

**Marks**  
**2**

- The specific heat capacity of water is  $4.18 \text{ J g}^{-1} \text{ K}^{-1}$  and the specific heat capacity of copper is  $0.39 \text{ J g}^{-1} \text{ K}^{-1}$ . If the same amount of energy were applied to a 1.0 mol sample of each substance, both initially at  $25 \text{ }^\circ\text{C}$ , which substance would get hotter? Show all working.

Answer: