

Grades

4-6

CAMELLIA SYMPHONY ORCHESTRA'S

Education and Outreach Series

Symphony Orchestra Lesson Plan

Lesson Purpose

To help students have a better understanding of the symphony orchestra and the instruments involved.

Materials Needed

Student booklets, a copy of the singing round, the speaking round and information about the instrument groups.

First 30 Minute Lesson

- Ask students about symphony orchestras and what they know about them. Explain that the orchestra plays music for concerts as well as background music for movies, television programs and radio programs.
- The students should be familiar with the musical score from the Harry Potter movies. Read the information provided about the first two instrument groups: strings and woodwinds.
- Have students work in the booklet completing the first few pages.

Second 30 Minute Lesson

Begin with having the students participate in a speaking round to experience the feeling of symphony players – each playing their part while other players are playing different parts at the same time.

Speaking Chant

“Avocado Round”

1. I've got an avocado in my guitar case
2. And an E-string in my shoe
3. There's a big purple eater in my bed
4. Now what am I to do?

Have the class chant the round to a steady beat of 2/4. (Practice the rhythm by saying ‘One, two. One, two.’ steadily.) Say the round several times steadily for confidence. Then begin the round by dividing the class in 4 groups. Group 1 begins the round and chants it all the way through. When they get to number 2 in the chant, the second group starts the chant at the beginning and chants till the end. When the first group gets to 3, the third group starts the round. When group 1 gets to number 4, the fourth group starts the round. They will finish last alone.

The point of this exercise is to provide the students a hands-on example of what the meaning of “symphony” is. Each group is “playing” part of the round and when they are all going together it has a similar feel to how a symphony would be.

If you are musical or if a student is and can learn to sing the “Black Socks” round, teach it in the same manner and have the students sing it to feel how groups work together to make music – similar to the orchestra experience.

Last 30 Minute Lesson

Read the information about the final two orchestra groups, the brass and percussion.

Have the students work in their booklets and participate in the coloring contest.

Optional Musician Visit

To finish the lesson, you may like to request that a Camellia Symphony Orchestra member visit the class to speak more on the instrument they play, and what it is like to play in an orchestra.

If you are interested in having an orchestra member visit your classroom, please contact the Camellia Symphony Orchestra at (916) 929-6655, or email us at camelliaorch@aol.com.

Resources from the Internet for Children

The following web sites have excellent games and information about orchestral instruments for children to use as well as teachers.

www.sfskids.org (San Francisco Symphony)

www.nyphilkids.org (New York Philharmonic Orchestra)

www.funbrain.com (click on music)

www.datadragon.com (information on orchestra instruments)

Strings

The string section is the one that seems to be most commonly associated with classical music, and for good reason. The string section in an orchestra is often comprised of the violin, viola, cello, and the plucked harp. These instruments, especially the violin, are considered to be the most versatile in sound and thus are used very often and play almost continuously in most typical classical compositions.

Violin-

The violin section is usually the largest in an orchestra because the violins often set the flow and tone of a classical piece. The violin can make a wide variety of sounds, all depending on the way the individual instrument is made. The sound and tone of the violin is determined by how the belly and back plates of the violin behave acoustically, so each violin has a unique sound, even if only to the most discerning ears. Because of this, an antique violin made by a prestigious artisan like the world-famous Stradivarius can cost \$2,032,000! The craftsmanship of the violin certainly does not guarantee good playing, however. An aspiring violinist must practice for many years before reaching a professional level of playing. To make the varying notes, a violinist must slide his bow across one or more strings with one hand while holding regulating the sound and length of the note by pressing down onto a corresponding string on the fingerboard with the other hand. While this may seem fairly simple, the placement of the fingers on the strings is not clearly mapped out. The player must achieve the correct position from skill alone or the violin will sound out of tune. Violinists must practice rigorously to attain good intonation, a skill that results from training the fingers to land in the right places, developing the correct method of hearing to distinguish when a note is not in tune, and the ability to correct the pitch very rapidly as notes are being played. Playing the violin is fairly simple, but playing it well requires dedication, focus, and passion.

Viola-

The viola is similar in appearance and sound to the [violin](#) but is larger in size and does not follow as many guidelines for its proportions. On average, the full size viola's body length is somewhere between one and four inches greater than the full size [violin](#)'s. The viola's size varies much more than the violin's does because the ideal sounding viola would be too big to rest on the player's shoulders, so the violas are made as large as the player can comfortably accommodate. The viola is generally lower in pitch than the violin because of its larger size and there is a greater length between the strings, forcing a player who switches between the violin and viola to use a more aggressive approach to the fingerings. Violas sound much mellower than violins, so they do not usually take center stage as often. However, the viola creates a unique sound and adds a little more quality to harmonies, which are the parts of the music that focus on pitch and are usually found more in the background.

Cello-

The cello is also a member of the violin family and is very similar in appearance to the violin and viola. However, the cello is much larger than either aforementioned instrument and, due to its increased size, must be played in an upright position, resting between the legs of the

player. While the basic method of producing sounds from the cello is similar to that of the violin, the cello is much deeper in pitch, creating a unique sound. The cello is not as popular as the violin, but almost all classical music pieces require cellos or even have cello solos, making the cello a necessary piece of the orchestra. Also, while the cellos mainly play harmony, they also sometimes switch over to melody, the most apparent part of the music for the casual listener.

Harp-

The harp is an instrument that is typically fairly large and stands up by itself. Unlike the other most common classical string instruments, the harp is plucked by hand. This may make the instrument seem easier to play, but in actuality the strength with which the string is plucked, called dynamics, and where it is plucked allows there to be a great range of sounds all coming from one supposedly simple string. For example, a fleshy pluck using the middle of the finger will make a warm tone, while a pluck near the end of the finger will make a loud, bright sound. If a harp is played fluidly enough, it can have a stronger, continuous sound, making it an important part of some classical songs

Woodwinds

The woodwinds are often considered the second most important part of a symphony. They carry the primary part of the melody with the strings and are often very popular instruments. Woodwinds are called woodwinds because the earliest instruments falling in this classification were made of wood. Also, the reed that helps turn oral vibrations into noise is made out of wood. One might argue that the majority of the woodwinds are easier to play than the string instruments, but this does not mean that the woodwinds are not a very beautiful, song part of an orchestra.

Single-reed-

Single reed woodwinds are instruments like the clarinet and saxophone. They only vibrate one reed to make sound and tend to be slightly easier to play than double reed instruments. The clarinet has the widest range of pitch out of all the woodwinds and the fingering systems have improved to allow the clarinet to also be a very nimble instrument. The relative simplicity of playing the clarinet coupled with the versatility make it very frequent in classical compositions. Another member of the clarinet family, the bass clarinet, is very long and very deep. Its size makes it more difficult to play than the regular clarinet, but the feel of the instrument is very similar. The saxophone is not as common in modern classical music, but it certainly adds to the music and saxophone pieces are not unusual because the saxophone originated as a classical instrument. The size of the saxophone can cause the sound to vary. Bass saxophones, much like bass clarinets, are very larger and considerably deeper in pitch.

Double Reeds-

Double reed instruments, like the oboe, bassoon, and English horn, tend to be a little more involved and difficult to play. Most serious musicians make their own reeds if they play a double reed instruments because each player likes a different feel. The bassoon is a fairly common orchestral instrument. It is known for its distinctive tone, wide range, variety of feelings, and agility. The bassoon is relatively deep sounding and adds more atmosphere to a piece. The English horn, a member of the oboe family, is very similar to the oboe in reed shape and technique, but resembles a clarinet with a pear-shaped bottom. The English horn requires a great amount of air to produce quality sound, so it is seen as a more difficult and physically demanding instrument, which is why it is not as common as an oboe. The English horn is a little lower than an oboe and not used quite as often in standard orchestras. The oboe, English horn, and the bassoon are all exposed double reed instruments, which means the reed goes between the player's lips as opposed to the less common capped reed instruments, where there is a cap covering up the reed with a hole that player blows through.

Flutes-

The flute family is another example of very common classical instruments. The flute family differs from the other woodwinds in that produces they sound from the flow of air against an edge instead of using a [reed](#). A flute produces [sound](#) when a stream of air directed

across the top of a hole bounces in and out of the hole. The most common orchestra flutes, the Western concert flutes, the piccolo, and the fife, are all side-blown flutes. The flute is generally sweet sounding and fairly weak in tone, allowing it to blend better with the rest of the orchestra. The angle at which a flute is played, how much air is being used, and the speed that the air is being passed through the instrument decided the tone. The piccolo appears to be a smaller version of a flute. Fingerings on the piccolo even correspond to [fingerings](#) on the flute, but the instrument itself sounds higher. The fife is similar to the piccolo, but even smaller, louder and shriller due to its narrower body. All of the main orchestra flute components are fairly similar in play style and appearance, but each adds another element to a complete symphony orchestra.

Percussion

Percussion instruments are music instruments played by being struck, shaken, rubbed, or scraped. They are perhaps the oldest form of musical instruments ever used, mainly because of the simplicity and the encompassing definition. The percussion section is a key part of any orchestra because it strengthens the rhythm and can add atmosphere. The percussion section plays melody and harmony parts, adding even more importance to it. Some of the percussion instruments that are more common in a symphony orchestra are the timpani, snare drum, bass drum, piano, glockenspiel, chimes, and bells, but different pieces require different instruments.

Drums-

Timpani are one of the more common types of drums used in classical music because they produce a very definite pitch. Timpani are composed of a skin called a head stretched over a copper base that starts very wide and tapers down. The tightness of the drum's head determines the pitch, allowing timpani's sound to vary depending on the atmosphere of the piece. Timpani evolved from military drums to become a staple of the classical orchestra in the 17th century and remain very important in almost all classical compositions.

Another type of drum used in classical music is the bass drum. The bass drum produces low, indefinite sounds and thus is not as commonly used as timpani. However, it is still an important staple of classical music. An orchestral bass drum is larger than those used for rock and roll or jazz, about 36" in diameter, and is played with one or, occasionally, two padded mallets. Usually the right hand plays the drum and the left hand muffles it but when played with both mallets, a knee or forearm can be used for muffling.

Snare drums are not used as commonly as timpani or bass drums because they tend to be fairly loud and staccato, which means short and accented. A cluster of snares made of curled metal wire, plastic, or animal gut is stretched across the bottom head, which is where the name comes from. When the drum is struck, the snares vibrate against the bottom head, producing a short, distinctive sound. The snares can be disconnected if this is not required, and snares used in classical music usually do not have their snares attached unless it is a marching song. Snare drums come in many different sizes that can also change the way the drum will sound. Snare drums that are shallow will have a higher sound while the deeper ones will give a heavier and thicker tone.

Piano-

The piano is fairly different from most other members of the percussion section in that it is also considered a keyboard instrument. Pianos are actually typically thought of as keyboard instruments rather than percussion instruments. However, the striking of the piano mallets against the strings on the inside as a result of striking the keys matches the definition of a percussion instrument. Many classical pieces integrate a good deal of piano time in and many composers, including Mozart and Beethoven, Chopin, and Schumann, used the piano to write their works. The huge changes in the evolution of the piano over time have created large changes in the sound of classical music over time. This causes a problem because much of the most widely admired music for piano was composed for a type of instrument that is very different from the modern instruments performed with today, so what we hear may not be what the composers originally intended us to. However, this evolution in the instrument over

time has allowed us to experience a whole new range of sounds and is a good example of the constantly evolving style of classical music.

Bells-

This section will cover some of the more common bell instruments, namely the basic bells, chimes, and the glockenspiel. These instruments are often used for atmosphere and are usually integrated into lulls in the music so that they can be heard clearly. Bells are fairly common and come in a wide variety of sizes and materials that can drastically change the pitch and volume of the bell. It usually appears as an open-ended hollow, metal drum made in a bell shape which resonates upon being struck. The object used to strike can be a tongue suspended within the bell, known as a clapper, a small, free sphere enclosed within the body of the bell that strikes when shook, or a separate mallet. These can also appear as cowbells, which make a more flat, metallic sound. Chimes are considered bells too because they have a very similar structure. The main difference is that the chimes are composed of a series of tube-shaped bells that strike against each other. Chimes produce a very pure, fluid sound and are usually used to accent a break in the music. The glockenspiel is also considered a part of the bell family despite its drastically different appearance. The name itself actually means 'a play of bells' in German and another name for the glockenspiel is the orchestra bells. The glockenspiel is almost identical in appearance to the xylophone, but the keys are made out of metal instead of wood and there are two piano-like rows of the flat, metal keys. The glockenspiel has a fairly high, distinctive sound and is used more often than bells or chimes in classical music.

Brass

The brass section adds a rich, strong sound to classical music. Brass instruments are defined as instruments whose tone is produced by vibration of the lips as the player blows into a tubular mouthpiece. These instruments are usually muffled or simply played more softly when being used for classical pieces so as not to overwhelm the other sections of the orchestra. The most common classical brass instruments are the trumpet, trombone, French horn, bass trombone, and tuba.

Trumpet-

The trumpet, much like the snare drums, is often too loud and staccato for classical music unless the bell that the sound comes from is pointed at the ground and/or a muffler is placed in the bell. However, trumpets are very important in marches and often form the driving force behind more energetic pieces since they are the highest and most distinct brass instruments. The trumpet is often confused with its similar-looking relative, the [cornet](#), which has a softer, more melodic sound and is also commonly found in a classical orchestra. Different notes are played on the trumpet by holding down different combinations of the three finger valves and by blowing air into the mouthpiece faster or slower, depending on whether the trumpeter desires a high or low-pitched note.

Trombone-

The trombone is fairly simplistic in appearance and different notes are hit by moving the slide to increase or decrease the amount of space that the air has to travel through to erupt through the bell. The slide has seven basic positions that a trombone player has to approximate and these positions are the basis of the note changes. Notes can also be made higher or lower by the speed that the air is blown into the mouthpiece. The bass trombone is the same length as the normal trombone, but it has a wider bell and more twists in the tube to make a fuller, deeper sound. There are usually only two or three trombone players and one bass trombone player in a standard orchestra, but the deep, full sound carries well.

French Horn-

The French horn is a brass instrument with a large bell that is slightly circular in shape with very tightly wound tubing in the center. The horn itself has three valves to control pitch, much like the trumpet. It originated as a French hunting horn that looped around only once without any valves, but it grew in complexity to allow for more varied sounds. The French horn has a smooth, strong sound and, when used in a solo, usually brings up the feeling of ‘the hunt.’

Tuba-

The tuba is the largest low brass instrument and has a very wide bell. It is generally oval in shape and contains twisting metal piping like the French horn, but in a small quantity. There is usually only one tuba in an orchestra, and it is used as the bass of the brass section, though its versatility means that it can be used to reinforce the strings and woodwind, or as a solo instrument. The tuba’s number of valves varies between three and six. Three valves are the most common choice for amateurs, while professionals prefer four to five valves for added control. Six valves are relatively rare and difficult to master.