



# **General Certificate of Secondary Education**

## **Science A 4461**

### **Physics 4451**

### **PHY1A F & H**

## *Objective Test Answer Keys*

*March 2007 examination series*

Answer keys are prepared by the Principal Examiner and considered, together with the relevant questions, by a panel of subject teachers.

Further copies of these answer keys are available to download from the AQA Website: [www.aqa.org.uk](http://www.aqa.org.uk)

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## PHY1A (Energy and Electricity) Foundation Tier

Question	<i>Key</i>			
One	<b>A</b>	heat		<b>4</b>
	<b>B</b>	light		<b>1</b>
	<b>C</b>	movement		<b>2</b>
	<b>D</b>	sound		<b>3</b>
Two	<b>A</b>	coal-fired power stations		<b>4</b>
	<b>B</b>	geothermal power stations		<b>1</b>
	<b>C</b>	nuclear power stations		<b>3</b>
	<b>D</b>	tidal power stations		<b>2</b>
Three	<b>A</b>	conduction		<b>3</b>
	<b>B</b>	convection		<b>4</b>
	<b>C</b>	radiation		<b>1</b>
	<b>D</b>	reflection		<b>2</b>
Four	<b>A</b>	0.9		<b>4</b>
	<b>B</b>	10		<b>1</b>
	<b>C</b>	30		<b>2</b>
	<b>D</b>	360		<b>3</b>
Five	<b>A</b>	The turbine turns the generator.		<b>4</b>
	<b>B</b>	Radiation is reflected onto the pipe.		<b>1</b>
	<b>C</b>	Steam drives the turbine.		<b>3</b>
	<b>D</b>	Water in the pipe absorbs energy.		<b>2</b>
Six	<b>A</b>	conclusion		<b>3</b>
	<b>B</b>	control		<b>1</b>
	<b>C</b>	environment		<b>4</b>
	<b>D</b>	evidence		<b>2</b>
	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>
Seven	<b>4</b>	<b>3</b>	<b>2</b>	<b>3</b>
Eight	<b>1</b>	<b>1</b>	<b>4</b>	<b>2</b>
Nine	<b>3</b>	<b>3</b>	<b>3</b>	<b>2</b>

**PHY1A (Energy and Electricity) Higher Tier**

<b>Question</b>	<b>Key</b>			
One	<b>A</b>	conclusion	<b>3</b>	
	<b>B</b>	control	<b>1</b>	
	<b>C</b>	environment	<b>4</b>	
	<b>D</b>	evidence	<b>2</b>	
Two	<b>A</b>	free electrons	<b>4</b>	
	<b>B</b>	ions	<b>3</b>	
	<b>C</b>	particles	<b>1</b>	
	<b>D</b>	waves	<b>2</b>	
	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>
Three	<b>1</b>	<b>1</b>	<b>4</b>	<b>2</b>
Four	<b>3</b>	<b>3</b>	<b>3</b>	<b>2</b>
Five	<b>4</b>	<b>2</b>	<b>4</b>	<b>4</b>
Six	<b>3</b>	<b>1</b>	<b>4</b>	<b>3</b>
Seven	<b>4</b>	<b>4</b>	<b>4</b>	<b>2</b>
Eight	<b>1</b>	<b>2</b>	<b>4</b>	<b>2</b>
Nine	<b>3</b>	<b>1</b>	<b>2</b>	<b>1</b>