

## Glossary (from Merriam Webster Dictionary)

**Measure:** a grouping of a specified number of musical beats located between two consecutive vertical lines on a staff

**Rhythm:** the aspect of music comprising all the elements (such as accent, meter, and tempo) that relate to forward movement

**Salsa:** popular music of Latino origin that has absorbed characteristics of rhythm and blues, jazz, and rock

**Sound:** a particular auditory impression; an organized group of vibrations

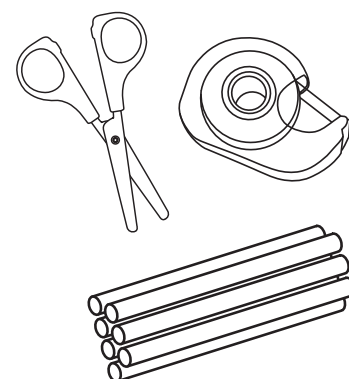
**Tejano Music:** Tex-Mex popular music that combines elements of European waltzes and polkas, country music, and rock and that often features an accordion

**Time Signature:** a sign used in music to indicate meter and usually written as a fraction with the bottom number indicating the kind of note used as a unit of time and the top number indicating the number of units in each measure

## Create It! Make your Own Andean Panpipe

### Materials:

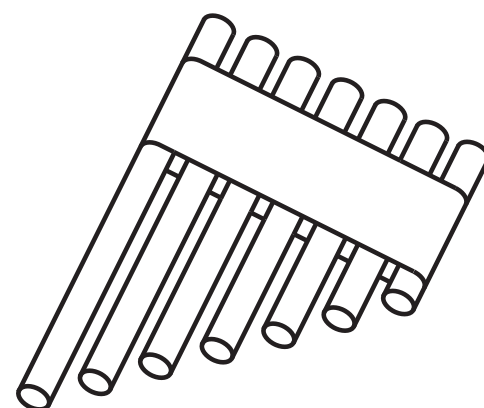
7 drinking straws  
(wider is better)  
2 strips of  
adhesive tape  
(wider is better)  
Scissors  
Ruler



### Instructions:

Using a ruler, line up the seven straws  $\frac{1}{2}$  inch (1.3 cm) apart. Cover them in the middle with adhesive tape (back and front). So that each straw produces a unique sound like a panpipe or zampoña, cut each straw shorter than the one before at even intervals.

You have made a panpipe. Now play your instrument! Blow air gently across the top of each straw to hear the different sounds.



# LATINO ART, BEATS, AND CULTURE



**Listen to our ¡Viva Cultura!  
Playlist on Spotify. Scan  
the QR code to listen now.**



¡Descubra! is made possible in part through program support provided by **NBC Universal Telemundo Enterprises**. To learn more about our sponsor's educational resources, please visit <http://www.telemundo.com/el-poder-en-ti/tu-educacion>.



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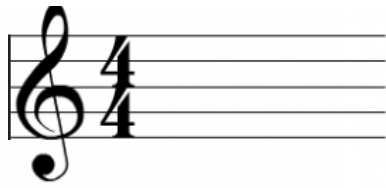




## Create-It! The Math Behind the Music

Did you know that there are fractions and math in music notations and patterns?  
Take a look at the musical notation. Let's break down the math components of the music.

Notation 1:







The time signature means that there are 4 beats per measure.

Notation 2:



The time signature means that there are 3 beats per measure.

In music there are different musical notes that indicate time and beats. These are usually expressed as fractions of time.

- A) : whole note (1 whole beat):  $4/4 = 1$
- B) : Half note (half of a beat):  $2/4 = .5$
- C) : Quarter Note (a quarter of a beat):  $1/4 = .25$
- D) : Eighth Note (eight of a beat):  $1/8 = .125$

## Can you name these instruments?

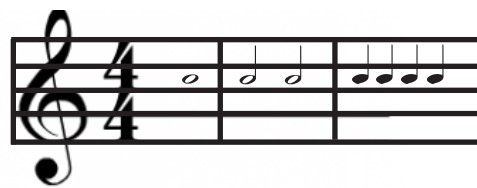


**Did you know?** Organized sound (vibrations through the air) that have various pitches (high or low quality) associated with them. This is what we know as music.

In the space below, draw fraction pie's for options a-d. Do you see the math now? Let's put it all together now.

Fill out the math of the below musical rhythms:

Exercise 1:

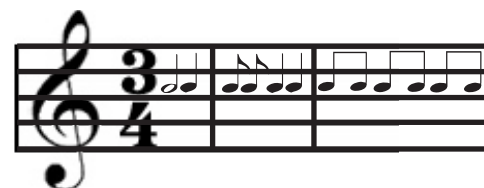


Identify each note and mathematical value.

\_\_\_\_\_

Each measure adds up to \_\_\_\_\_.  
(Hint: Circle the time signature.)

Exercise 2:



Identify each note and mathematical value.

\_\_\_\_\_

Each measure adds up to \_\_\_\_\_.  
(Hint: Circle the time signature.)

**Did you know?** Several different parts of the brain process music. Among those parts, are the sensory cortex which processes tactile elements while the nucleus accumbens and amygdala process emotional reactions.

**Did you know?** People who are deaf or hard of hearing are able to feel low frequency vibrations such as the bass.

## Try it at Home! Cooking Up History

**Did you know?** Papas a la Huancaína is a Peruvian appetizer of yellow potatoes and a creamy, spicy sauce. It is named after Huancayo, a city in the Peruvian highlands.

### PAPAS a la HUANCAINA

Huancayo Style Potatoes  
Yield: 2 servings

Huancaina Sauce:  
2 ounces Peruvian yellow peppers paste  
1 cloves garlic, chopped  
1/4 small onion, chopped  
1/2 cup vegetable oil  
1 1/2 cups evaporated milk  
8 saltine crackers  
3 oz. queso fresco, chopped  
Salt and pepper to taste

1. In a medium sauté pan, pour 2 tablespoons of vegetable oil and sauté the yellow pepper paste, the garlic and the onions until translucent about 5 minutes. Remove from heat and cool down.



2. Place the mixture into a blender or food processor; add half of the milk, half of the crackers and half of cheese. Blend for a couple of minutes and then keep adding the other half of ingredients. The texture should be fluid but a little thick. Season to taste with salt and pepper.

Garnish:  
2 yukon potatoes, cooked, peeled cut into 1/2-inch slices.  
4 black olives (preferably brine-cured), in halves  
1 hard cooked egg, quartered  
2 leaves romaine lettuce

3. Pour the Huancaína sauce over the potato slices, sprinkle parsley and garnish with olives, eggs and lettuce.

For more information and recipes, please visit the Cooking Up History website at <https://americanhistory.si.edu/topics/food/pages/cooking-history>

Recipe Courtesy of Chef Daniela Hurtado-Castro

## Smithsonian Because of Her Story Collections Connections

### Did you know?

Selena grew up speaking only English. She had to learn to sing Spanish phonetically on her early albums that targeted the Spanish-speaking market. Selena has been called the Queen of Tejano music.



Selena Leather Outfit  
National Museum of American History  
ID Number: 1999.0104

**Did you know?** Celia's catchphrase ¡Azúcar!, (Sugar!) which has become one of the most recognizable words in Salsa, was Celia's rallying cry that referred to the African slaves that used to work the sugar plantations in her homeland of Cuba.



Shoes worn by Celia Cruz  
National Museum of American History  
ID Number: 1997.0291  
Gift of Celia Cruz

