P5 Kerboodle MRI

8) Potential difference is the energy transferred per unit charge. The current is the charge that flows per second.

The power of a travel kettle labelled ‘24V, 5A’ is 120W. If it heats water for 15 minutes then 108,000J of energy are transferred. To calculate the energy transferred, use the equation. Energy transferred (J, kWh) = power (W) x time (s)

11) a double-insulated appliance has a case that will not conduct electricity.

If the live wire touches the metal casing of a kettle, the earth wire will pull a large current through the live wire and melt the fuse