

**37** Each of Kirchhoff's two laws presumes that some quantity is conserved.

Which row states Kirchhoff's **first** law and names the quantity that is conserved?

	statement	quantity
<b>A</b>	The algebraic sum of currents at a junction is zero.	charge
<b>B</b>	The algebraic sum of currents at a junction is zero.	energy
<b>C</b>	The e.m.f. in a loop is equal to the algebraic sum of the product of current and resistance round the loop.	charge
<b>D</b>	The e.m.f. in a loop is equal to the algebraic sum of the product of current and resistance round the loop.	energy