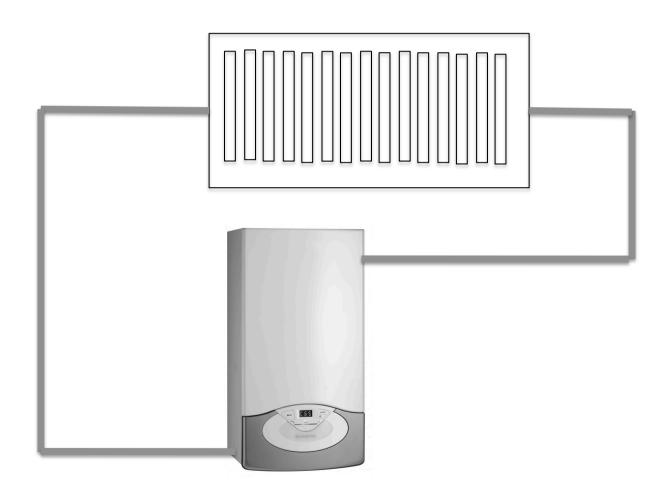
Topic	Electrical circuits	Level	For students aged 11-16
Outcomes	Students are able to use models to describe and explain current, potential difference and resistance in series circuits		

Model	In this model what represents the:	Let's use the model to explain
SER SCHILL)	Current	Use this model to explain what potential difference is.
	Battery	
	Wires	
	Current	Use this model to explain why the current is the same at all points in a series circuit.
	Battery	Use this model to explain why current is not used up in a circuit.
	Wires	
	Current	Use this model to explain what resistance is.
	Battery	Use this model to show why increasing the resistance decreases the current in a circuit.
	Wires	

The penguin model



The central heating model



The rope model



Voltage (or p.d.)

Is not a push. For each unit of current, the voltmeter reading tells us how fast energy will be supplied to that section of a circuit across which it is connected.

Driver, 2000. Children's ideas in science. Published by OUP.