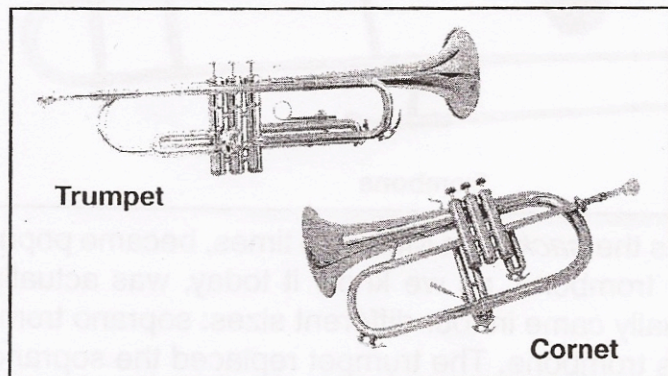




Chapter 10: All in the Family—The Brass

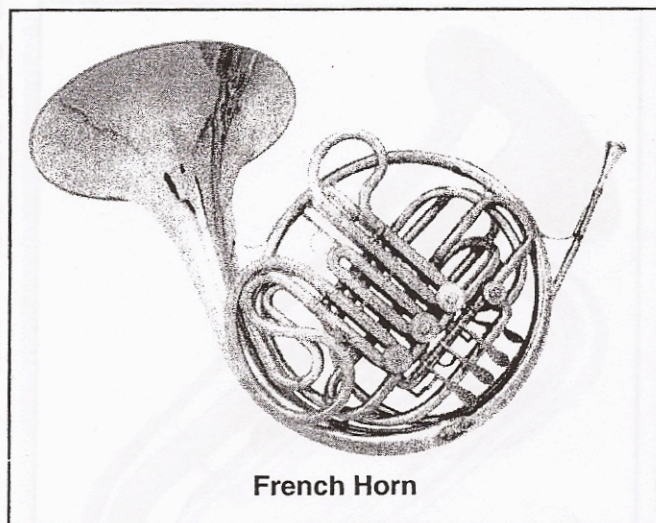
The **brass family** consists of the trumpet, cornet, trombone, horn (sometimes called the French horn), tuba, euphonium, and baritone. Each instrument is played by vibrating the lips into a mouthpiece. This mouthpiece then channels those vibrations and the air of the player into the instrument and forces it through different-sized tubing to create the various pitches. The two brass instruments that have been around the longest are the trumpet and the horn.



The original trumpets did not have valves and were frequently used to announce an arrival or to herald nobility. The earliest types of trumpet or horn were made out of either animal horns or seashells. Later, they were made out of brass or other metals with a detachable mouthpiece through which the player could vibrate his lips, set the vibrations in motion, and create sound. Trumpets did not develop valves or pistons until near the end of the Classic era. The valves and pistons enabled the trumpet to change pitch more clearly and cleanly by channeling the air into different tubing on the instrument as the player depressed keys or valves.

As mentioned earlier, the horn was originally made from animal horns or shells and was frequently used to sound an alert or to send signals over long distances. Later, horns were manufactured from brass. They were relatively small with a mouthpiece on one end, the tubing wrapped into a circle, and a bell at the other end. Often these horns were used as hunting horns. A rope was usually attached to the horn so that it could go around the neck or shoulders of the hunter while he was astride a horse. The horn could then be sounded to help drive animals, as well as signal to other hunters. This use of the horn was prevalent during the Middle Ages and Renaissance. During the Baroque era, horns were further developed and began to be used in instrumental music ensembles. During the Classic era, the horn became a favorite solo instrument for composers such as Mozart and Haydn. Horns during the Classic era did not have valves to change the pitch. The pitch on these early instruments was changed through changing the shape of the hand and depth of the hand inside the bell. The pitch also changed by tightening and loosening the lips, known as the **embouchure**.

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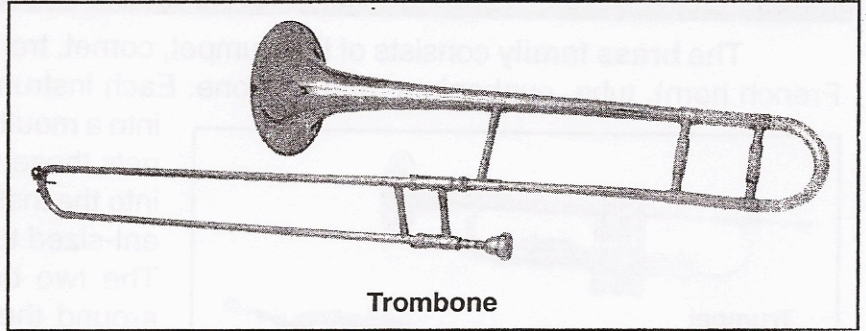


By the turn of the nineteenth century, the beginning of the Romantic era, valves were developed for the horn and the trumpet. The horn evolved over the next 50 to 75 years into the form we see today.



Chapter 10: All in the Family—The Brass (cont.)

The trombone is the next oldest in the brass family. Trombones evolved from the trumpet as instrument makers experimented with adding a slide to the trumpet, thus enabling a musician to change pitch. The slide trumpet soon became less popular. However, the larger instrument that came from the slide trumpet, known as the *sackbut* in Medieval times, became popular, and composers made great use of it. The trombone, as we know it today, was actually developed in the late sixteenth century. It originally came in four different sizes: soprano trombone, alto trombone, tenor trombone, and bass trombone. The trumpet replaced the soprano trombone by the end of the Baroque era. The alto, tenor, and bass trombones survived through the end of the Romantic era. By the beginning of the twentieth century, the alto trombone was no longer in use. Today, the surviving members in the trombone family are the tenor and bass trombones. The pitch on the trombone is changed by lengthening or shortening the slide with the trombone player's right hand, while changing the lip tension in the embouchure.



Trombone

The remainder of the brass family—the tuba, euphonium, and the baritone—are all similar in shape and manner of sound production; however, they vary in size. The tuba is the largest and lowest of the instruments. The baritone and euphonium have the same range, approximately one octave higher than the tuba. The baritone differs in appearance from the tuba and euphonium because the bell faces outward, rather than straight up. These three instruments came into use during the nineteenth century in European brass bands. The tuba has several predecessors, such as the *serpentine* among others, which have been in use for several centuries. In terms of shape and sound, however, these predecessors are nothing like the tuba. Again, the sound, as with the other brass instruments, is initiated through the vibration of the lips into a mouthpiece. Pitch is changed through valves similar to those of a trumpet, and the sound ultimately comes out through the bell at the top.



Tuba

These instruments constitute the brass family and are all regular members of marching bands

and symphonic bands. The trumpet, trombone, tuba, and horn are all regular members of the symphony orchestra, as well. The trumpet and trombone are the only brass instruments generally used in jazz ensembles.

Name: _____ Date: _____



Chapter 10: Questions

1. How is sound created in brass instruments? _____

2. How were the original trumpets different from today's instruments?

3. What materials were the earliest types of trumpets or horns made from?

4. What were early horns used for? _____

5. What is it called when a player changes pitch by tightening or loosening the lips?

6. What was the name of the early trombone developed in the Medieval period?

7. How is pitch changed on a trombone? _____

8. When were valves developed for the trumpet and horn? _____

9. What is the lowest brass instrument? _____
10. Which brass instruments are used in jazz ensembles? _____

Word Search

Complete the word search using terms from the chapter. Circle the words in the puzzle as you find them.



air
embouchure
mouthpiece
trombone

bands
euphonium
orchestra
trumpet

baritone
French horn
sackbut
tuba

bell
keys
serpentine
tubing

brass
lips
slide
valves
vibrate