



ASSESSMENT and  
QUALIFICATIONS  
ALLIANCE

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Mark scheme  
June 2003

GCSE

Science (Modular)  
Single Award

Module 17

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Registered address: Addleshaw Booth & Co., Sovereign House, PO Box 8, Sovereign Street, Leeds LS1 1HQ  
Kathleen Tattersall: *Director General*

## Energy and Electricity: Foundation Tier

Question	Key
One	1 – movement (kinetic energy) 2 – light 3 – heat (thermal energy) 4 – sound
Two	1 – air 2 – movement (kinetic energy) 3 – electricity 4 – sound
Three	1 – switch 2 – battery 3 – resistor 4 – lamp
Four	1 – neutral pin 2 – earth pin 3 – fuse 4 – cable grip
Five	1 – geothermal sites 2 – tidal barrages 3 – wind farms 4 – solar cells
Six	increase the current flowing through the wire increase the strength of the magnetic field
Seven	fix shiny metal foil behind the heater lay a thick carpet on the floor
Eight	8.1 – D, 8.2 – B, 8.3 – C, 8.4 – A
Nine	9.1 – B, 9.2 – B, 9.3 – A, 9.4 – B
Ten	10.1 – B, 10.2 – B, 10.3 – C, 10.4 – D

**Energy and Electricity: Higher Tier**

Question	Key
One	1 – geothermal sites 2 – tidal barrages 3 – wind farms 4 – solar cells
Two	1 – the small wheel of the dynamo turns 2 – this spins the magnet near the coil 3 – a voltage is induced across the coil 4 – this causes a current to flow
Three	fix shiny metal foil behind the heater lay a thick carpet on the floor
Four	P R
Five	5.1 – D, 5.2 – B, 5.3 – C, 5.4 – A
Six	6.1 – B, 6.2 – B, 6.3 – A, 6.4 – B
Seven	7.1 – B, 7.2 – B, 7.3 – C, 7.4 – D
Eight	8.1 – B, 8.2 – D, 8.3 – B, 8.4 – C
Nine	9.1 – B, 9.2 – B, 9.3 – C, 9.4 – C
Ten	10.1 – A, 10.2 – D, 10.3, – D, 10.4 – D