E2.1

UNIT E2 · WORKSHEET

Voltage, current, resistance and meters

UNIT PROGRESS

Core BUILD THE BASICS

C1 **State** the symbol for voltage. **[1]**

C2 **State** the unit of resistance. **[1]**

C3 **State** 6.8 kΩ in ohms. **[1]**

C4 **State** 40 mA in amps. **[1]**

C5 **State** the unit of resistance and its symbol. **[1]**

C6 **State** 3.3 kΩ in ohms. **[1]**

C7 **State** 0.25 A in mA. **[1]**

C8 **State** the meter used to measure current. **[1]**

Stretch GO FURTHER

S1 **State** 0.0022 A in mA. **[1]**

S2 **State** 470 000 Ω using a suitable prefix. **[1]**

S3 **State** 1 500 000 Ω using a suitable prefix. **[1]**

S4 A multimeter set to 20 V reads 1.2. A second reading on the 200 mV range shows 'OL'. **Explain** the second reading. **[2]**

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S5 A reading of about 9 V is expected. **State** the best multimeter range from 200 mV, 2 V, 20 V, 200 V. **[1]**

S6 **Calculate** the current when 6 V is across 1.5 kΩ. Give your answer in mA. **[2]**

Exam Ready QUALIFICATIONS SCOTLAND STYLE

E1 **State** the meter and its connection to measure the current through a motor. **[2]**

E2 A pupil writes the current as '5'. The working used volts and kΩ. **State** the correct unit. **[1]**

E3 **Explain** why resistance is measured with the component removed from the circuit. **[2]**

E4 **Explain** what an 'OL' reading on a multimeter means. **[2]**

Total: 23 marks. Use the Data Booklet. Show your working and give units.