



**GCSE**

**Science A (4461)**

*Specification A*

**PHY1AP, PH1ASF & PH1ASH**

**Mark Scheme**

*2008 Examination – November Series*

This component is an objective test for which the following list indicates the correct answers used in marking the candidates' responses.

Further copies of this Mark Scheme are available to download from the AQA Website: [www.aqa.org.uk](http://www.aqa.org.uk)

Copyright © 2008 AQA and its licensors. All rights reserved.

#### COPYRIGHT

AQA retains the copyright on all its publications. However, registered centres for AQA are permitted to copy material from this booklet for their own internal use, with the following important exception: AQA cannot give permission to centres to photocopy any material that is acknowledged to a third party even for internal use within the centre.

Set and published by the Assessment and Qualifications Alliance.

**GCSE**  
**SCIENCE A (4461)/PHYSICS (4451)**  
 Objective Test Answer Key  
**PHY1AP (Energy and Electricity)**  
 Foundation Tier

Question	<b>Key</b>			
One	<b>A</b>	electrical	<b>1</b>	
	<b>B</b>	heat	<b>4</b>	
	<b>C</b>	light	<b>2</b>	
	<b>D</b>	sound	<b>3</b>	
Two	<b>A</b>	geothermal	<b>3</b>	
	<b>B</b>	(falling water) hydroelectric	<b>1</b>	
	<b>C</b>	tides	<b>4</b>	
	<b>D</b>	waves	<b>2</b>	
Three	<b>A</b>	conduction	<b>1</b>	
	<b>B</b>	convection	<b>3</b>	
	<b>C</b>	insulation	<b>2</b>	
	<b>D</b>	radiation	<b>4</b>	
Four	<b>A</b>	This is where the electricity is being used.	<b>4</b>	
	<b>B</b>	This is where the electricity is being generated.	<b>1</b>	
	<b>C</b>	This is where the voltage is increased.	<b>2</b>	
	<b>D</b>	This is where the voltage is decreased.	<b>3</b>	
Five	<b>A</b>	0.6	<b>4</b>	
	<b>B</b>	5	<b>3</b>	
	<b>C</b>	15	<b>2</b>	
	<b>D</b>	30	<b>1</b>	
	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>
Six	<b>2</b>	<b>1</b>	<b>4</b>	<b>3</b>
Seven	<b>1</b>	<b>2</b>	<b>2</b>	<b>2</b>
Eight	<b>2</b>	<b>4</b>	<b>3</b>	<b>3</b>
Nine	<b>3</b>	<b>3</b>	<b>3</b>	<b>4</b>

**GCSE**  
**SCIENCE A (4461)/PHYSICS (4451)**  
Objective Test Answer Key  
**PHY1AP (Energy and Electricity)**  
Higher Tier

Question	<b>Key</b>			
One	<b>A</b>	0.6	<b>4</b>	
	<b>B</b>	5	<b>3</b>	
	<b>C</b>	15	<b>2</b>	
	<b>D</b>	30	<b>1</b>	
Two	<b>A</b>		*	
	<b>B</b>		*	
	<b>C</b>		*	
	<b>D</b>		*	
	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>
Three	<b>2</b>	<b>4</b>	<b>3</b>	<b>3</b>
Four	<b>3</b>	<b>3</b>	<b>3</b>	<b>4</b>
Five	<b>3</b>	<b>1</b>	<b>3</b>	<b>2</b>
Six	<b>3</b>	<b>2</b>	<b>1</b>	<b>2</b>
Seven	<b>3</b>	<b>2</b>	<b>4</b>	<b>3</b>
Eight	<b>3</b>	<b>1</b>	<b>2</b>	<b>3</b>
Nine	<b>4</b>	<b>2</b>	<b>3</b>	<b>1</b>

\* The whole of question two was removed from the mark scheme and this test was marked out of 32.