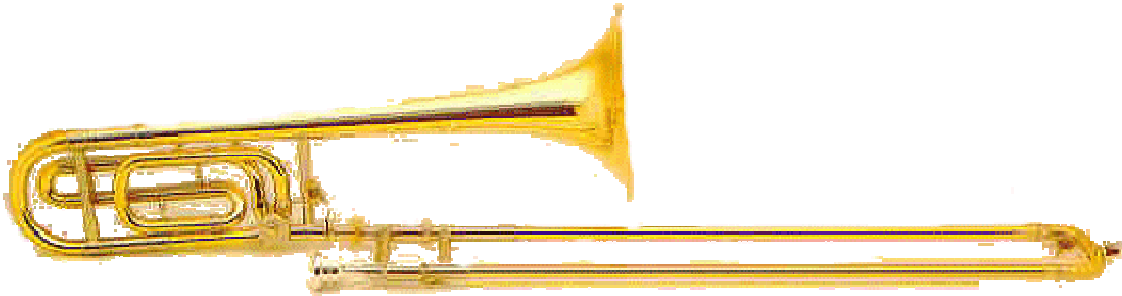


TROMBONE

The trombone has the greatest note range out of all the brass because of its slide. The mouthpiece of the trombone is larger than that of a trumpet, and gives the instrument a more mellow sound. It is a long brass tube that is folded back on itself sort of like a paper clip. Instead of valves, the trombone has a slide which changes the length of its approximately 9 feet of tubing to reach different pitches. Trombones have been around for over 600 years. The original design of the trombone came from an Old English instrument called the sackbut.



Trombone Links

<http://www.trombone.org/>
<http://www.ita-web.org/>
<http://www.trombone-usa.com/>

How the sound is made

Sound on a brass instrument comes from a vibrating column of air inside the instrument. The player makes this column of air vibrate by buzzing the lips while blowing air through a cup or funnel shaped mouthpiece. To produce higher or lower pitches, the player adjusts the opening between his/her lips. The mouthpiece connects to a length of brass tubing ending in a bell. The shorter the tubing length, the smaller the instrument, and the higher the sound; and the longer the tubing length, the larger the instrument, and the lower the sound.

How the pitch is changed

The pitch of a brass instrument depends on the volume of air that is vibrating, as well as the speed at which the player's lips vibrate. The volume of air depends on the length of the tube; a longer tube means a larger volume of air, hence lower pitch. By buzzing the lips faster or slower, the player can cause the air in the tube to resonate at different harmonics. In order to get all 12 notes of the chromatic scale, the player needs to change the length of the tube by moving a slide or by pressing valves.