ARTS INTEGRATION LESSON FRAMEWORK (ARTS/OTHER DISCIPLINE)

Title: Traditional Chinese Instruments	Grade: K-5					
Subject/Content Area & Art Form: Science Music	Lesson Duration: 30 minutes- 2 hours					
Driving Question: What are the instruments in the Beijing Opera orchestra and how do they make sound?						
Connected Objective: Students will learn about traditional Chinese opera instruments, their construction and how they are played.						
Subject/Content Area Objective		Art Form Objective				
Students will know: Musical instruments make so vibrations or soundwaves.	ound through	Students will know: Musical instruments can organize sounds into different patterns.				
Students will be able to: Identify how different materials effect the sounds an instrument can make.		Students will be able to: Make a connection between the materials used to make the instrument and how the instrument can function in a musical piece.				
Subject Area Standard(s):	Art Elements: MUSIC		21 st Century Skills:			
SCIENCE 1-PS4-1. Plan and conduct investigations to provide evidence that vibrating materials can make sound and that sound can make materials vibrate. 4-PS4-1 Develop a model of waves to describe patterns in terms of amplitude and wavelength and that waves can cause objects to move. 4-PS4-3 Generate and compare multiple solutions that use patterns to transfer information.	Intermediate level; Element: Timbre: World Instruments 11C: Describe the relationships of music to dance, theatre, the visual arts, media arts and other disciplines. Expectation 11C: With limited guidance, make connections between music and other common core subjects, including the arts, through creating, performing, or responding to music.		Choose skills that apply to lesson) ☐ Creativity & Innovation ☐ Critical Thinking & Problem Solving ☐ Collaboration & Teamwork ☐ Communication ☐ Cross-cultural Understanding			

Formative Assessment(s): Explain the differences in instruments made of wood or metal. (And/or) Explain how high and low sounds have waves that travel at different speeds. How does that affect the volume of the sounds and how far it travels?

Summative Assessment(s): Design an instrument. Explain/draw what the instrument is made out of, how you play it, and what style of music you would play on it.

Lesson Materials/ Preparation:

- Internet connection- youtube
- Information about sound waves (See science curriculum for links and information)
- Pencil and paper

Lesson Steps/Strategies for Learning

- Introduce: Watch Melodic Planet episode 3 on Chinese Opera, for voice/falsetto- 13:35- 15:45, Instruments 16:50 18 and for demonstration of the stringed instruments watch at 19 minutes to 24 minutes.
- Engage: What is the difference between your regular singing voice and falsetto? Try and sing an easy song using your falsetto voice. Was it louder? When you listen to Chinese opera do you hear more high sounds or low sounds? Why do you think that is? (See video at 13:45 for answer). What instruments are in the Chinese opera orchestra? (See pictures below). Which instruments do you think make high sounds? Low sounds? Loud or soft?
- **Build Knowledge:** What are the instruments made from? (Wood, bamboo, metal, animal skin, gut). Do you think this is related to the resources they had? How does the material of the instrument effect the sound?
- **Deepen/Assess Understanding:** If you were going to build an instrument, what would you make it out of and why? What kind of music would you play on your instrument?
 - -Optional: Use available materials to construct musical instruments. Have students demonstrate their instruments.
- **Apply:** Either alone or with a classmate, draw a picture of your instrument. Describe to your class what your instrument sounds like and what kind of music it plays. Is it hard to play?
- **Reflect:** How are instruments from China different than Western instruments? Do you think the materials they are made from affect the sound waves?

INSTRUMENT LINKS:

Erhu: https://www.youtube.com/watch?v=thqUc1bf8IU

Zhonghu: https://www.youtube.com/watch?v=IdCTxI4j3-8

Moon guitar: https://www.youtube.com/watch?v=lqQhHqtN2RU

Percussion: https://www.youtube.com/watch?v=cKOZWAH7d9g

Percussion ensemble with horns: https://www.youtube.com/watch?v=ROICExEkXNw (this is 12 minutes- watch as needed)

A video with a variety of Chinese instruments included some used in opera: https://www.youtube.com/watch?v=0esuSpyHmVc



Percussion Section with drums and gongs



Strings, the Erhu (Violin) and Zhonghu (Viola) –(sounds like jing-hu)



Moon Guitar



The whole orchestra