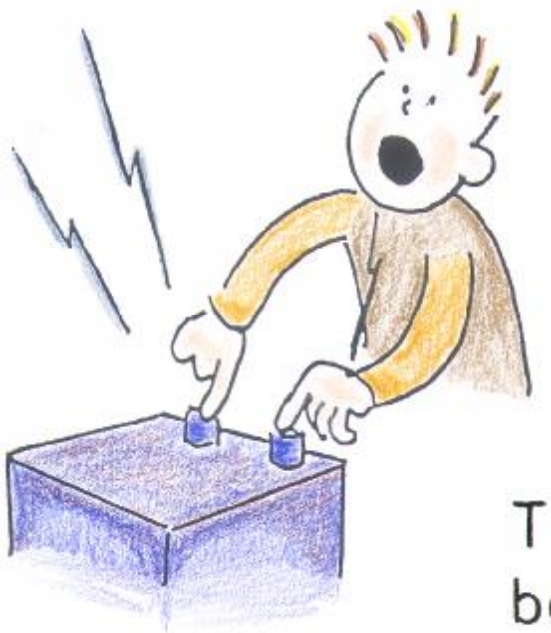
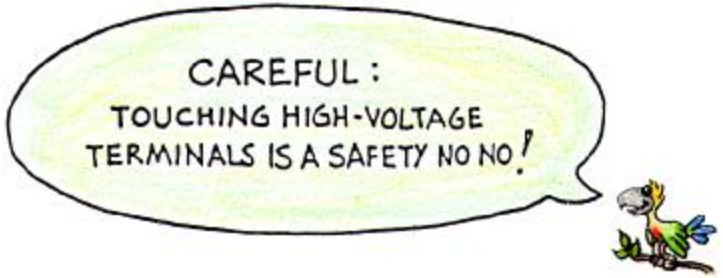
Next-Time Question

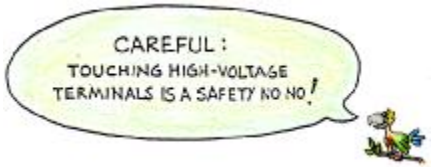


Touch the terminals of a 100-volt battery and you're jolted. Touch a 10,000-volt rubber balloon and you feel nothing. Why?



NEXT-TIME QUESTION

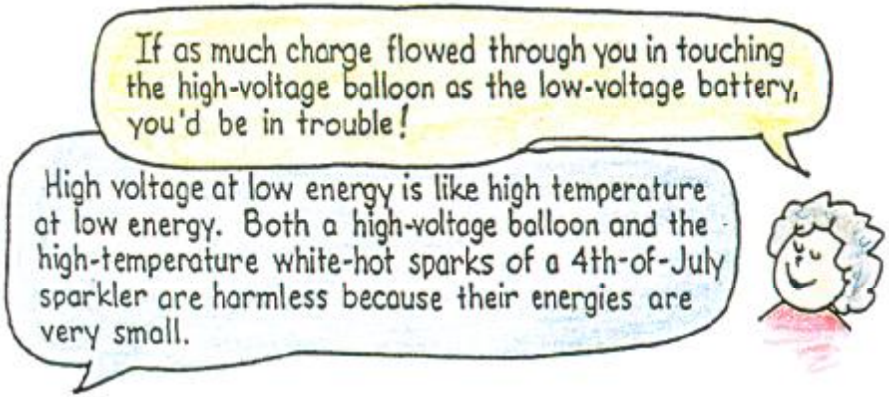
Touch the terminals of a 100-volt battery and you're jolted. Touch a 10,000-volt rubber balloon and you feel nothing. Why?



Answer:

Voltage is energy per charge. How much energy depends on how much charge. A lot more charge flows through you when you become the circuit for the battery, and the corresponding energy flow can be a shocking experience.

Although the energy per charge is 100 times greater on the balloon, only about a millionth as much charge flows through you when you discharge it. The corresponding lowenergy flow is below your threshold of feeling.



CONCEPTUAL Physics