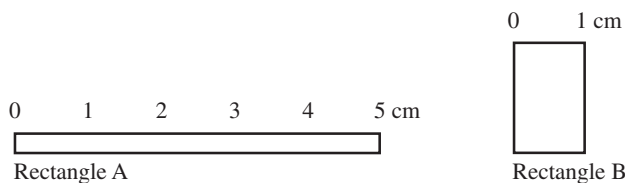


Conductivity Tester Worksheet

Data Table A

Object, Material or Solution	Prediction	Conductor or Insulator	Relative Volume



Data Table B

Distance between Electrodes Rectangle A (cm)	Observations
1	
2	
3	
4	
5	
Rectangle B, 1 cm	

Post-Lab Questions *(Answer on a separate sheet of paper.)*

- Based on the results of Part A, what property do the solid conductors have in common?
- Describe any differences observed in the relative conductivity of the liquids tested based on the volume and pitch of the sound produced.
- Based on the results of Part B, describe the relationship between the length of a conductor and its resistance. What evidence led you to this conclusion?
- Comparing the results of testing Rectangle B to the same length of Rectangle A, what conclusion can be drawn regarding the width of a conductor and its resistance?
- List the following copper wires in order of resistance, from greatest resistance to least resistance.
A. 20 cm in length, 2.1 mm in diameter B. 20 cm in length, 1.0 mm in diameter C. 10 cm in length, 2.1 mm in diameter
- Explain how a volume control knob on a radio adjusts current flow.