STEM 101
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Name: _____
Period: _____

UNIT: UKULELE

FEEL THE VIBES!

OBJECTIVE:

You're going to feel sound in action! Vibrations are how sound moves. Let's find out what happens when sound travels through the ukulele, your hands, and even furniture!

MATERIALS:

- ✓ Ukulele
- ✓ Hard surface (e.g., desk or table)
- ✓ Cardboard box (as an alternative surface)
- ✓ Student worksheet or notebook for recording
- ✓ Pencil or pen

STUDENT DIRECTIONS:

STEP 1: Partner Up

- One person will be the plucker, and the other will be the feeler.
- Place your fingers very lightly on the top surface of the ukulele (the flat wood part near the strings).

STEP 2: Pluck the String

- Have your partner gently pluck one of the strings.
- Close your eyes to focus on what you feel through your fingers.

STEP 3: What Did You Feel?

- Could you feel the vibrations in the wood?
- Try plucking harder and softer. Did the vibration change?

Record it:

→ *Can you feel the vibrations?*

→ _____

STEP 4: Try It on a Desk or Box

- Now place the ukulele on a hard surface like a desk or cardboard box.
- Pluck the string again and listen closely.

STEP 5: Compare the Sound

- Does the ukulele sound louder, softer, or different on the desk or box?
- Why do you think that happens?

Record it:

→ *Does the sound change when the ukulele touches another object?*

→ _____

LET'S REFLECT:

1. What do you think causes the vibration?

→ _____

2. How do you know that sound is made by something moving?

→ _____

3. What did the desk or box do to the sound? Why?

→ _____

STANDARDS ALIGNMENT

NGSS: 1-PS4-1 **STEL:** STEL 1A, STEL 3A, STEL 7A, STEL 8B, STEL 9A **CCSS:** CCSS.MATH.CONTENT.1.MD.A., CCSS.MATH.CONTENT.K.MD.A.2, CCSS.MATH.PRACTICE.MP2, CCSS.MATH.PRACTICE.MP5