ACTIVITY 3: HIGH AND LOW, LOUD AND SOFT SOUNDS =

Goals: To differentiate between high and low, loud and soft sounds
To understand that the longer the straw, the lower the pitch

Skills: Observing by listening, comparing, classifying, inferring, explaining

Materials: Drinking straws

Scissors

Cardboard tube from a toilet paper roll

5" square of waxed paper

Rubber band For each student:

one of each of the items above (Have the students bring in the cardboard tubes.)

Preparation: 1. Gather the materials and place them on a table so they can be easily distributed.

2. Practice making sounds by blowing across a straw, as in the illustration below.

Preparation Time: 10 minutes

Lesson Time: 20-25 minutes

Procedure and Questioning Strategy

Show the students how to make a sound with a straw. Hold the straw with your thumb covering the bottom of the straw. Put the straw close to your bottom lip, as illustrated below, and blow across the straw. Blow softly for a soft sound. Blow harder for a louder sound. (You may need to practice before demonstrating for the students.) Now distribute one straw to each student.

- 1. See if you can make a sound with your straw by blowing across the top of it.
- 2. Try to make a soft sound as you blow across your straw.
- 3. How did you do that?

 I didn't blow very hard.
- 4. Try to make a loud sound.
- 5. How did you make it louder?
 I blew harder.



Distribute a pair of scissors to each student.

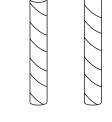
- 6. Cut your straw into two pieces—a long piece and a short piece.
- 7. Blow across the top of each piece.
- 8. How are the sounds different?

One sound is higher (or lower) than the other.

9. Which straw makes the higher sound?

The shorter straw.

Cut three lengths of straw—1", 3", and 5"—and hold them up so students 1" can see them.



3" 5

10. Here are three straws of different lengths. Which one do you think will make the lowest sound?

The longest one.

11. Let's listen to the sounds.

Have three students, one at a time, blow across each of these lengths of straw.

12. Which one made the lowest sound?

The longest one.

13. Which one made the highest sound?

The shortest one.

Hold up the 3" length of straw.

14. What sound did this one make?

Higher than the longest straw. Lower than the shortest straw.

If the students do not recognize that this straw made a sound in between the other two sounds, have the three students blow over their straws in order, from lowest to highest sounds.

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If the students can identify the three different pitches, cut six lengths of straw, from 1" to 6". Select six students to blow across the straws. Give them the straws in random order of size. Have the rest of the students listen to the six sounds and decide how to place them in order from lowest to highest.