An Introduction to Brass Bands

A Study Guide for the performance of Boston Brass

Objectives

Through a presentation of the music of Red Chamber and study guide materials, students will:

- develop an understanding of the basic history and characteristics of the trumpet
- develop an understanding of the basic history and characteristics of the French horn
- develop an understanding of the basic history and characteristics of the trombone
- develop an understanding of the basic history and characteristics of the tuba
- be introduced to basic musical terms
- be introduced to basic classical terms
- be exposed to a high quality, inspirational arts experience

A Good Audience Member Will...

- behave respectfully towards the performers and other audience members.
- listen attentively to the music, narration, and instructions.
- participate at appropriate times in the program.
- attempt to remember elements of the program for later discussions.
Boston Brass

For nearly 25 years, Boston Brass has set out to establish new standards in musical entertainment. From exciting classical arrangements, to burning jazz standards, and the best of the original brass quintet repertoire, Boston Brass treats audiences to a unique musical experience, which captivates all ages. The ensemble’s lively repartee, touched with humor and personality, attempts to bridge the ocean of classical formality to delight audiences in an evening of great music and boisterous fun. The philosophy of Boston Brass is to provide audiences with a wide selection of musical styles in unique arrangements provided in a friendly and fun atmosphere.

Through over 100 performances each year, the members of Boston Brass play to audiences at concerts, educational venues and jazz festivals. In addition to solo performances, Boston Brass regularly performs with orchestras, bands, organ, jazz bands and a variety of other ensembles. They have performed in 49 states and 21 countries and have conducted master classes around the world including sessions and residencies at The Eastman School of Music, Shepherd School of Music at Rice University, Peabody Conservatory of Music, University of North Texas, Royal Academy of Music in London, Yong Siew Toh Conservatory at the National University of Singapore and Mahidol University in Bangkok.

Boston Brass helped raise over $100,000 for VH1’s Save the Music program, giving musical instruments to schools in need. They have been featured educators and performers at the Mid West Band and Orchestra Clinic, World Association for Symphonic Bands and Ensembles, Music Educators National Conference events, American Bandmaster Association Conference, The American Band College, and at the Texas Bandmasters Association Convention. Since 2006, Boston Brass has served as Artist/Educational Ambassadors for Jupiter Band Instruments.

Boston Brass has been featured on The CBS Early Show, National Public Radio’s Performance Today, The Great American Brass Band Festival and has recorded several diverse albums. Latin Nights, their latest offering, features a collection of some of the greatest classical and jazz works by Latin composers and performers and features the legendary drummer Steve Gadd, the beautiful voice of Talita Real, percussion and guitar. Other albums include Ya Gotta Try, featuring music from Horace Silver, Chick Corea and Dizzy Gillespie, produced by legendary jazz recording genius Rudy van Gelder and Within Earshot, featuring classical works by Shostakovich, Ginastera, Dvorak, Liszt and others.

“In terms of humor, entertainment and mind-boggling virtuosity, they are to music what the Harlem Globetrotters are to basketball.”

- The News-Press, Fort Meyers, FL.
BOSTON BRASS

TRUMPET- JOSE SIBAJA
TRUMPET- JEFF CONNER
FRENCH HORN – CHRIS CASTELLANOS
TROMBONE/EUPHONIUM – LANCE LADUKE
TUBA – ANDREW HITZ

Attending the Performance:

During the assembly, listen carefully to the performance and watch the show. Remember:

● Enjoying the performance demands careful listening and concentration.
● Talking to friends disturbs the performers and other members of the audience.
● You can show your appreciation for what you hear by applauding when the performance ends. You will know when the performance ends because the music will stop and the performers may stand and bow. The artist will be pleased to hear your applause. After the performance ends, stay seated until your teacher tells you to leave.
THE TRUMPET: BRIGHT & BRASSY

The trumpet is a popular brass instrument often found in orchestras, bands and jazz ensembles. The highest member of the brass family, the instrument has roots all the way back to 1200 B.C. Trumpets have been made from hollow logs, bone, cane, ivory or metal. Their loud blasts have been used to banish evil spirits, summon gods and inspire soldiers in battle. According to Richard Wagner in Grolier’s Encyclopedia, the oldest trumpets have been bound in the Egyptian tomb of Tutankhamen. Made of silver and about 18 inches long, they resembled the straight trumpets held by soldiers in Egyptian wall paintings. These were “natural” or valveless instruments, capable of only playing one note, or possibly a second through a harmonic technique called overblowing. None of these early instruments had a separate mouthpiece. Compton’s Encyclopedia suggests the trumpet was used in ancient Egypt military for signaling and fanfares. Crusaders returning from the Middle East brought the medieval brass trumpet back with them to Europe. A straight metal tube which flared open into a bell at one end, it was 5-6 ft. long. By about 1400, this unwieldy tube had been bent into an S shape. In the early 17th century the S-shaped tube was bent once again to form the loops seen in the modern trumpet.

During the Renaissance, trumpets were used in Europe for musical purposes. Virtuoso trumpet playing developed in the Baroque era. From Monteverdi through Bach, composers wrote for valveless trumpets; most commonly the 7 ft. tube pitched in D. These instruments played melodies best in the fourth octave, the high and hard-to-play “clarino” range. Their tonality, the key in which they played, could be changed by adding a crook, one of a series of additional tubing coils of different lengths inserted next to the mouthpiece. Musician’s guilds guarded the privileges of these talented clarino trumpeters. The clarino technique became outmoded in the late 18th century. Trumpets were shortened and fitted with mechanical devices (slides) to enable them to play in several keys. The now-standard B-flat trumpet with A-slide soon emerged. The key trumpet, with four or five finger-operated keys which gave the instrument a full chromatic scale, was invented in Austria in the late 18th century. Haydn and Hummel wrote their trumpet concertos for it.

The valve trumpet was developed in 1813 to allow all of the notes in the chromatic scale to be easily played. Three valves on the top center of the instrument enabled the player, in effect, to change crooks at the touch of a button. The full potential of this invention was not realized until late in the century. The narrow-diameter cylindrical tube gives the trumpet its brilliant, powerful sound. A player vibrates his or her lips and blows into the cup-shaped mouthpiece to produce sound. Notes are changed by pressing one or a combination of three valve buttons while changing lip tension. Most trumpets used in bands are pitched in the key of B flat and have a
tube 4 1/2 feet long (measured as if the loops were straightened out). Orchestras use these as well as ones made with shorter tubes and pitched in other keys.

Experimentation with the design and pitch of trumpets still continues today. Many orchestral musicians use a 4 ft. trumpet in high C. Trumpets in high D, F, and the high-range piccolo B-flat are used for clarino-style Baroque music. Composer Richard Wagner used a bass trumpet in C in The Ring of the Nibelung. A cone of wood or fiber, called a mute, is sometimes inserted in the trumpet’s bell to produce a muffled or more nasal tone. Orchestras have included included trumpets since early in their development, according to Compton’s Encyclopedia. Although the trumpet has been overshadowed by other instruments as a solo instrument in classical music, it has been a principal jazz instrument for many years. Jazz trumpet styles have influenced both the way the orchestral trumpet is played and much of the contemporary music written for it. Today, the trumpet is a standard instrument in orchestras, bands and many popular music ensembles.

HISTORY AND BACKGROUND OF THE FRENCH HORN

The French horn, often simply called “the horn,” received its name from the orchestral version developed from the French cor de chasse. The French simply call it cor, or “horn.” The sound of the instrument ranges from angry to sad. Music for the French horn is written in the treble and bass clefs. The first horns were literally made from the horns of elephants, bulls and boars. They were used as signaling instruments, most often on hunts. Rhythmic codes later developed into tunes. Following this lead, a blast on the horn in opera signified a hunting scene to the audience. Early horns had no keys or valves. Before the 17th century, horns only had one length of tubing which produced one set of harmonies. By the 18th century individual lengths of tubing, or crooks, were added in order to change keys. Musicians had to rapidly change the crook when required to change keys in the middle of a performance. The sound of the horn was still coarse and unrefined. Players often stuffed a wad of cotton into the bell to ‘sweeten the voice.’ In 1770 a musician named Hampl from Dresden discovered that the cotton plug also lowered the pitch of the note played, depending on how far up in the bell it was placed. He soon began to use his hand instead and thus the hand horn was invented. The valve horn was developed in the early 19th century and is most often credited to Heinrich Stölzel. Two types of valves were used: the piston, operated by depressing a trigger button, and the rotary, a tab-like plate pushed to open or close the air passage. The valve horn is still held with the hand in the bell even though it is not essential for altering harmonies.

The double horn was created at the end of the 19th century and includes extra twists and turns in the tubing. This horn is capable of playing in B flat alto, adding more high notes than the standard key of F. In early music the horn was redesigned to play more softly, but as performance halls became larger the horn was reconfigured to play loudly again. Many scholars today are interested in recording early orchestral music on the original instruments for which it was composed.

The horn is played by vibrating the lips against the mouthpiece. Lip tension contributes to playing the correct notes. Tight lips produce high notes, slack lips produce the lower notes. Trills, tremolos, flutter tonguing and glissandi are all special effects which may be produced by the horn player. The mute helps to create a softer muffled sound. Water, actually condensation, is drained from the horn using the water key.
THE TROMBONE:

The trombone was invented in Europe in the 1400s. Originally called the sackbut, only the name has changed dramatically over the past 500 years. The name most likely originated from a type of Spanish pump or a hooked French lance used to knock fighters off their horses in battle. The sackbut was a popular instrument during the 1400s. Sackbut players were often members of king’s bands and played at rituals, ceremonies and feasts. Early composers for the sackbut were Gabrieli (1557-1612) and Monteverdi (1567-1643). Seldom did composers write for the solo sackbut, by this time called the trombone, but usually in groups of four or eight. Early trombones were softer in dynamic and often used to accompany singing in church. The modern orchestra usually features two tenors and one bass.

In the 1600s trombones were standardized into four sizes - soprano, tenor, alto and bass. Today the soprano version is extremely rare. Most common in orchestras are the tenor and bass. Both Wagner and Mahler wrote for the contrabass trombone, called “a tank” by one trombonist. Only one manufacturer remains for this “slide tuba,” and most of its music is now played on the tuba. Trombones were used in orchestral works written in the 18th century to portray menace or majesty. In 1820 the first valve trombone was attempted. Although easier to play, it was rejected by musicians since wrapping the long tube into many tight bends changed the sound too drastically from the original slide trombone.

The trombone is the only naturally chromatic instrument in the orchestra. This means it is possible to play in any key. There are only two hairpin bends in the long tube which forms the instrument. To play different notes, the musician holds the slide in the right hand and moves it in and out of the main tube. Sound is produced by the vibration of the player’s lips against the mouthpiece, as in the trumpet. The u-shaped slide moves in seven positions to determine the pitch of the note to be played. The musician also controls the notes through varying breath pressure. The pitch range of the tenor trombone encompasses the tenor and the treble scales. The bass trombone can play anywhere on the bass clef. Trills and pitch can be controlled by the lip movement. Three versions with different diameters of tubing are manufactured today: the narrow French version, medium English and the wide style used by Americans and Germans.
THE TUBA:
THE BASS OF THE BRASS

The tuba is the newest member of the brass family. They are the largest of the brass instruments and have the lowest pitch, serving as the bass voice in a brass section. A musician plays the tuba by vibrating the lips in a cup-shaped or funnel-shaped mouthpiece. Pitches are determined by the tension of the lips and the fingering of the instrument’s valves.

Tubas are known by a number of different names. One type of tuba is the baritone, also known as the euphonium or the tenor tuba, depending on the manufacturer and the diameter of the instrument’s tubing. The baritone has three or four valves and is widely used in concert bands and marching bands. It plays in the same basic range as the trombone. The upright tuba is a large instrument which appears in symphony orchestras. It has from three to five valves. Most frequently in marching bands, you will see the three valve sousaphone. It wraps around the musician’s body and has a large flaring bell. Drum and bugle corps often use the three-valve marching bugle tuba.

According to Robert A. Warner in Grolier’s Multimedia Encyclopedia, the tuba was designed as a satisfactory bass instrument needed to compliment the valved bugle in brass bands. Although the tuba was built in sizes ranging from a B-flat soprano to various enormous double basses, only the baritone in B-flat (along with the wider-bored euphonium) and the basses in F, E-flat, CC, and BB-flat are made today. A variety of instrument makers, among them Johann Gottfried Moritz in 1835 Berlin and Parisian Adolphe Sax (father of the saxophone) in 1845, have patented versions of the tuba. The American sousaphone, created in 1898, was inspired by the Viennese helicon bass (1849), which has a circular coil formed to rest on the player’s shoulder.

RESOURCE ROOM

Internet
Go to www.bostonbrass.com for more photos, biographies and music clips!

KidZone
www.nyphilkids.org
Includes bios on conductors, puzzles, games and instructions on making
home versions of orchestral instruments. Go to the Instrument Storage
Room for sound clips and backgrounds on different instruments.

The Interactive Music Emporium
http://library.thinkquest.org/3656/html/how.htm
While all instruments make sounds, they all have a different way of doing
so. Some instruments are struck, some are blown, and some require special
“tools” to produce sound (such as the bow of a violin). This section of the
Music Emporium is dedicated to explaining just how different instruments
make the sounds they do.

Arts Edge Music Resources
http://artsedge.kennedy-center.org/ir/music.html
Sponsored by the Kennedy Center, includes links to music education web
sites.
Also check out http://artsedge.kennedy-center.org/cs.html for arts curriculum
plans and resources.

Art Kids Rule
www.artkidsrule.com
Well-organized site listing links to hundreds of arts activities & projects.
Integrating the Internet into Classroom Instruction

Kit Eakle’s Virtual Music Classroom
www.musickit.com
Songs & games, midi files, activities and ideas for using music in the classroom.

Classical Music Home Page
www.classical.net
Links to classical music resources.

Essentials of Music
http://www.essentialsofmusic.com/
Renowned classical composers and their music are brought to life and six
main eras of music history are explained. Also a glossary of music terms.
ACTIVITY: ON THE ENTERTAINMENT BEAT

MUSIC VOCABULARY

• **dynamics** — variations in intensity between sounds; i.e. softs and louds. Italian terms and abbreviations are often used in sheet music to indicate different levels: pianissimo (pp), “very soft;” piano (p), “soft;” mezzo-forte (mf), “fairly loud;” forte (f), “loud;” and fortissimo (ff), “very loud.”

• **harmony** — the combining of notes to create chords, sets of two or three notes played at once

• **pitch** — “height” or “depth” of a tone, defined by the frequency of vibrations

• **song** — musical setting of a piece of poetry or prose

• **tempo** — the speed of the beat in music. Using Italian terms (such as adagio, “slow;” allegro, “fast;” largo, “very slow;” and presto, “very fast”)

• **tone** — characteristic sound of a particular instrument

• **virtuoso** — musician who possesses outstanding technique

Pretend you are a newspaper reporter. Write a review of the performance. Describe what you saw. What did you hear? How did it make you feel? Would you recommend this performance to a friend? Include as many vocabulary words as you can.

CLASSICAL TERMS

• **ballade** — an instrumental piece, usually for piano, in the romantic style

• **concerto** — a musical work for orchestra, usually set in three movements and featuring one or more solo musicians

• **étude** — a musical piece composed for study which focuses on a particular technical problem

• **nocturne** — dreamy, romantic piece inspired by the night

• **orchestra** — large group of instrumentalists, often includes string, brass, woodwind and percussion instruments

• **rhapsody** — a freely-structured piece written in an improvisational style and based on a folk melody

• **sonata** — a musical work for one or two instruments, set in two to four movements of contrasting style and speed

• **symphony** — a musical work for orchestra, usually set in four movements
FOLLOW-UP ACTIVITIES

which may be applied to all the arts

Class discussion:
(All ages, 15-30 min.)
Go around the room and have students tell what they liked best. What did they like least? Was there anything they didn’t understand? For older students, what did they learn? How can they apply this new knowledge to what they have studied in class? Answer any questions that you can, using the study guide or other reference materials.

Visual art:
Supply each student with a piece of blank paper, have them draw their interpretation of the performance. Display in room as a “performance gallery.” (K-5, visual art, creative skills, 20 min. - 1 hr.)

Thank you notes:
Have students write thank you letters to Boston Brass describing what they liked best. To get them started, call on several students and list responses on the board. Collect letters and send them to Camille Barigar; staff will forward them to the artist. (option: have students decorate their letters with crayon drawings of the performers, or other memories of the performance) (K-5, memory, writing, visual art skills, 30 min.)

Journal-writing:
Have students write a description of what they saw during the performance. Read samples aloud. Make a list on the blackboard of different things students remembered; for example, topic of a song, movement of musician, history of the instrument, costume or dress of performer. (3rd & up, memory skills, non-fiction writing, 15-30 min.)

Creative writing:
Ask students to write a short story about what they saw. List several terms on the board from the performance to help them get started: music, tuba, trumpet, horn, trombone, performer, musician. (3rd & up, imagination builder, 30 min.)

Reading/Literature:
Read a short story to the class about classical music. See your school or public librarian, or the resource lists in this study guide, for suggestions. (K-5, language arts, cultural exploration, 10-30 min.)

Creative movement:
Play some brass quintet music and have groups of students improvise a dance. While one group performs, have the others guess what the first is trying to convey. (K-5, music, physical exercise, 15-20 min.)

Rhythm:
Have students make simple rhythm instruments (many books are available in the library on this subject). Take turns having one student lead the class “rhythm band.” Encourage students to try to duplicate rhythms they heard in the performance. (All ages, arts/crafts, music, leadership skills, 30 min. - indefinite amount of time, can use instruments throughout the year)