

When doing problems watch for best conductor or

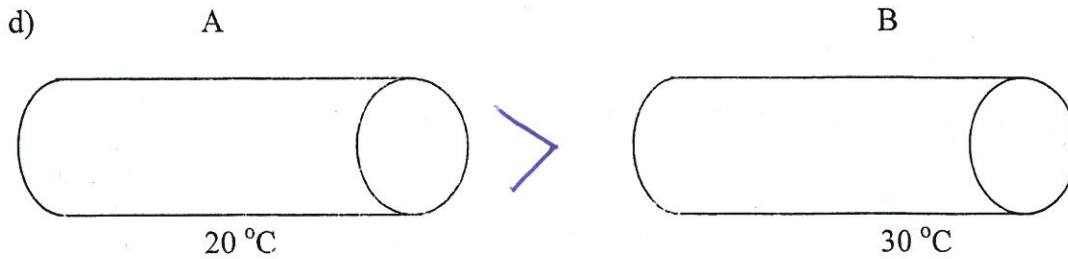
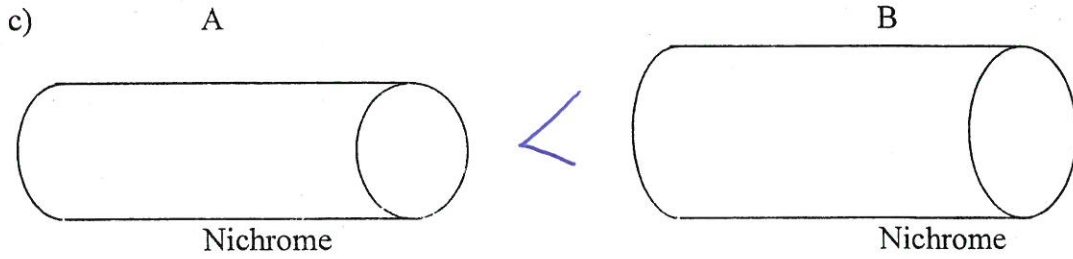
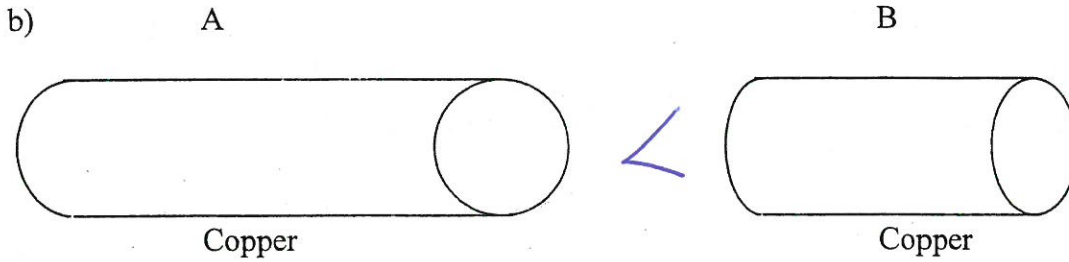
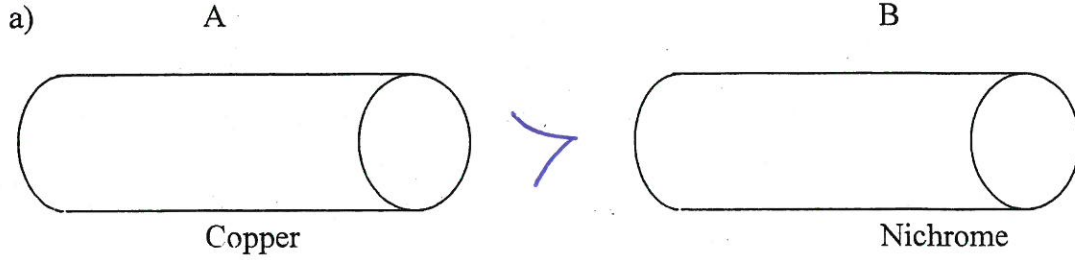
best "resistor"

Factors that affect Conductance

Short Fat Copper Cold

Answer Key

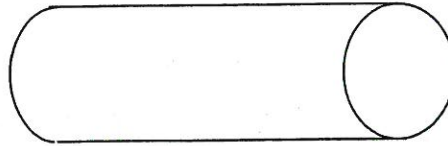
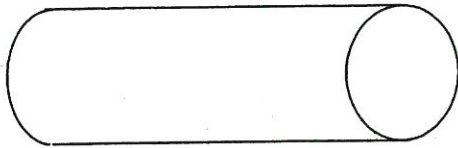
1. Determine which one of each of the following pairs is the better conductor. Use $>$ if A is a better conductor than B and use $<$ if A is a worse conductor than B.



e)

A

B



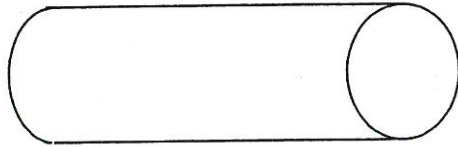
Nichrome

Copper

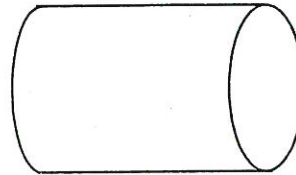
f)

A

B



don't know?



shorter ✓

"fatter" ✓

30 °C Copper

20 °C Nichrome

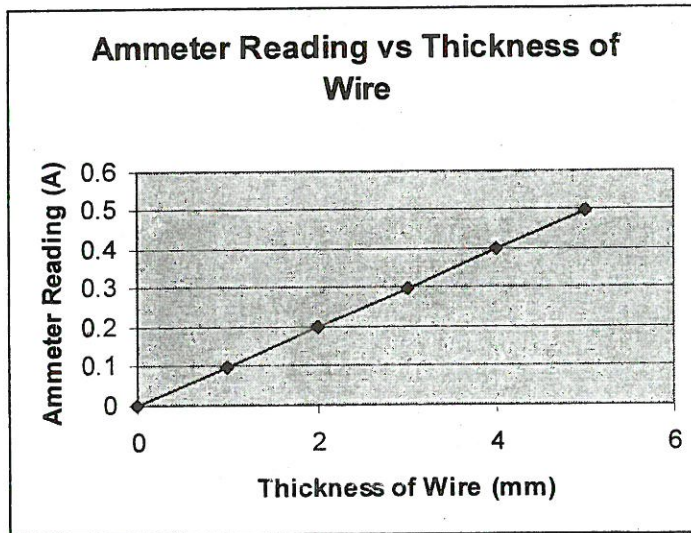


cooler ✓ X 5 but

need the mathematical formula ✓

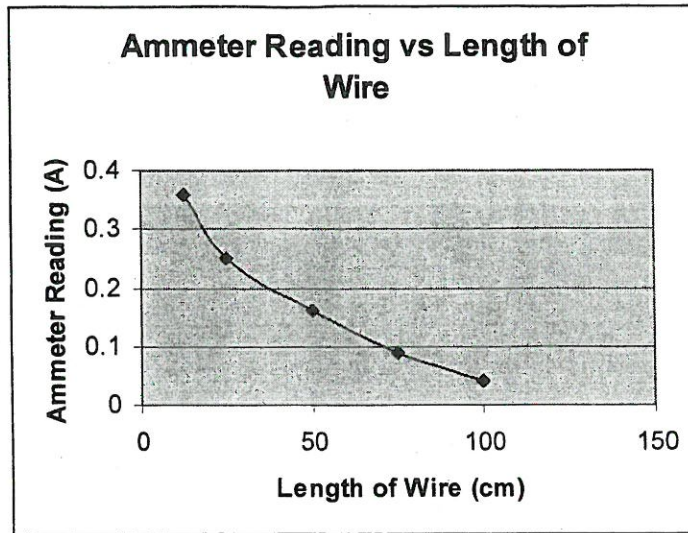
2. What do the following graphs tell you about the factors that affect conductance?

a)



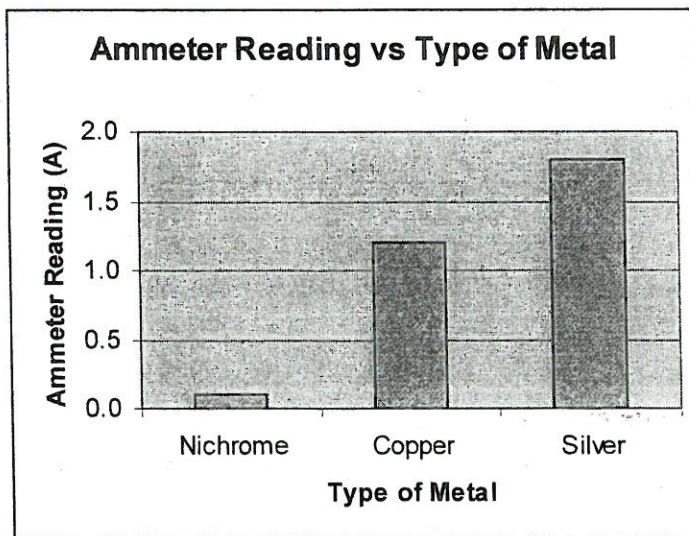
↑ thickness = ↑ I ∴ thicker = better conductor

b)



\uparrow length = \downarrow I \therefore longer = worse conductor

c)



nature of metal affects the ability to conduct

Ag > Cu > NiCr

ele ele alloy of Nickel & Chromium

