

## **Instrument Bodies**

What effect does each surface have on the sound from the music box?  
What is causing these effects?

Why do instruments have bodies; why aren't they just a bunch of strings or a reed or a membrane to beat on?

Why would an instrument maker choose to make an instrument body out of wood? Why might metal be chosen? Of the other materials you experimented with, would you make instruments out of them? What kind of instrument with each material? Why?

How does a megaphone shape change a sound? Does it matter whether the megaphone is narrow or flaring?

How do you think the megaphones would have changed if they had been made of wood or of metal?

Would a violin sound louder if you were sitting right front of it or behind it? What about a trumpet? What's the difference?

Based on your observations, what do you think the shape of the instrument does to the sound of a tuba, trumpet, trombone, clarinet, or saxophone? What about flutes and bassoons (which do not flare)?