



**GCSE**

**Science A 4461**

*Physics 4451*

**PHY1AP F & H**

**PHY1AS F & H**

**Mark Scheme**

*2007 examination - November series*

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**PHY1A (Energy and Electricity)**

## Foundation Tier

Question	Key			
One	A	chemical energy to heat		3
	B	electrical energy to heat		4
	C	light energy to electrical energy		1
	D	kinetic energy to electrical energy		2
Two	A	conduction	3	
	B	convection	4	
	C	insulation	1	
	D	radiation	2	
Three	A	nuclear	3	
	B	solar	4	
	C	tides	2	
	D	wind	1	
Four	A	the method that costs most to install		3
	B	the method that conserves most energy		1
	C	the method that pays for itself in less than one year		2
	D	the method that takes five years to pay for itself		4
Five	A	0.05	4	
	B	5	2	
	C	95	3	
	D	100	1	
Six	A	gravitational potential energy		1
	B	kinetic energy		2
	C	light energy		4
	D	thermal energy		3
	A	B	C	D
Seven	4	4	1	3
Eight	1	1	1	4
Nine	2	1	1	4

**PHY1A (Energy and Electricity)**

## Higher Tier

Question	Key			
One	A	gravitational potential energy	1	
	B	kinetic energy	2	
	C	light energy	4	
	D	thermal energy	3	
Two	A	battery	4	
	B	buoy	1	
	C	generator	3	
	D	turbine	2	
	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>
Three	1	1	1	4
Four	2	1	1	4
Five	2	3	2	4
Six	1	3	1	1
Seven	4	4	1	1
Eight	3	3	2	1
Nine	4	1	3	3