

Brass Family Study Lapbook

Joy Music <http://homeschoolblogger.com/joyfulmusic/>

Lapbook Components

<i>Valve vs. Slide</i>	<i>“Buzzing Brass Mouthpiece”</i>	<i>Styles of Music</i>
<i>Metallic Elements</i>	<i>“Experience Vibrations”</i>	<i>Trumpet Mini</i>
<i>The Bell</i>	<i>“How Hearing Works”</i>	<i>French Horn Mini</i>
<i>Saxophone?</i>	<i>Brass Mouthpieces</i>	<i>Trombone Mini</i>
<i>Brass Instrument Cards</i>	<i>Brass Measurement</i>	<i>Tuba Mini</i>
<i>Brass Notebook Page</i>	<i>Characteristics of Brass Notebook</i>	<i>Science & Math Notebook</i>

Characteristics of Brass Instruments – A brass instrument is can be made of brass or other materials. All brass instruments have the same type of mouthpieces except in size and variation of shape. Players must “buzz” with their lips while blowing to produce a sound.

“Brass instruments are wind instruments that are made of metal, and usually brass. They appear in many different shapes and sizes, all brass instruments have a mouthpiece, a length of hollow tube, and a flared bell. The mouthpiece of a brass instrument may be cup shaped, like a cornet, or a cone shaped, like the horn. The tube may be wide or narrow, mainly conical, as in the horn and tuba, or mainly cylindrical, as in the trumpet and trombone. The sound of a brass instruments is made by the player’s lips vibrating against the mouthpiece, so that the air vibrates in the tube, causing the whole instrument to resonate. By changing lip tension, the player can vary the vibration and produce notes of different pitches. The range of notes produced by a brass instrument can be extended by means of a valve system. Most brass instruments, such as the trumpet, have piston valves that divert the air in the instruments along an extra piece of tubing (known as a valve slide) when pressed down. The total length of the tube is increased and the pitch of the note produced is lowered. Instead of valves, the trombone has a movable slide that can be pushed away from or drawn toward the player. The sound of a brass instrument can also be changed by inserting a mute into the bell of the instrument.”

“What are Brass Instruments?” **Brass Instruments in Action** http://www.b-visible.co.uk/article/brass_instruments.html

Clear, easy descriptions of brass instrument characteristics - great pictures and videos

Brass Instruments <http://encyclopedia.thefreedictionary.com/Brass+instruments>

Very detailed description of the family. I would choose only some of this for elementary students; some of it is more advanced for middle / high school – correlates with physics (design and pitch) and chemistry (metallic elements). Use this site for the following mini books: *Valve vs. Slide*: What is the difference? ~ *Metallic Elements*: What materials are brass instruments made with? ~ *The Bell of the Horn* ~ *Saxophone?* Is it a brass instrument? Why or why not? (No ~ the way the mouthpiece is played.) ~ *Styles of Music* – What types of music do brass instruments play? orchestral, jazz, rock, military, marching, etc.

Brass Mouthpieces [http://encyclopedia.thefreedictionary.com/Mouthpiece+\(brass\)](http://encyclopedia.thefreedictionary.com/Mouthpiece+(brass)) Picture & diagram of brass mouthpiece; embouchure; mouthpieces of the family (size & shape) ~ *Brass Mouthpieces*

Experiments

Math & Science with Brass Instruments (DSO) <http://www.dsokids.com/2001/instrumentchart.htm> Elementary / Middle School ~ Click to particular instruments for info and sounds.

Math ~ *Brass Measurement Activity* How long are the metal tubes in brass instruments?

<http://www.dsokids.com/2001/dso.asp?PageID=396> Follow the directions from this page. You may want to print the “uncoiled” page out and put into your lapbook. Note your observations in the mini book. ~

What was added to brass instruments over the years to produce more pitches? ~ Length of Tubing: Estimate & Actual ~ Measurements ~ How does tubing circumference and length make an effect on brass instruments?

Science ~ “*Buzzing Brass Mouthpiece*” Experiment <http://www.dsokids.com/2001/dso.asp?PageID=103> ~ “*Experience Vibrations*” Experiment <http://www.dsokids.com/2001/dso.asp?PageID=99> ~ “*How Hearing Works*” <http://www.dsokids.com/2001/dso.asp?PageID=132> Ear diagram to print out and put in lapbook. Write observations in the mini file folders.

Instrument Mini Books - Fill in with information about the instrument: How does it sound? What does it look like? What is it made of? How is it made? How is it played? What is the history of the instrument? Where and when was it first played? Who is a famous player of this instrument? Etcetera... *Trumpet Mini* ~ *Tuba Mini* ~ *Trombone Mini* ~ *French Horn*

Brass Instrument Information

Brass Family (SFS) <http://www.sfskids.org/templates/instorchframe.asp?pageid=3> Elementary ~ Click on an instrument to find out more and to hear examples.

Brass Section <http://www.artsalive.ca/en/mus/instrumentlab/brass.html> Elementary ~ simple explanations, pictures, sound clips.

Brass Family <http://www.mathcs.duq.edu/~iben/brass.htm> Elementary / Middle School ~ History & Description of all instruments as a family and separate instruments (click on left).

Meet the Orchestra <http://www.makingmusicfun.net/htm/mmf-music-library-meet-the-orchestra-index.htm> Elementary / Middle School ~ Info and history on the trumpet, French horn, trombone, and tuba. Really fun site! The games are cute and educational too!

The Orchestra – A User’s Manuel <http://www.mti.dmu.ac.uk/~ahugill/manual/brass.html> This is the brass page, but if you click a particular instrument under orchestration, it leads you to mini lesson videos and resources for players. Click on historical to learn about the style periods.

Music Acoustics <http://www.phys.unsw.edu.au/jw/brassacoustics.html> Middle / High School ~ Sound, Frequency, Air Flow, Dynamics, Pipes Size & Shape, Bell, Mouthpiece, Resonances and Harmonics, Intervals, Intonation, Spectra, Mutes, Valves & Slides – Fantastic to use with physics and math lessons!

Brass Games ~ *Brass Instrument Flashcards* / *Matching Game* – two versions.

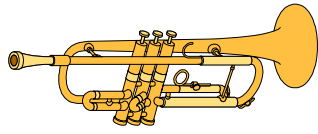
Music-Instrument Clipart <http://www.wmfclipart.com/cgi-bin/get.cgi?url=free-clipart-Music-Instruments.html> “Music-Instruments Clipart - Below is the collection of free Music-Instruments clipart collected from various internet Music-Instruments free clipart sites and free Music-Instruments newsgroups, with permissions. All these free Music-Instruments free clip arts are in public domain, royalty free and can be freely used by anybody.”

Music Graphics Galore <http://www.musicgraphicsgalore.net/graphics-5.html#Brass>

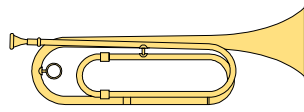
“**DISCLAIMER: Most of these graphics were obtained through search engines and "owners" were contacted for permission to use them. If anyone discovers that any of these graphics are copyrighted, please notify me, and I will remove them immediately. I am unaware that any are at the present time. You are welcome to use these graphics in a NON-PROFIT manner only, such as non-commercial websites or signature files, brochures, flyers, posters, stationary, signs and pamphlets.**”

Brass Flashcards / Matching Game 1

JOY Music <http://homeschoolblogger.com/joyfulmusic/> Print out 2 sets.



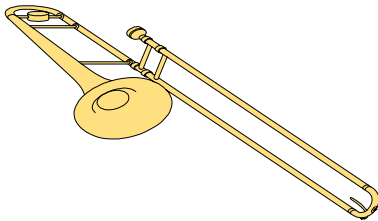
Trumpet



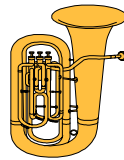
Bugle



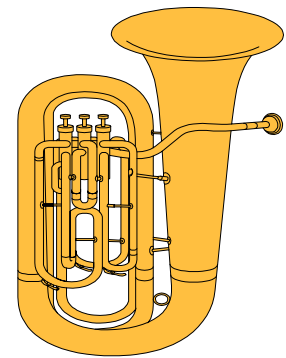
French Horn



Trombone



Baritone



Euphonium



Tuba



Bass Trombone



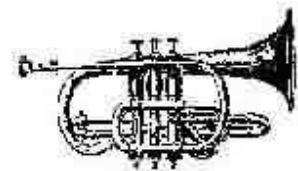
Bugle



**Soprano
Trumpet**



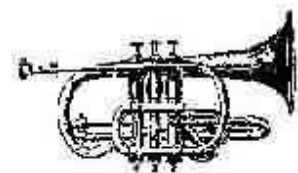
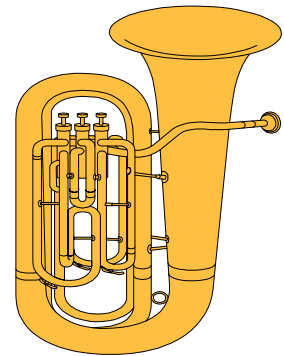
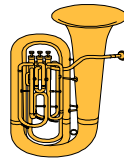
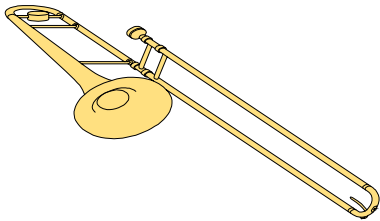
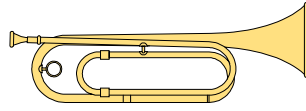
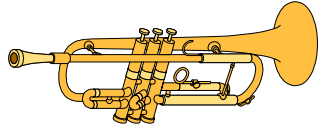
Mellophone



Bass Trumpet

Brass Flashcards /Matching Game 2a

JOY Music <http://homeschoolblogger.com/joyfulmusic/> Print out one each.



Brass Flashcards / Matching Game 2b

JOY Music <http://homeschoolblogger.com/joyfulmusic/>

Trumpet	Bugle	French Horn
Trombone	Baritone	Euphonium
Tuba	Bass Trombone	Bugle
Soprano Trumpet	Mellophone	Bass Trumpet

Brass Flashcard Pocket

JOY Music <http://homeschoolblogger.com/joyfulmusic/>

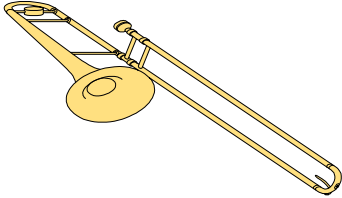
Cut out as one piece, fold long rectangle back, fold edges of top piece back and glue.

THE

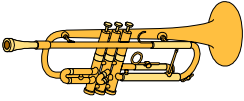
BRASS

FAMILY

Brass Lapbook Materials 1



Trombone



Trumpet

Blank oval shape with four horizontal lines for writing.

Blank star-shaped shape with three horizontal lines for writing.

Blank oval shape with four horizontal lines for writing.

Blank star-shaped shape with three horizontal lines for writing.

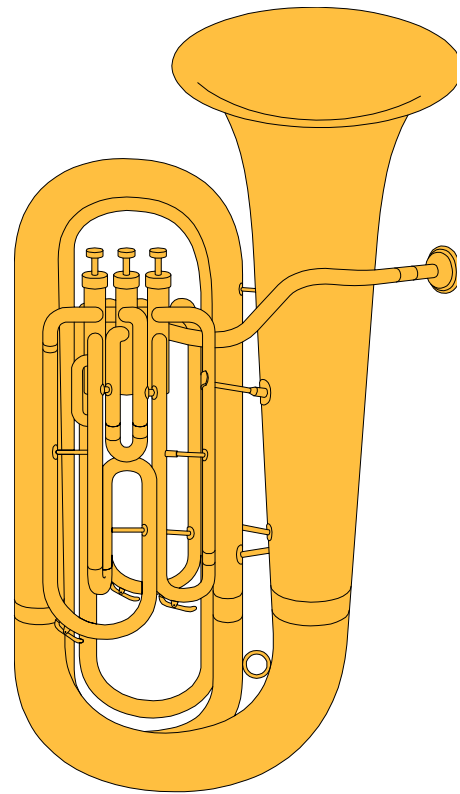
Blank oval shape with four horizontal lines for writing.

Blank star-shaped shape with three horizontal lines for writing.

Blank star-shaped shape with no lines.

Brass Lapbook Materials 2

Clip Art <http://www.wmclipart.com/cgi-bin/get.cgi?url=free-clipart-Music-Instruments.html>

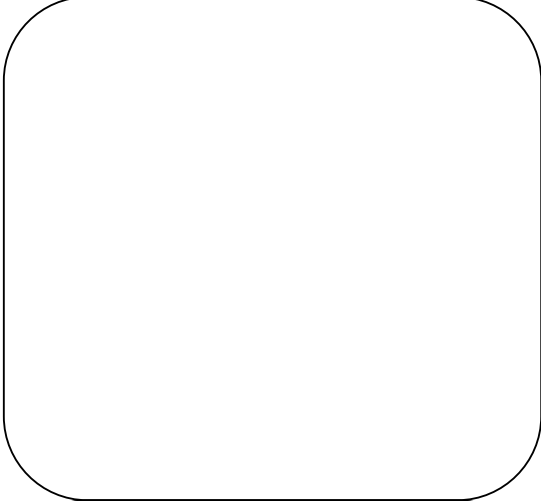


**Tuba
or
Euphonium**

Brass Lapbook Materials 3

Clip Art <http://www.wmclipart.com/cgi-bin/get.cgi?url=free-clipart-Music-Instruments.html>

French Horn



French Horn Lined Insert

Lined insert for French Horn with 7 horizontal lines.

Tuba Lined Insert

Tuba Lined Insert with 15 horizontal lines.

Brass Lapbook Materials 4

Clip Art <http://office.microsoft.com/en-us/clipart/download.aspx>
Brass Instruments <http://encyclopedia.thefreedictionary.com/Brass+instruments>

Slide

Fold sides to front, fold down cover over sides.

Glue this side to lapbook.

Valve



**What
is the
difference?**



Brass Lapbook Materials 5

Joy Music <http://homeschoolblogger.com/joyfulmusic/>
Brass Measurement Activity

Length of Tubing

Estimate ~ Actual

Trumpet
French Horn
Trombone
Tuba

What was added to brass instruments over the years to produce more pitches?

“Brass Instruments Uncoiled”
<http://www.dsokids.com/2001/dso.asp?PageID=396>

Follow the lesson plan from the link.

Cut out as one piece,
fold all sides in.

Glue this side to lapbook.

How does tubing circumference and length make an effect on brass instruments?

Measurements

Brass Lapbook Materials 6

Joy Music <http://homeschoolblogger.com/joyfulmusic/>

Experiments

**Buzzing
Brass
Mouthpieces**

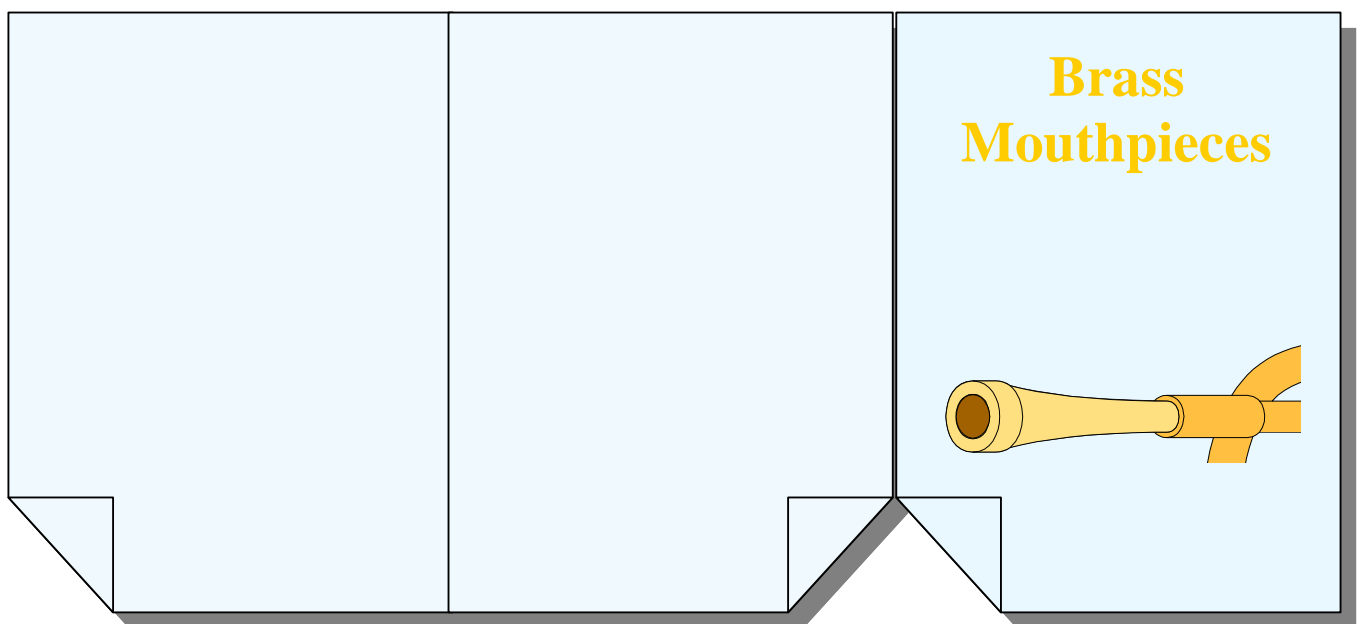
**EXPERIENCE
Vibrations**

**How
Hearing
Works**

Brass Lapbook Materials 7

Joy Music <http://homeschoolblogger.com/joyfulmusic/>

<h1>Brass</h1>		 <p>Copper Atomic Number: 29 Atomic Mass: 63.55</p>
<h1>Silver</h1>	Cut between brass, silver, and other sections, fold into book, fold cover into book.	 <p>Silver Atomic Number: 47 Atomic Mass: 107.87</p>
<h1>Other</h1>	Glue this piece to the lapbook.	<h2>Metallic Elements</h2>  <p>Zinc Atomic Number: 30 Atomic Mass: 65.39</p>  <p>Gold Atomic Number: 79 Atomic Mass: 196.97</p>

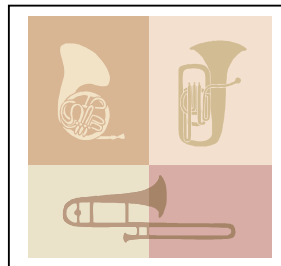


Brass Lapbook Materials 8

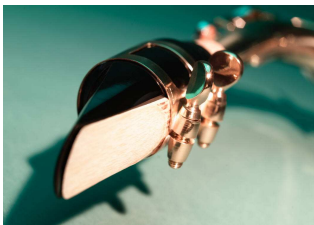
Joy Music <http://homeschoolblogger.com/joyfulmusic/>

Cut $\frac{1}{4}$ of circle diameter at arrow, bend picture piece back (so picture sticks out, fold other pieces back until it looks like a piece of pie.

THE BELL



Why or



why not?

Is a
saxophone



a brass
instrument?