Electricity: IV relationships (OEOO12) – Revision Checklist

I can…	Lesson	Revised
Recognise and draw standard circuit symbols for common components	OEOO12 LE1	
Interpret circuit diagrams using standard symbols	OEOO12 LE1	
Draw an appropriate circuit diagram using correct circuit symbols	OEOO12 LE1	
State what must be present in a closed circuit for electrical charge to flow	OEOO12 LE2	
Define electric current and explain it as a rate of flow of charge	OEOO12 LE2	
State the value of current at different points in a single closed loop	OEOO12 LE2	
Explain how current through a component depends on resistance and potential difference	OEOO12 LE6	
Explain the effect of increasing resistance on current for a given potential difference	OEOO12 LE6	
Explain the difference between components with constant and changing resistance	OEOO12 LE6	
Describe the relationship between current and potential difference for an ohmic conductor	OEOO12 LE7	
Sketch a graph that shows the relationship between current and potential difference for an ohmic conductor	OEOO12 LE6	
Explain the design and use of a circuit to measure the resistance of a component	OEOO12 LE8	
Use graphs to determine whether circuit elements are linear or non-linear	OEOO12 LE7	
Describe how the resistance of a filament lamp changes with temperature	OEOO12 LE4	
Sketch a graph that shows the relationship between current and potential difference for a filament lamp.	OEOO12 LE6	
Describe how current flows through a diode and its resistance in reverse	OEOO12 LE7	
Sketch a graph that shows the relationship between current and potential difference for a diode.	OEOO12 LE6	
Describe how the resistance of a thermistor changes with temperature	OEOO12 LE7	
Describe an application of a thermistor in a circuit	OEOO12 LE7	
Describe how the resistance of an LDR changes with light intensity	OEOO12 LE7	
Describe an application of an LDR in a circuit	OEOO12 LE7	
State the two ways of joining electrical components in a circuit	OEOO12 LE7	
Describe the flow of electrical current	OEOO12 LE5	
Use the charge flow = current x time equation	OEOO12 LE5	
Use the potential difference = current x resistance equation	OEOO12 LE5	
Recall the rules for current, potential difference and resistance in a series circuit	OEOO12 LE3	
Explain why adding resistors in series increases total resistance	OEOO12 LE2	
Explain the design and use of dc series circuits for measurement and testing	OEOO12 LE8	
Define 'series' circuit	OEOO12 LE2	
Define 'parallel' circuit	OEOO12 LE3	
State the rule for resistance in series circuits	OEOO12 LE2	
State the rule for current in series circuits	OEOO12 LE2	
State the rule for potential different in series circuits	OEOO12 LE2	
State the rule for resistance in parallel circuits	OEOO12 LE3	
State the rule for current in parallel circuits	OEOO12 LE3	
State the rule for potential different in parallel circuits	OEOO12 LE3	
Determine the current, potential difference or resistance in series circuits, for components and the whole circuit	OEOO12 LE2	

Determine the current, potential difference or resistance in parallel circuits, for components and the whole circuit	OEOO12 LE3	
Explain, qualitatively, the effect of adding resistors in a series circuit	OEOO12 LE2	
Explain, qualitatively, the effect of adding resistors in a parallel circuit	OEOO12 LE3	
Describe a method to investigate the relationship between the length of a wire and resistance	OEOO12 LE8	
Identify sources of error in an investigation into the relationship between the length of a wire and resistance.	OEOO12 LE8	