

The Orchestra at Work

For 1st-4th grades



Lesson 1 — *The Orchestra at Work*

Objective

Students will learn how each member of the orchestra (onstage and behind-the-scenes) contributes to a successful performance. Students will listen to an excerpt from Movement 3 of Tchaikovsky's Symphony No. 6 and identify the instruments and instrument families by sound in the piece. Students will make a sound map to demonstrate their understanding.

Suggested Materials

- Orchestra at Work cards (included)
- 4 Instrument Families graphics (included)
- Instruments of the Orchestra demos: <https://www.mydso.com/dso-kids/learn-and-listen/instruments>
- Recording of Tchaikovsky's Symphony No. 6, Mvmt. III Time Stamp: 32:49-36:58 (audio links can be found at [youtube.com/user/BfloPhilharmonic](https://www.youtube.com/user/BfloPhilharmonic))

New York State Arts Standards

MU:Re7.2.1a MU:Re7.2.2a MU:Re7.2.3a MU:Re7.2.4a
MU:Re8.1.1a MU:Re8.1.2a MU:Re8.1.3a MU:Re8.1.4a

New York State Career Development and Occupational Studies Standards

- 1 - Career Development
- 2 – Integrated Learning

New York State English Language Arts & Literacy Standards

Reading, Standard 1, 2, & 4
Writing, Standard 2
Speaking & Listening, Standard 1, 2 & 4
Language, Standard 1

Procedure

PART 1: Roles in the Orchestra

- 1) Introduce the BPO orchestra community and invite the students to explore the people who make up this community. Everyone has to work together as a team! Start with a discussion. Some suggested discussion questions could be – What types of jobs or roles do you imagine in an orchestra? Are all orchestra community members on stage during a performance? Does everyone who works in an orchestra have to have the same skills and training?
- 2) Share the Orchestra at Work cards that describe selected BPO members and their roles (print and fold in half to make a card with a front and a back). You can put students into groups and give each group a card. Or you can explore each card together as a class.
- 3) The most visible members of the Buffalo Philharmonic community are on stage during a concert. But there are many others who work off stage as well. Start by deciding whether each person on a card works on stage or off stage. Then, read the facts on the back of each card (as a class or in groups) and discuss the questions that are included. When exploring the musician cards and discussing the instruments of the orchestra, you may utilize the Instrument Demos videos, as appropriate for your class. Make sure students are familiar with the sounds of each instrument family!

Lesson 1 — *The Orchestra at Work* (continued)

PART 2: Listening Exercise – The Orchestra at Work

- 4) The most prominent job in the orchestra is that of the musicians! Their role is to perform the music written by the composer. Make sure students are familiar with the sounds of each instrument family before doing this part of the lesson. You can use the Instrument Demos links provided above, if necessary.
- 5) Play a recording of an excerpt from Movement 3 of Tchaikovsky's Symphony No. 6 (Time Stamp: 32:49-36:58) (see audio links). Ask students to listen carefully to the different timbres created by each instrument family playing together. Provide the Instrument Families handouts, if necessary, for reference. Guide students in identifying the instruments they are hearing (at the beginning the strings have the melody with woodwinds and brass accompanying, then a timpani roll leads into each instrument section entering with the main melodic theme again.) Ask students to notice how each section of the orchestra works together. Sometimes they are all playing together, other times one section may support another, sometimes one section is featured, etc. But at all times, everyone is part of the same team.
- 6) This was the last symphony Tchaikovsky wrote. He entitled the work, "The Passionate Symphony," meaning "emotional." The work as a whole represents the story of life and the many emotions that one experiences throughout their lifetime. The third movement presents a triumphant brass-reinforced march with rapid, aggressive rhythms. Discuss: How does this music sound? What do you think the composer Tchaikovsky was trying to express and how does his selection of instruments help achieve this?
- 7) Create a sound map as a class, showing the instruments and/or instrument families in the order as they are heard in the piece. Include any other musical elements students hear that help show the dramatic effect as the piece unfolds.

STRINGS

Violin



Viola



Cello



Bass



Flute



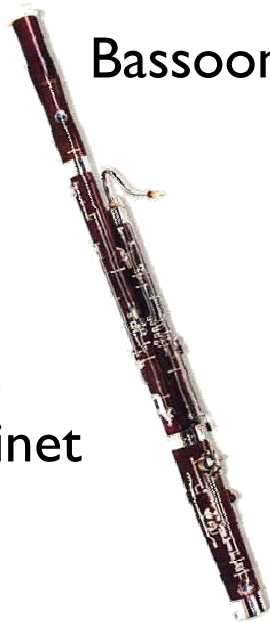
Oboe



Clarinet



Bassoon



WOODWINDS

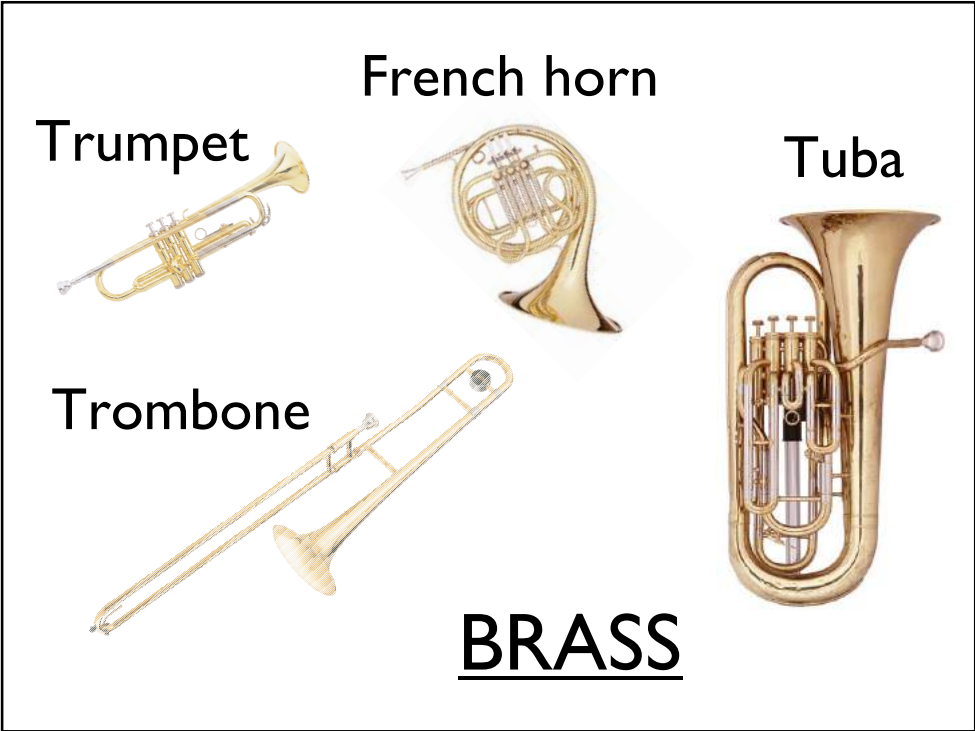
French horn

Trumpet

Tuba

Trombone

BRASS

A collection of four brass instruments: a trumpet, a French horn, a tuba, and a trombone. The instruments are arranged in a grid-like fashion. The trumpet is in the top left, the French horn is in the top middle, the tuba is in the top right, and the trombone is in the bottom left. The word "BRASS" is written in large, bold, black letters at the bottom center, underlined.

Chimes

Triangle

Tambourine

Snare drum

Timpani

PERCUSSION

A collection of five percussion instruments: a snare drum, chimes, a triangle, a tambourine, and a timpani. The snare drum is on the left, the chimes are in the center, the triangle is on the right, the tambourine is below the triangle, and the timpani is at the bottom right. The word "PERCUSSION" is written in large, bold, black letters at the bottom left, underlined.



ADAM
box office manager

The Orchestra at Work

1 Adam — box office manager

Workplace: Kleinhans Music Hall

Number of years at BPO: 11 years

Favorite piece of orchestral music: Smetana's *The Moldau*

Biggest challenge of the job: Keeping track of over 75 performances each year!

Favorite part of the job: Seeing the hall filled with people for a performance

Favorite hobby: Bicycling around Buffalo

Adam runs the Box Office, where he and his staff sell tickets to all of the BPO's concerts and events. He keeps track of every single performance and every single ticket sold. That's over 100,000 tickets each year! Luckily, he has computer programs to help him keep track of everything.

- What special skills do you think Adam needs for this job?
- Did Adam need to study music to do this job?
- What would happen if Adam and his box office staff didn't do their job?



AL
head usher



The Orchestra at Work

2 AI — head usher

Workplace: Kleinhans Music Hall

Number of years at BPO: 2nd year

Favorite piece of orchestral music: Tchaikovsky's 1812 Overture

Biggest challenge of the job: Coordinating the schedules of over 120 volunteers.

Favorite part of the job: Getting to know our volunteer ushers, over 120 of them.

Favorite hobby: Going out to dinner at restaurants in Buffalo.

AI oversees the ushers at every concert at Kleinhans. The ushers are the people who greet you when you come in and help you find your seats in the Hall.

AI trains them and ensures that each performance has plenty of helpers. He and the ushers make sure that every person who comes into Kleinhans Music Hall feels welcome and taken care of.

- What special skills do you think AI needs for this job?
- Did AI need to study music to do this job?
- What would happen if AI and his team of ushers didn't do their job?

The Orchestra at Work

3 Charlie — *stagehand*

Workplace: Kleinhans Music Hall

Number of years at BPO: 37 years

Favorite piece of orchestral music: Tchaikovsky's 1812 Overture

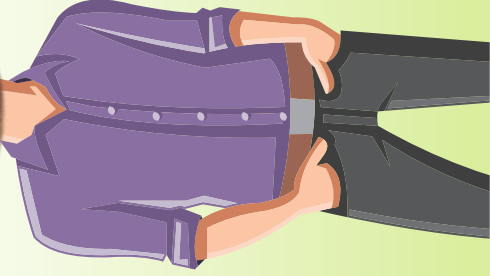
Biggest challenge of the job: Setting up and taking down all of the chairs, stands and musical instruments for an orchestra performance

Favorite part of the job: Listening to the orchestra perform!

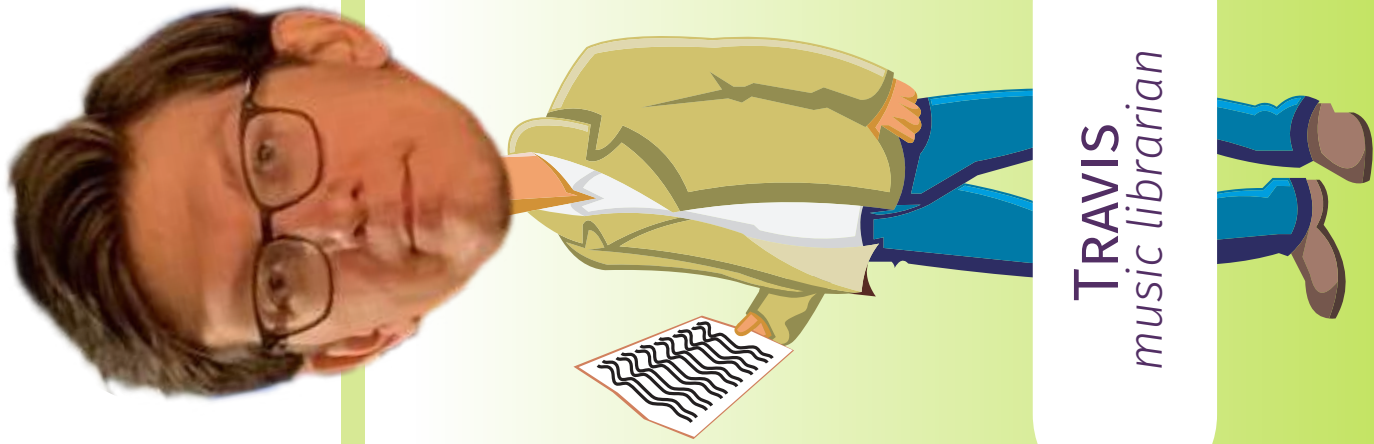
Favorite hobby: Bowling

Charlie comes to every rehearsal and concert very early so that he and the other stagehands can set up the stage. He makes sure that all 73 BPO musicians have everything that they need to perform, from the chairs they sit on to the lights on their stands. He also moves large instruments and equipment. Sometimes he builds or repairs things on stage.

- What special skills do you think Charlie needs for this job?
- Did Charlie need to study music to do this job?
- What would happen if Charlie didn't do his job?



CHARLIE
stagehand



TRAVIS
music librarian

The Orchestra at Work

4 Travis — music librarian



Workplace: Kleinhans Music Hall

Number of years at BPO: 11 years

Favorite piece of orchestral music: Whatever we happen to be working on at the moment. There are too many to list!

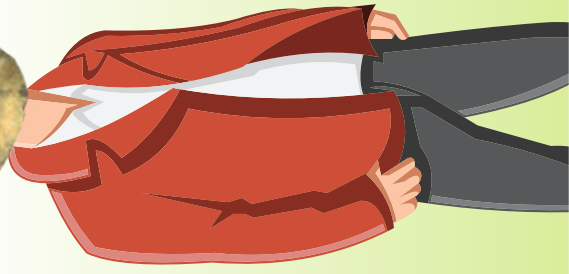
Biggest challenge of the job: Making sure the right piece of music is in the right place at the right time

Favorite part of the job: The experience of creating with my talented colleagues

Favorite hobby: Hiking with my kids

Travis oversees the BPO's music library which has over 2,000 pieces of music. He makes sure that each musician has all of the parts they need for each concert. Sometimes the orchestra plays up to four different concerts in a week! Any special markings that are needed in the music are put in by the librarians (there are two librarians at the BPO). They also have to make corrections in the parts if there are any wrong notes.

- What special skills do you think Travis needs for this job?
- Did Travis need to study music to do this job?
- What would happen if the music librarians didn't do their job?



TCHAIKOVSKY
composer



The Orchestra at Work

5 Tchaikovsky — composer

Workplace: Mainly in Moscow, Russia

Number of years at BPO: Since age 4, so for 49 years.

Favorite piece of orchestral music: Music by Wolfgang Amadeus Mozart

Biggest challenge of the job: Getting his home country of Russia to enjoy his music

Favorite part of the job: Writing music that makes listeners experience different emotions

Favorite hobby: Playing piano and cards with friends

Tchaikovsky started composing music when he was four years old and became one of the most influential and prolific Russian composers, whose music would make a lasting impression internationally. His music is beloved by many for its ability to convey the joys, loves, and sorrows of the human heart, drawing out great emotion from listeners, especially in his operas and ballets. Today, much of his music is used in popular music and film.

- What special skills do you think a composer needs for this job?
- If you composed a piece, what choices would you need to make in order to create the music?
- What would happen if there were no composers of music? What would a concert be like?

The Orchestra at Work

6 Amy — concertmaster — violin



AMY
concertmaster — violin

Workplace: Kleinhans Music Hall

Number of years at BPO: 22 years

Favorite piece of orchestral music: Prokofiev's *Romeo and Juliet*

Biggest challenge of the job: Trying to find enough time to practice!

Favorite part of the job: Playing for happy audiences

Favorite hobby: Canoeing

Amy is the concertmaster, which means she plays first violin in the orchestra. Not only is she the leader of the first violins, she also tunes the orchestra at the beginning of the concert and she often has solo parts during the performance. Do you notice how all of the violinists' bows move in the same direction up and down together? Amy decides the directions — it's called bowings. She is a leader for all of the musicians, often serving as a liaison between them and the conductor during rehearsals.

- What instrument family does Amy's violin belong to?
- What other instruments belong in this instrument family?
- Using the instrument demos at www.mydso.com/dso-kids/learn-and-listen/instruments Listen to the sounds of the instruments in this family. What is unique about the instruments in a string family and what do they contribute to the orchestra?
- What special skills do you think Amy needs for this job?
- In an orchestra, the instrument family with the largest number of players is the string family. Why do you think the other instruments might not have as many players?
- What would happen if Amy didn't do her job?

The Orchestra at Work

7 Christine — flute

Workplace: Kleinhans Music Hall

Number of years at BPO: 26 years

Favorite piece of orchestral music: Anything by the composer Prokofiev

Biggest challenge of the job: Juggling the rehearsal and concert schedule

Favorite part of the job: Creating friendships with new members of the woodwind section

Favorite hobby:

Reading with my book club and cooking/baking

Christine plays first flute in the orchestra, which is also called principal flute. Each instrument in the woodwinds has a principal, a second player, and a third player who also plays an auxiliary instrument. In the flute section, the third player also plays piccolo. Like all of the musicians, Christine has to learn all of the notes, dynamics and tempos for each piece before the rehearsals begin for that concert. That way she is prepared to play together with the orchestra.

- What instrument family does Christine's flute belong to?
- What other instruments belong in this family?
- Using the instrument demos at www.mydso.com/dso-kids/learn-and-listen/ instruments listen to the sounds of the instruments in this family. What is unique about the instruments in the woodwind family and what do they contribute to the orchestra?
- Can you decide which instrument section these auxiliary instruments belong to? English horn, contrabassoon and bass clarinet.
- What special skills do you think Christine needs for this job?
- What would happen if Christine and her section didn't prepare their music ahead of time?



CHRISTINE
flute

The Orchestra at Work

8 Alex — trumpet



Workplace: Kleinhans Music Hall

Number of years at BPO: 23 years

Favorite piece of orchestral music: Stravinsky's *Firebird*, or Mussorgsky/Ravel's *Pictures at an Exhibition*

Biggest challenge of the job: Keeping my “chops” in top condition throughout the season

Favorite part of the job: Collaborating with colleagues in the music making process

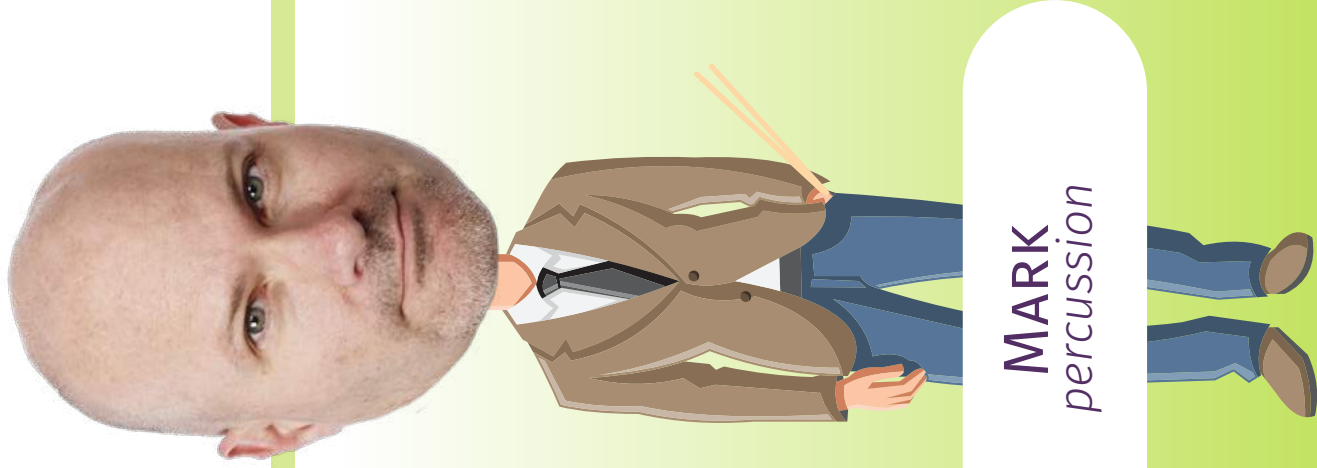
Favorite hobby:
Golf

Alex plays first trumpet in the orchestra, which is also called the principal trumpet. In addition to leading the trumpets, he also leads the brass section. Because of the special way that brass players make sound by buzzing their lips into their instruments, Alex and others in his section have to warm up before they play in a rehearsal or concert. They do this by playing long notes for a while and then gradually expanding their range of higher and lower notes. Musicians are like athletes in this way. They need to warm themselves up before jumping right into their activity.

- What other instruments belong in this instrument family?
- Using the instrument demos at www.mydso.com/dso-kids/learn-and-listen/instruments listen to the sounds of the instruments in this family. What is unique about the instruments in the brass family and what do they contribute to the orchestra?
- What special skills do you think Alex needs for this job?
- What might happen if Alex and his section didn't warm up before playing?

The Orchestra at Work

9 Mark — percussion



Workplace: Kleinhans Music Hall

Number of years at BPO: 23 years

Favorite piece of orchestral music: Anything that has a drum set in it!

Biggest challenge of the job: Playing percussion really, really soft

Favorite part of the job: Banging on things all day!

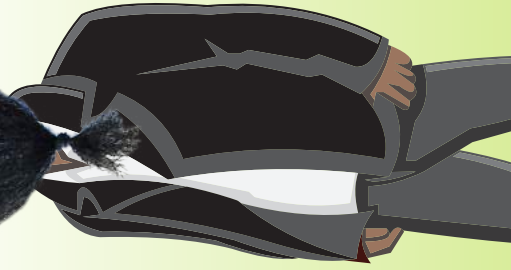
Favorite hobby: Traveling around the world

Mark is the principal percussionist in the orchestra. The percussionists play lots and lots of different instruments. Some are unpitched like the snare drum and the maracas, and others are pitched like the xylophone and the chimes. There are so many percussion instruments, we can't really list them all. Mark and the other percussionists often have several different instrument parts to read during one piece. One very important percussion instrument in the orchestra is the timpani (sometimes called the kettle drums) which is a set of drums that have different pitches!

- Can you name other unpitched percussion instruments that belong in this family? How about other pitched instruments in this family?
- Using the instrument demos at www.mydso.com/dso-kids/learn-and-listen/ instruments listen to the sounds of the instruments in this family. What is unique about the instruments in the percussion family and what do they contribute to the orchestra?
- What special skills do you think Mark needs for this job?
- What would happen if Mark and the other percussionists didn't do their job?



JAMAN
conductor



10 Jaman — *conductor*

Workplace: Kleinhans Music Hall

Number of years at BPO: 4th year

Favorite piece of orchestral music: Right now it is Adolphus Hailstork's Symphony No. 2, but it often changes!

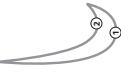
Biggest challenge of the job: Practicing conducting without an orchestra

Favorite part of the job: Conducting and performing for young audience members like you!

Favorite hobby: Video games

Jaman is the conductor, which means it is his job to lead the whole orchestra during a performance. He has to learn all of the pieces of music before the orchestra rehearses together. He studies the score, which shows every single musician's part, all together. When he stands on the podium in front of the orchestra, he uses a baton to show the tempo and meter. He can also demonstrate the dynamics and the mood of the music through his movements and facial expressions. The musicians watch him, which helps them play together and express the music in the same way as a team.

- What special skills do you think Jaman needs for this job?
- What might happen if Jaman didn't conduct the orchestra in the correct meter?
- Can you conduct in 2 and 3?



Conducting patterns:
Duple pattern (in two):



Triple pattern (in three):

The Orchestra at Work

11 You — *the audience*

Draw yourself here

You
the audience

Name:

School:

Attended a concert before:

Favorite music:

What I look forward to at a concert:

Favorite hobby:

The audience plays a really important role in any performance. A concert wouldn't be the same if there was no one there to listen and enjoy the music. A good audience is attentive and engaged in the music. They don't talk to their neighbors while the musicians are performing and they show their appreciation when the music stops by clapping and sometimes by cheering if they really enjoyed it.

- What special skills do you need to use to be a good audience member?
- Do you need to study music to be a good audience member?
- What would happen if you didn't do your part as a good audience member?