

High Tunstall College of Science Curriculum Intent

Subject: Physics Year: 8

Thread 3—Electricity



	Physics Thread 3	Progress		
Topic	Key ideas	R	A	G
Electricity	I can calculate using the formula $\text{units used} = \text{power} \times \text{time}$			
	I can describe what happens to current and voltage in an example series circuit.			
	I can describe what happens to current and voltage in an example parallel circuit.			
	I can explain how a bulb in a circuit can be used to determine an insulator or conductor			
	I can explain resistance changes in example circuits.			
	I can describe how a static charge can be created on an object.			
	I can define an electric field and draw field diagrams.			

Lesson	Learning Focus	Assessment	Key Words
1	Calculating the cost of electricity when using everyday appliances	Calculate using the formula $\text{units used} = \text{power} \times \text{time}$	Power, kilowatt-hour, units
2	Building and investigating current and voltage in series circuits	Describe what happens to current and voltage in an example series circuit	Current, voltage, series circuit
3	Building and investigating current and voltage in parallel circuits	Describe what happens to current and voltage in an example parallel circuit	Current, voltage, parallel circuit
4	Investigating how to identify a conductor or insulator using resistance	Explain how a bulb in a circuit can be used to determine an insulator or conductor	Resistance, insulator, conductor
5	Investigating how resistance changes in parallel and series circuits	Explain resistance changes in example circuits.	Resistance, Ohms, series circuit, parallel circuit.
6	Describing static electricity and how static charge is created.	Describe how a static charge can be created on an object.	Charge, static electricity, electron, friction, atom
7	Define an electric field and draw simple field diagrams	Define an electric field and draw field diagrams.	Electric field, field line, positive, negative