

Sound Through Solids



Some materials allow sound to travel through them easily. These are called *conductors*. Follow the steps below to learn more about solids as sound conductors.



- A.**
- Put your head down on the desk so that one ear is on the desk. Cover your other ear with your hand.
 - Have your partner place one of the objects from the chart on the desk. Then have your partner use a pencil to tap it.
 - Listen carefully. How well does the sound travel through the desk?
 - Lift your head and listen as your partner taps the object once again. How well does the sound travel through the air?
 - On the chart, rate the loudness of each of the sounds.
 - Repeat Steps 1–5 for each of the objects on the chart.

7. Have your partner choose two additional objects to test. In the last two spaces on the chart, record the name of the object and then rate how well you could hear it.

8. Trade places with your partner and repeat Steps 1–7.

- B.** On the back of this sheet, explain why you think you got the ratings you did on the chart. Keep in mind what you have learned about the way sound travels.

Object	Sound Through Solid					Sound Through Air				
plastic ruler	not at all				very well	not at all				very well
wooden ruler	not at all				very well	not at all				very well
sponge	not at all				very well	not at all				very well
paper/cloth	not at all				very well	not at all				very well
egg carton	not at all				very well	not at all				very well
	not at all				very well	not at all				very well
	not at all				very well	not at all				very well