



Unit 2

The Orchestra

Meet the composer, and explore the four instrument families of the orchestra, as well as pitch and timbre. Apply learning through Listening Challenges, reflective writing, and visual identification games.

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"Tideo," traditional American song. Performed by Sue Landis and Shane Schag.

"De Colores," traditional Mexican song. Performed by Sue Landis and Shane Schag.

"Ode to Joy" by Ludwig van Beethoven. Adapted by John Whitney. Performed by Sue Landis and Shane Schag.

"Au Claire de la lune" by Claude Debussy. Arranged by Richard Mannoia. Performed by Sue Landis.

"Hot Cross Buns," traditional American song. Performed by Sue Landis.

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Unit 2: The Orchestra

Elvis: Wow! The musicians in the orchestra are playing so many different instruments. How are they organized?

Violet: My aunt knows all about the instruments, but I don't think she can help us since she's about to start a rehearsal. But let's keep looking for Gino, the Carnegie Hall cat. He knows a lot about music.

Elvis: There he is!



Violet: Hi there. We're Elvis and Violet, and we're so happy you found Gino, because we are curious about all those instruments. We heard Gino knows a lot about music and can help us.

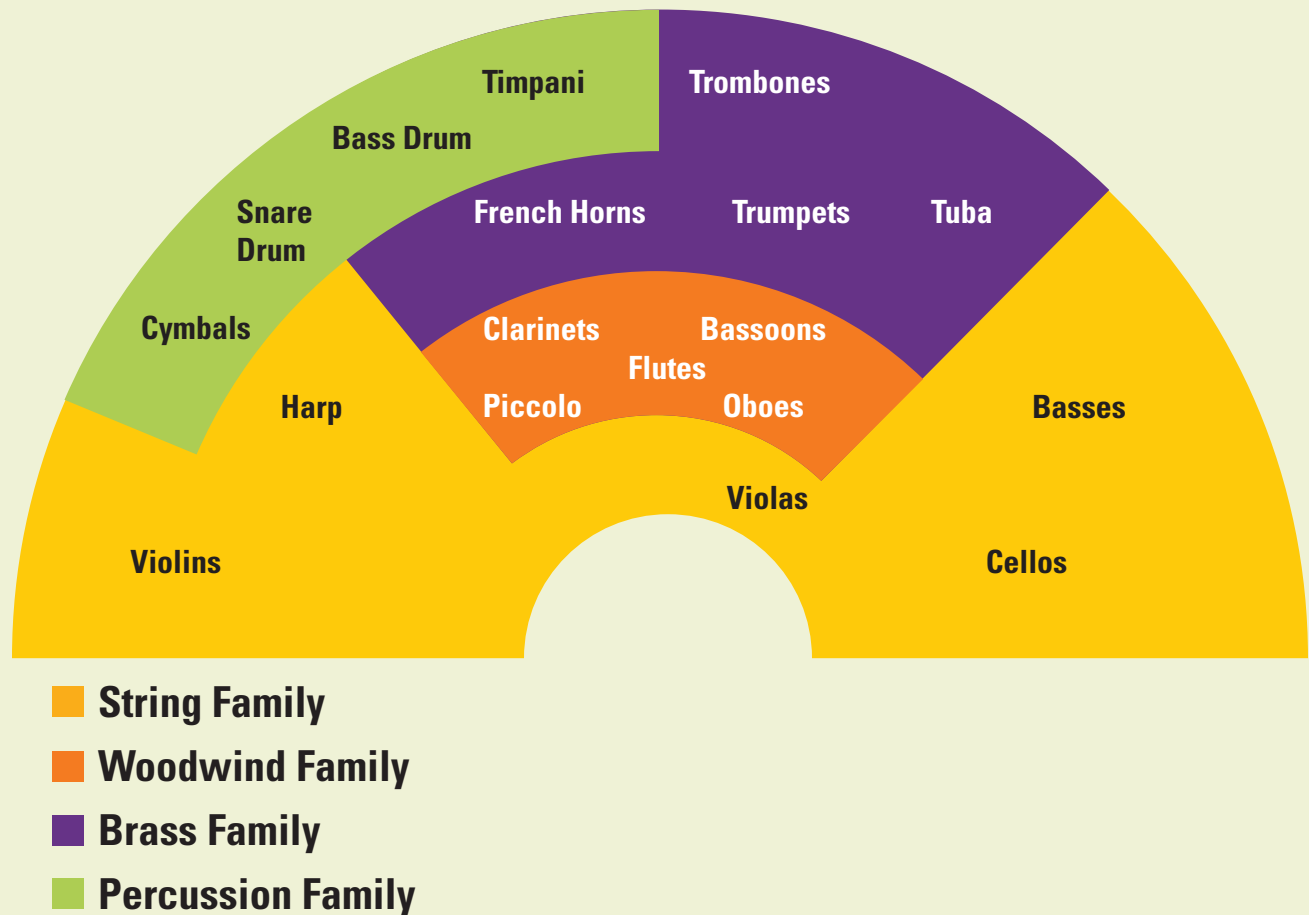
Composer: Well, Gino sure knows how to get people the answers they need! I'm glad you're asking about the instruments, because I spend a lot of time thinking about them. I'm a **composer**, and I write music. When I'm working, I'm always thinking about how the piece is going to sound.

lesson extension

Have your students put their heads down and close their eyes. Then, select three students and have them say the same word (for example, "hello"). With their heads still down and eyes closed, have the other students guess whose voice it is. Follow up with a discussion of different vocal qualities (include movie or cartoon characters for exaggerated examples) and generate descriptive language for identifying vocal or instrumental sounds. Facilitate a sharing of students' reflections and experiences. [NYC 2]

Violet: Isn't that why the orchestra is arranged the way it is—according to the different ways the instruments make sound?

Composer: You're right! The orchestra is divided into four different families: strings, woodwinds, brass, and percussion. Take a look at this map to see where they usually sit.



Violet: Oh, I get it. The four instrument families all sit together onstage as one big extended family.

Elvis: Yeah, but how can we tell which instruments belong to which family?

The seating arrangement of the instruments in the orchestra can vary depending on the music being played or even the tradition of individual orchestral institutions.

teacher **note**

Help Elvis and Violet: What do the instruments in each family have in common?

WOODWINDS



BRASS



reflection **discussion**

For the instrument family discussion, use these example questions: What are the instruments in each family made of? How are they shaped? How are they played?

PERCUSSION



STRINGS





The **woodwind instruments** look like long tubes with lots of keys. Some have pieces of wood, called reeds, that performers blow into to make sounds. Others, like flutes and piccolos, have a hole across which players blow to make sound. The **brass instruments** are made out of metal and are curvy. Performers blow into them through metal mouthpieces. The **string instruments** are wooden and make sound when performers draw a bow (a wooden stick that holds long strands of horse-hair) across the strings, or pluck the strings with their fingers. **Percussion instruments** have many shapes and sizes, and they make sound when they're shaken, scraped, or struck.

Elvis: This is fun! The families are all so different and interesting in their own ways. Let's hear what they all sound like.

Violet: They all sound so beautiful and different. It's kind of like each family has its own voice.

Elvis: Yeah, but I wonder if I could still match the sounds with the instrument families when I have my eyes closed!

Composer: Well then, here's a Listening Challenge to help you find out if you can.

lesson **extension**

Listen to each instrument family example several times. With your students, brainstorm to come up with words that describe the sound of each family. Chart students' responses on chart paper or have them write their thoughts down on paper.

reflective writing | listening challenge

How would you describe the sounds of the instrument families?
(Examples of these recommended works are available for download from your favorite online music retailer.)



Woodwind Family

listen to *The Final Fugue, The Young Person's Guide to the Orchestra* by Britten



Brass Family

listen to *Canzon septimi toni* No. 2 by Gabrieli



Percussion Family

listen to *Act 1, The Nose* by Shostakovich



String Family

listen to *First Movement, Serenade for Strings* by Tchaikovsky

listening challenge

Examples of these recommended works are available for download from your favorite online music retailer.



listen to
The fanfare from *La Péri* by Dukas
brass



listen to
Andante Cantabile by Tchaikovsky
strings



listen to
Xylophonia by Joe Green
percussion



listen to
Concerto for Two Oboes by Albinoni
woodwinds



listen to
Pas Redoublé No. 3 by Cherubini
percussion



listen to
Adagio for Strings by Barber
strings

For an even harder challenge, try identifying two families playing at once:



listen to
Fanfare for the Common Man by Copland
brass and **percussion**



listen to
The Moldau by Smetana
woodwinds and **strings**

Help Elvis and Violet identify the instrument families. Below are the names of the instruments. Below each one, write down the name of the family each one belongs to.



1. clarinet
woodwinds



2. French horn
brass



3. flute
woodwinds



4. xylophone
percussion



5. oboe
woodwinds



6. timpani
percussion



7. bassoon
woodwinds



8. violin
strings



9. trombone
brass



10. tambourine
percussion



11. double bass
strings



12. piccolo
woodwinds



13. tuba
brass



14. triangle
percussion



15. snare drum
percussion



16. cello
strings

17. trumpet
brass

18. viola
strings

Violet: That was pretty easy. I'm starting to notice that some instruments within each family look bigger than the others.

Composer: That's right. Each family has small and large instruments. The smaller ones make higher sounds, and the bigger ones make deeper or lower sounds.



Identify the instruments. Then sort them by size within their families and label each instrument **small**, **medium**, or **large**.

String Family



Name: violin

Size: small



Name: viola

Size: medium



Name: double bass

Size: large

Brass Family



Name: trumpet

Size: small



Name: tuba

Size: large



Name: French horn

Size: medium

Percussion Family



Name: **timpani**

Size: **large**



Name: **bongos**

Size: **medium**



Name: **snare**

Size: **small**

Woodwind Family



Name: **clarinet**

Size: **medium**



Name: **bassoon**

Size: **large**



Name: **piccolo**

Size: **small**

Composer: Let's listen to the violin, the smallest and highest-sounding string instrument.



listen to

Caprice for Solo Violin No. 24 by Paganini

(Examples of this recommended work are available for download from your favorite online music retailer.)

And now let's hear the cello, a deeper sounding string instrument.



listen to

Allemande, Suite for Solo Cello No. 2 in D Minor by Bach (Examples of this recommended work are available for download from your favorite online music retailer.)

Elvis: Wow, that's such a big difference!

Composer: I'm glad you can hear that. In addition to highness and lowness, each instrument has its own distinct sound quality, or **timbre**. Do this Listening Challenge and see if you can identify a few more instruments by their timbres.

listening challenge

First, **write down** the name of the instrument family to which each instrument belongs. Then, **circle** the instrument you hear in each example.

Do you hear a:

1.



listen to **Track 1**



flute

OR



bass drum ?

woodwind family

percussion family

2.  listen to **Track 2**



trumpet

OR



violin ?

brass family

string family

3.  listen to **Track 3**



double bass

OR



oboe ?

string family

woodwind family

4.  listen to **Track 4**



triangle

OR



tuba ?

percussion family

brass family

5. **BONUS:**  listen to **Track 5**



bassoon

OR



bass drum ?

woodwind family

percussion family

Composer: I know it's hard to believe, but you guys hear timbre all the time!

Elvis: We do? When?

Composer: When you listen to people's voices!

Conductor: Soon, you'll know the timbres of lots of other instruments, too.

do **now**

Make a list of words to describe the various sounds that instruments make, such as raspy, tinkly, and smooth. Tell students that these words describe sound quality, or timbre.

reflective writing



Write about your listening experiences in this unit.

What were some of the words we used to describe a voice or sound?

What other types of sounds can you identify with your eyes closed?

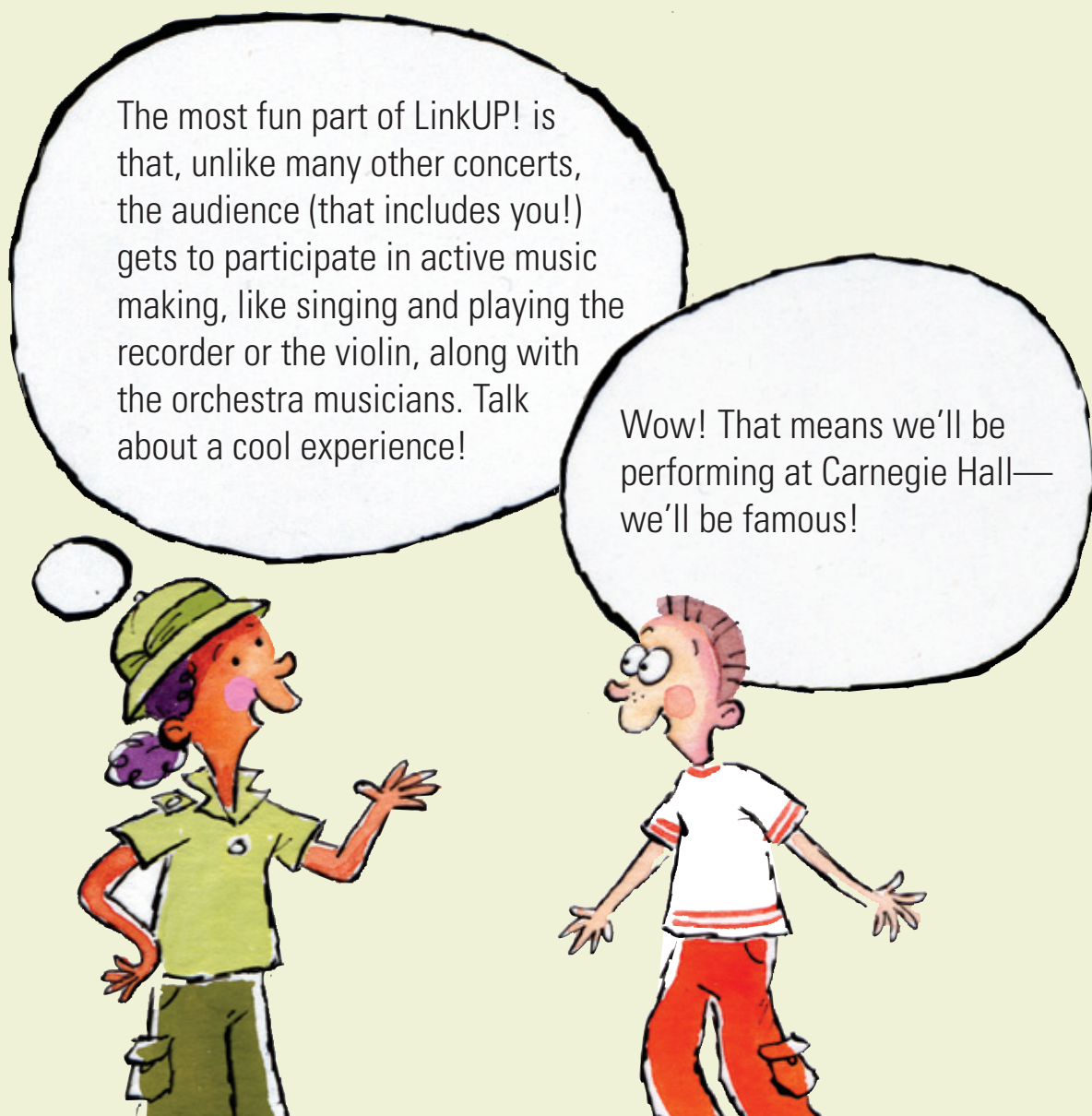
What was most challenging about the type of listening we did in this unit?

Conducting: Split the class into four groups, each representing one of the four orchestral families. Have each group create a vocal sound to match its instrument family. Then, have each group share its sound. Next, choose student conductors. Have the conductors use gestures to communicate to each group when to start and stop, crescendo (get louder) or diminuendo (get softer), and change intensity or feeling. [US 3; NYC 1, 2]

lesson **extension**

Composer: Now that you know all about the orchestra, you're ready to be an expert audience member at Carnegie Hall. Let's practice being expert audience members as we listen to the whole orchestra play together.

Elvis: Thanks, but ... uh ... how do we become expert audience members?



reflection **discussion**

Have students choose a character from a class book or story and describe how the character's voice would sound. What voice type or vocal qualities do you associate with certain character traits? Did the author write any descriptions in the story that tell the reader how that character speaks or sounds? If so, which types of words can good writers use to help you imagine sound? [US 8; NYC 3]

To learn more about instruments and orchestras, visit online: Carnegie Hall's animated game for Benjamin Britten's *The Young Person's Guide to the Orchestra*

You can also check out YouTube.com, which has thousands of videos of conductors, orchestras, and people playing instruments.

Now your teacher is going to ask you to share your thoughts about being a member of an audience.



Lots of symphony orchestras have created interactive and educational resources, too!

Look up the websites of these orchestras:

- New York Philharmonic: lots of games and interactive information
- San Francisco Symphony: fun design and lots of information
- Dallas Symphony Orchestra: an interactive instrument encyclopedia

Practice being an expert audience with your class! Lead students in a discussion about audience participation. Brainstorm a list of audience member tasks. Chart student responses and post in the classroom, updating throughout the year. Assign symbols to rate different levels of participation (for example: one, two, or three stars). Each time you listen to music, revisit the list, reflect, and rate. [US 7]

do **now**

Brainstorm other situations that need audiences (a baseball game, storytelling, or a play, for example). Compare the roles of the audiences with the role of the audience at a music concert.