song and use one of your new found-object instruments for accompaniment!
- Watch the percussion group STOMP as they use everyday objects in all their performances. In the [first video](#) they play a piece with the Harlem Globetrotters, using only basketballs. In the [second](#), they use brooms and trash cans to make music. After watching, ask, "Does watching this make you want to add some instruments to your collection?"