Brassy Brass Activity 6
All the Buzz

Teaching Sequence
1. In musical instruments, sound is created when the player causes the air in or around the instrument to vibrate. Instruments are grouped into four families according to how the player produces that vibration. Brass instruments are played by buzzing.

2. Buzzing is when a player blows air between their closed lips causing them to vibrate together. In brass instruments, sound is produced when the player buzzes his or her lips into a mouthpiece on the instrument. This creates a sound that travels through the tubing of the instrument, giving the instrument its unique timbre. The flared bell of the instrument acts like a megaphone, amplifying the sound. As a demonstration, make a megaphone out of a piece of poster board and talk into it. Notice that the megaphone concentrates the sound in a particular direction, making it louder.

3. Make a mouthpiece by cutting the top off a plastic bottle. Be sure to leave enough of the bottle so that it flares out, making a place into which you can buzz your lips—see illustration below.

Culminating Activity
Create a brass instrument by inverting your new mouthpiece into the top of a larger bottle or jug from which the bottom has been cut out. Experiment with the timbre of your instrument by ‘playing’ your mouthpiece into various sized jugs and containers and noting what kind of sound is produced. Try playing your mouthpiece into a piece of garden hose with a funnel on the end for a bell. Try different sized funnels and different lengths of hose. Allow students to try. After a little experience they will be able to make predictions about how a given item will affect the sound.

Evaluation
Did students develop an understanding that the unique timbre of the brass family is determined by the size and shape of each instrument?

Extension Activity
Tell students that the military uses a brass instrument called a bugle to signal troops and give instructions like wake up, lights out, or “charge!” Using the brass instruments they made, have students create bugle calls by composing small patterns of long, short, high and low tones. Examples of instructions could be to line up, stand, sit down, etc.

TEKS Connections
Music 117.12 a, b1(A-B); 117.15 a, b1(A,B); 117.18 a, b1(A,B); 117.33 b, c1(A,B)
Science 112.14 a(1,2,3,4A), b(6A); 112.15 a(1,2,3,4A), b6A; 112.16 a(1,2,3,4A), b(1B,6A);
112.18 a(1C), b(1B)
Teaching Objective:
Students will become acquainted with two composers whose music they will hear during the Dallas Symphony Youth Concert.

Resources/Materials:
- CD player
- Accompanying Youth Concert CD cued to Tracks 7 and 8
- Titles of the two compositions displayed on the chalkboard or another appropriate space.
- www.dsokids.com/listen/by-composer
- Several copies of biographical information of composers Chris Hazell and Paul Hindemith posted in unusual places throughout the classroom; on cabinet doors, bookshelves, windows, teacher’s desk and chair, etc. The bios can also be found on page 8 of this guide.
- A Composer Scavenger Hunt Worksheet for each student, that can be found on page 23 of this guide.
- A Composer Scavenger Hunt Answer Sheet for the teacher, that can be found on page 24 of this guide.
- A sharpened pencil for each student
- Classroom computer
- The names Chris Hazell and Paul Hindemith on small pieces of paper placed in a container to be drawn from prior to the Extension Activity

Vocabulary:
Scavenger Hunt—a ‘seek and find’ game in which individuals or teams try to locate and record responses to a list of questions provided for them
Composer—one who creates music

Pre-Assessment:
As students enter the classroom, play the recording of “Borage” by Chris Hazell (Track 7) and The 4th Movement from Symphonic Metamorphosis of Themes by Paul Hindemith, (Track 8). At the conclusion of Track 8, stop the music and tell the class what they have heard. Begin a discussion of the type of music and how and why that music is a part of the classroom instruction. Encourage students to give the names of several other composers.

Teaching Sequence:
1. Tell the students that today they will get to know the two composers whose compositions they heard as they entered the classroom, and will hear again at the Dallas Symphony Orchestra’s Youth Concert. The composers are Chris Hazell and Paul Hindemith.
2. Ask the students to define composer. Tell the students they will find information about the two composers as they participate in a classroom scavenger hunt.
3. Encourage volunteers to describe a scavenger hunt, then give specific instructions. Allow for discussion so that students will understand the rules of this indoor, classroom activity. Distribute a Composer Scavenger Hunt Worksheet and pencil to each student. Have them read the worksheet so that they become familiar with the type of information they will seek. Classroom computer(s) should be available as a resource. Students will enjoy working in pairs as they search the room for clues to fill their worksheets.