

- 21** A filament lamp is rated as “120V, 40W”.

The lamp is connected into a circuit so that it lights up normally.

Which statement is correct?

- A** The charge passing through the filament in one second is 3.0 C.
- B** The lamp transfer 40 J for each coulomb passing through the filament.
- C** The lamp transfers 120 J in 3.0 s.
- D** The supply provides 40 J to the lamp when the current is 3 A.