

THE
CLEVELAND ORCHESTRA

WHAT IS AN ORCHESTRA?



Student Learning Lab for

The Brass Family

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PART 1:

Let's Meet the Brass Family

An orchestra consists of musicians organized by instrument “family” groups. The four [instrument families](#) are: strings, woodwinds, brass and percussion. Today we are going to explore the brass family!

Brass instruments have been around since ancient times. Horns have been pictured on the walls of primitive dwellings and Egyptian tombs, and described on crumbling scrolls and clay tablets. They have been made of bone, cane, an animal's horn, and metal. Brass instruments have played important roles throughout history from communicating messages over long distances, to announcing the arrival of dignitaries and royalty, to war, hunting, and celebrations.

The members of the brass family – from highest to lowest in the [pitches](#) that they are able to produce – are:



[Trumpet](#)

[French Horn](#)

[Trombone](#)

[Tuba](#)

How brass instruments work

Brass instruments have a metal mouthpiece. A player puts her lips together and buzzes air through them into the metal mouthpiece. This starts the air vibrating through the hollow metal tube, which comes out of the “bell” at the far end of the tubing. The more metal tubing there is and the larger the bell, the lower the sound - just like in the other instrument families in which the larger instruments produce the lowest sounds!

Have you ever tried buzzing your lips? Close your mouth with your lips loosely touching. Take a deep belly breath and blow through your lips, making them vibrate (it might tickle!), which produces a loud buzzy sound. Brass players do something similar, but they do that directly into the mouthpiece of their instruments in order to direct and control that sloppy sound.

You also play different notes on a brass instrument by tightening and loosening your lips and by pressing down valves, or in the case of the trombone, by moving the slide in and out.





PART 2: Let's Listen to *Sonata for Horn, Trumpet and Trombone* by Francis Poulenc

To see this video you'll need to get the password from your **Teacher/Parent**. If they don't have the password yet, please have them go to <http://bit.ly/DigitalEducationSeries> and fill out the short form.



Composer Fun Facts

The French composer **Francis Poulenc** (pronounced “pool-awnk”) was born in 1899 in France and lived until 1963. His father ran a chemical factory and his mother came from a long line of artisans. She encouraged him in his music, starting him on the piano at the age of five. His father did not want him to focus exclusively on music in his schooling, hoping he might take over the family business. As a result, Francis was primarily self-taught in composing music, with mentorship provided by some of the other great composers of the day.

Francis Poulenc enjoyed a good joke or two and often injected comic elements into his compositions, along with upbeat characteristics he picked up in the music halls and jazz clubs of Paris. But his music could also be serious, particularly in the religious music he composed when he turned toward a deeper spirituality when he was in his 30s. He continued to alternate more light-hearted compositions with serious ones throughout his composing life.

About the Music

Poulenc composed the ***Sonata for Horn, Trumpet and Trombone*** in 1922. It is called a “[sonata](#)” because it uses the “sonata form.”

The sonata form has three main sections – let’s call them Section A, Section B, and Section A (again). To see what happens in each section, let’s think of the sonata form like a sandwich! Here we go:

A = ***lay out*** a piece of bread on your plate

B = ***develop*** your sandwich by spreading peanut butter, jam, and maybe even sliced bananas to make it interesting!

A = ***go back*** to the loaf of bread and add a piece of bread on top of your sandwich

Voila! Now you have a yummy sandwich and have learned about the “sonata form” in music.

Each movement of Poulenc’s ***Sonata for Horn, Trumpet and Trombone*** has a different feeling. The first movement has been described as a series of dance tunes, with the second movement as more of a [lullaby](#), and the third movement returning to more lighthearted dance music.

The first movement is also a great example of the sonata form! It begins with a dancelike feeling (A), changes into a slower section in a [minor key](#) (B), then returns to the light dance at the beginning (A).

As you watch and listen to this piece of music, feel free to move around! You can move in your seat, tap your fingers, get up and dance around, or do all three! How do your movements change with the music?

PART 3: Music Learning Lab

Activity #1: “Brass to Basics” in the Orchestra

Back in the early days of orchestras, a few hundred years ago, orchestral music used only two members of the brass family: trumpets and French horns.

Fun Fact: Do you know why we also call horns, “French Horns”? These larger, circular [hunting horns](#) appeared in France in about 1650 and soon began to be used in orchestras.

The French Horn’s brass cousin, the trumpet, was added to orchestral music next. Eventually trombones and the tuba joined the orchestra, as compositions changed with the styles of the times and composers began using more diverse sounds and textures in their music.

Today, the brass section of the modern symphony orchestra, like The Cleveland Orchestra, has all four instruments of the brass family

How many of each of the brass instruments are found in The Cleveland Orchestra? **Hint:** check out this [link](#) to see the actual musicians in The Cleveland Orchestra’s brass family!

In addition to the professional career that our musicians enjoy with the orchestra, they also perform in smaller groups – just like this brass trio!

Activity #2: Look Closely

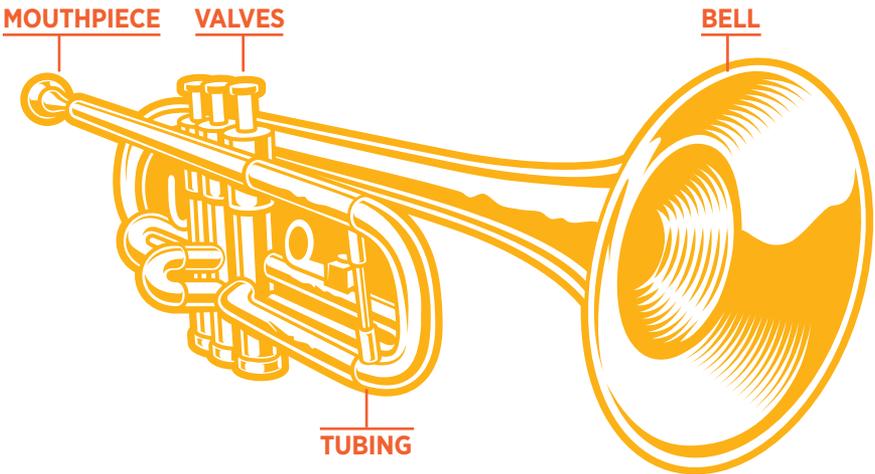
There are a few basic components that make up each brass instrument:

Mouthpiece = where you place your lips to blow and make a sound

Tubing = the hollow metal tubes through which the air flows

Valves = metal “keys” you press to impact the air flowing through the tubing to change the pitch

Bell = the bell-shaped opening at the end of the tubing through which the air finally escapes! The flair of the metal amplifies the sound and directs it outwards.



Find the brass family instruments in these [coloring pages](#). For each instrument – French Horn, Trumpet, Trombone, and Tuba – identify the brass instrument components listed above. You can print these pages, and diagram the components for each (and even color them when you’re done!).

Go deeper and check out this detailed [diagram](#) of a trumpet!

Activity #3: Listen Closely

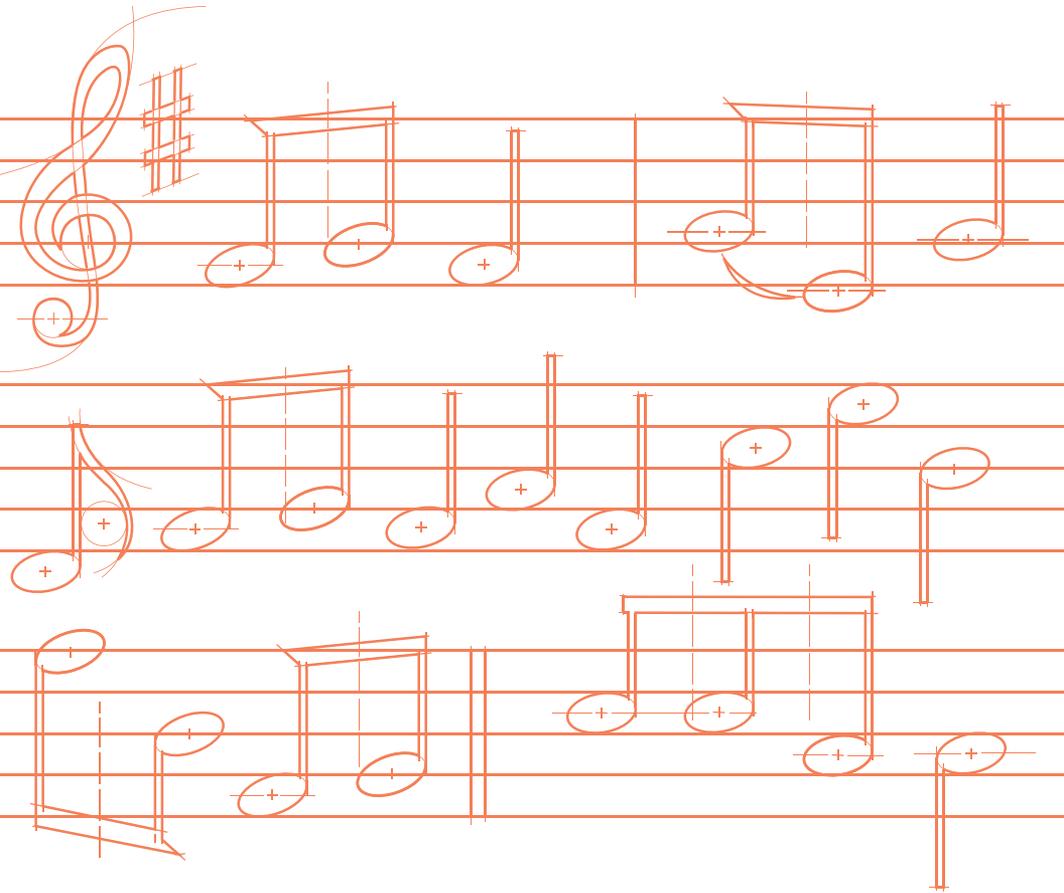
Watch and listen to the first movement of ***Sonata for Horn, Trumpet and Trombone*** again. The trumpet plays the [melody](#) most of the time, but shares it with the French horn, too. Can you count how many times the trumpet and French Horn each take the lead with the melody?

Sometimes it's hard to tell, but watch and listen closely!

Test Your Knowledge!

Show us your smarts with this [fun quiz!](#)

Take the Quiz!



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