

General Certificate of Secondary Education

Science Single Award Modular 3469

Module 17: Energy & Electricity

Module Test Answer Keys

November 2006 examination series

Mark schemes are prepared by the Principal Examiner and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation meeting attended by all examiners and is the scheme which was used by them in this examination. The standardisation meeting ensures that the mark scheme covers the candidates' responses to questions and that every examiner understands and applies it in the same correct way. As preparation for the standardisation meeting each examiner analyses a number of candidates' scripts: alternative answers not already covered by the mark scheme are discussed at the meeting and legislated for. If, after this meeting, examiners encounter unusual answers which have not been discussed at the meeting they are required to refer these to the Principal Examiner.

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Energy & Electricity: Foundation Tier

Question No.	KEY
One	1 – lamp 2 – fuse 3 – thermistor 4 – variable resistor
Two	1 – blue plastic 2 – green and yellow plastic 3 – brown plastic 4 – white plastic
Three	1 – LDR 2 – thermistor 3 – diode 4 – filament lamp
Four	1 – fossil fuels 2 – hydroelectric schemes 3 – wind farms 4 – nuclear fuels
Five	1 – water flows through the sluice gates 2 – water is trapped behind the barrage 3 – water flows through the turbines 4 – electricity is generated
Six	No fuel is used No sulphur dioxide is produced
Seven	P S
Eight	8.1 – A, 8.2 – C, 8.3 – D, 8.4 – B
Nine	9.1 - C, 9.2 - A, 9.3 - B, 9.4 - D
Ten	10.1 – A, 10.2 – A, 10.3 – A, 10.4 – D

Energy & Electricity: Higher Tier

Question No.	KEY
One	1 – water flows through the sluice gates 2 – water is trapped behind the barrage 3 – water flows through the turbines 4 – electricity is generated
Two	1 – neutral 2 – earth 3 – live 4 – positive
Three	P S
Four	J M
Five	5.1 – A, 5.2 – C, 5.3 – D, 5.4 – B
Six	6.1 - C, 6.2 - A, 6.3 - B, 6.4 - D
Seven	7.1 – A, 7.2 – A, 7.3 – A, 7.4 – D
Eight	8.1 - D, 8.2 - A, 8.3 - B, 8.4 - C
Nine	9.1 – B, 9.2 – B, 9.3 – D, 9.4 – C
Ten	10.1 - D, 10.2 - A, 10.3, - A, 10.4 - B