

PRECISION MEASURING

UNIT: UKULELE

OBJECTIVE:

Students will measure selected ukulele parts using a tape measure and a vernier caliper, convert measurements to decimals, and compare results to understand precision.

MATERIALS:

- ✓ Ukulele
- ✓ Tape Measure
- ✓ Vernier Caliper
- ✓ Pencil

ACTIVITY SETUP:

Students have learned how to safely use a tape measure and a vernier caliper and how to convert measurements between units.

STUDENT CHALLENGE:

Measure the same ukulele part using two different tools and determine which tool provides greater precision.

STUDENT DIRECTIONS:

1. Measure the Ukulele Parts

Measure each part carefully using the Vernier caliper.

Ukulele Part	Tape measure (cm)	Vernier Caliper (mm)
Bridge Width	_____ cm	_____ mm
Bridge Length	_____ cm	_____ mm
Bridge Height (Thickness)	_____ cm	_____ mm
Fret Board Width at the Nut	_____ cm	_____ mm
Tuning Peg Diameter	_____ cm	_____ mm
Body Thickness	_____ cm	_____ mm

2. Convert Measurements

Show your solutions on the space provided.

a. *Bridge Width:* _____ cm -> _____ mm

b. *Bridge Length:* _____ cm -> _____ mm

c. *Bridge Height (Thickness):* _____ cm -> _____ mm

d. *Fret Board Width at the Nut:* _____ cm -> _____ mm



Name: _____

Period: _____

e. *Tuning Peg Diameter:* _____ cm -> _____ mm

f. *Body Thickness:* _____ cm -> _____ mm

REFLECTION:

Which measurement is more precise, the tape measure or the vernier caliper? Explain why?

If one measuring tool is more precise than the other, why would you use a less accurate measuring tool? Explain your thinking.
