The Listening Yardstick

Did you ever try to hear through a yardstick? Now's the time!

What to do: A wind-up alarm clock is perfect for this experiment. If you don't have one, then check your electric alarm clock. Does it make a whirring sound? Most of them do if you listen carefully. If it doesn't, find some other appliance in the house that hums or makes a mechanical sound that isn't very loud. If you don't have a yardstick, a ruler will work. So will a wooden dowel rod. Hold the yardstick so that one end touches the clock and the other end press is against the outside of your ear, like this:

What happens: The sound of the clock is much louder now than when you listen to it without the yardstick. You can check this by using the yardstick to listen to other appliances around the house.

Why: The wooden yardstick carries sound waves better than air. Therefore, you hear the clock's sounds more loudly through the yardstick than when you listen normally.

YOU NEED

• yardstick
• ticking clock

365 Simple Science Experiments
Churchill, Loeschnig, Mandell, 1997