

## Making Oboes

This activity accompanies “The Corn-Stalk Fiddle,” from *The Complete Poems of Paul Laurence Dunbar* by Paul Laurence Dunbar, record number 4986.

**Activity Title:** Making Oboes

**Description:** The students will learn about sound by making their own oboes out of straws.

**Subject:** Science

**Skill:** Sound

**Behavioral Objective:**

- The student will investigate and explain that sound is produced by vibrating objects and that pitch depends on how fast or slow the object vibrates.

**Materials:**

- “The Corn-Stalk Fiddle” poem, available in audio and print form at <http://etc.usf.edu/lit2go/>
- Paper and pencils
- Straws of 5 different lengths (cut them in advanced)
- Scissors
- Lab sheet (below)
- Ruler

**Procedures:**

Read the poem with the class, or have the students read it on their own. Discuss with the students how sound is produced, like how Dunbar makes sound with his corn stalk in the poem. Next, have the students create their own oboes, (directions below).



### Straw Oboe Directions:

1. Split the students into groups and hand out the lab sheet.
2. Explain to the students that they will be making oboes out of straws to learn about sound (demonstrate the sound with a premade straw).
3. Show the students the different length straws and ask them to predict if all the straws will make the same sound (for old students ask them about what type of pitch each length will make).
4. Have the students write down their predictions (on the lab sheet).
5. Hand out the straws and rulers; each group should have a different length of straw.
6. Have the students measure the length of their straws in centimeters and record it in their group's box (on the lab sheet).
7. Have the students flatten the end of the straw (about 2-3 cm) making sharp creases in the sides.
8. Have the students cut the end of the straw into a triangle about 1.5cm long.



(Picture from:

<http://www.thenakedscientists.com/HTML/content/kitchenscience/exp/straw-oboe/>)

9. Allow the students to practice using their oboes (triangle side in their mouths).
10. Have one group at a time tell the length of their oboes while the rest of the class writes it down on their lab sheet.
11. Have the groups perform their oboes together, one group at a time.
12. As the groups play their various length oboes have the students write descriptions of the sounds they hear (high, low, medium).
13. Finally, have the students check their predictions with what they wrote down.

\*The shorter the straw the shorter the wavelength, resulting in a higher pitch sound.

Name \_\_\_\_\_

Date \_\_\_\_\_

## Oboe Lab

Prediction: \_\_\_\_\_

\_\_\_\_\_

	Length of Oboe	Description of the sound of the oboe.
Group 1		
Group 2		
Group 3		
Group 4		
Group 5		

Was your prediction correct: \_\_\_\_\_

What was really happening: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

