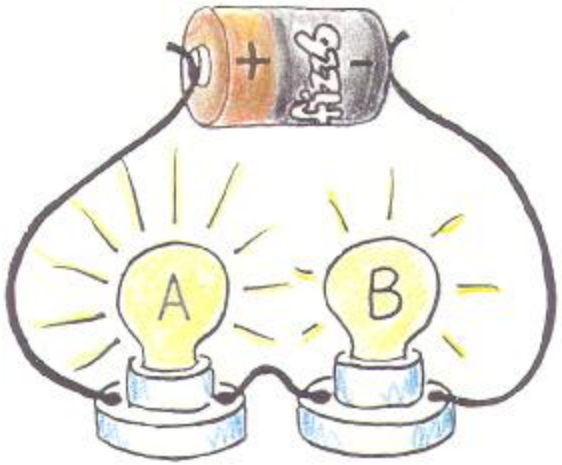
NEXT-TIME QUESTION

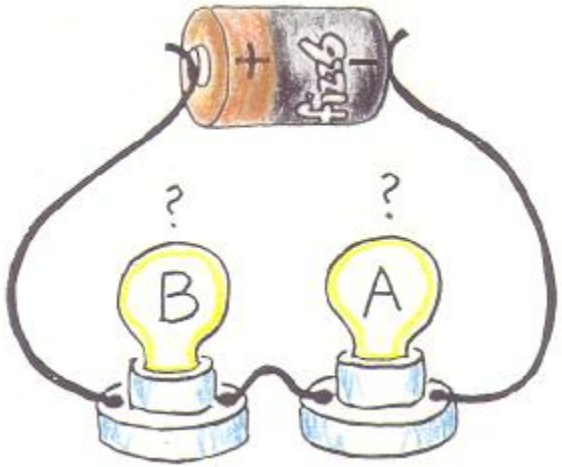
When the series circuit shown to the right is connected, Bulb A is brighter than Bulb B. If the positions of the bulbs were reversed,



a) Bulb A would again be brighter

b) Bulb B would be brighter.

c) either of the above could occur.



thanx to Dean Baird

Hewitt Drew it!

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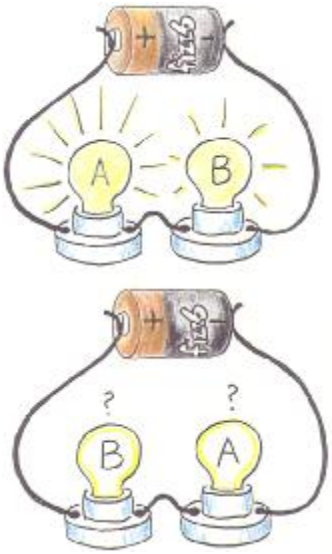

Answer: a

The bulbs are connected in series, so the same current passes through both of them. Different brightnesses indicate different filament resistances. Bulb A is NOT brighter because it is "first in line" for current from the battery! After all, electrons deliver the energy, and they flow from negative to positive—in the opposite direction!

In which bulb is the filament resistance higher?

Which bulb would be brighter if they were connected in parallel?