GCSE

Science A (4461) / Physics (4451)

Specification A

PHY1AP, PH1ASF & PH1ASH

Mark Scheme

2011 Examination – March Series

The blank answer sheet for this component can be found at the end of this document.

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

GCSE
SCIENCE A (4461) / PHYSICS (4451)
Objective Test Answer Key
PHY1AP (Energy and Electricity)
March 2011
Foundation Tier

Question		Key	
One	A	falling water	4
	B	sunlight	1
	C	waves	2
	D	wind	3
Two	A	conduction	1
	B	convection	2
	C	insulation	4
	D	radiation	3
Three	A	electrical	3
	B	kinetic	4
	C	light	1
	D	sound	2
Four	A	coal-fired	1
	B	geothermal	3
	C	nuclear	2
	D	wind farm	4
Five	A	economical	2
	B	efficient	1
	C	environmental	3
	D	ethical	4

	A	B	C	D
Six	3	3	4	3
Seven	1	3	2	1
Eight	2	4	2	4
Nine	4	3	2	2

GCSE
SCIENCE A (4461) / PHYSICS (4451)
Objective Test Answer Key
PHY1AP (Energy and Electricity)
March 2011
Higher Tier

Question	Key			
One	**A** economical			**2**
	B efficient			**1**
	C environmental			**3**
	D ethical			**4**
Two	**A** . . . increase the rate at which infra red radiation is absorbed			**4**
	B . . . increase the rate at which infra red radiation is emitted			**3**
	C . . . improve the ability to reflect visible light			**1**
	D . . . prevent the reflection of visible light			**2**

	A	**B**	**C**	**D**
Three	2	4	2	4
Four	4	3	2	2
Five	2	3	1	3
Six	3	2	3	3
Seven	3	4	3	4
Eight	1	1	4	1
Nine	1	2	1	3

AQA

Unit : PHY1AP   PHYSICS UNIT 1A

Centre :

Candidate Number :   **UCI :**

Candidate Name :

Series : 3G11

02-MAR-11

HIGHER TIER

Instructions on how to complete this answer sheet are given on the question paper. Please make sure you follow them carefully.

Questions **ONE** to **NINE** Choose one response **1 - 4** for each of the parts **A - D**

QUESTION ONE

		1	2	3	4
1A	economical	○	○	○	○
1B	efficient	○	○	○	○
1C	environmental	○	○	○	○
1D	ethical	○	○	○	○

QUESTION TWO

		1	2	3	4
2A	...increase the rate at which infra red is absorbed	○	○	○	○
2B	...increase the rate at which infra red is emitted	○	○	○	○
2C	...improve the ability to reflect visible light	○	○	○	○
2D	...prevent the reflection of visible light	○	○	○	○

QUESTION THREE

	1	2	3	4
3A	○	○	○	○
3B	○	○	○	○
3C	○	○	○	○
3D	○	○	○	○

QUESTION FOUR

	1	2	3	4
4A	○	○	○	○
4B	○	○	○	○
4C	○	○	○	○
4D	○	○	○	○

QUESTION FIVE

	1	2	3	4
5A	○	○	○	○
5B	○	○	○	○
5C	○	○	○	○
5D	○	○	○	○

QUESTION SIX

	1	2	3	4
6A	○	○	○	○
6B	○	○	○	○
6C	○	○	○	○
6D	○	○	○	○

QUESTION SEVEN

	1	2	3	4
7A	○	○	○	○
7B	○	○	○	○
7C	○	○	○	○
7D	○	○	○	○

QUESTION EIGHT

	1	2	3	4
8A	○	○	○	○
8B	○	○	○	○
8C	○	○	○	○
8D	○	○	○	○

QUESTION NINE

	1	2	3	4
9A	○	○	○	○
9B	○	○	○	○
9C	○	○	○	○
9D	○	○	○	○

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FOUNDATION TIER

Questions **ONE** to **NINE** Choose one response **1 - 4** for each of the parts **A - D**

QUESTION ONE

		1	2	3	4
1A	falling water	○	○	○	○
1B	sunlight	○	○	○	○
1C	waves	○	○	○	○
1D	wind	○	○	○	○

QUESTION TWO

		1	2	3	4
2A	conduction	○	○	○	○
2B	convection	○	○	○	○
2C	insulation	○	○	○	○
2D	radiation	○	○	○	○

QUESTION THREE

		1	2	3	4
3A	electrical	○	○	○	○
3B	kinetic	○	○	○	○
3C	light	○	○	○	○
3D	sound	○	○	○	○

QUESTION FOUR

		1	2	3	4
4A	coal-fired	○	○	○	○
4B	geothermal	○	○	○	○
4C	nuclear	○	○	○	○
4D	wind farm	○	○	○	○

QUESTION FIVE

		1	2	3	4
5A	economical	○	○	○	○
5B	efficient	○	○	○	○
5C	environmental	○	○	○	○
5D	ethical	○	○	○	○

QUESTION SIX

	1	2	3	4
6A	○	○	○	○
6B	○	○	○	○
6C	○	○	○	○
6D	○	○	○	○

QUESTION SEVEN

	1	2	3	4
7A	○	○	○	○
7B	○	○	○	○
7C	○	○	○	○
7D	○	○	○	○

QUESTION EIGHT

	1	2	3	4
8A	○	○	○	○
8B	○	○	○	○
8C	○	○	○	○
8D	○	○	○	○

QUESTION NINE

	1	2	3	4
9A	○	○	○	○
9B	○	○	○	○
9C	○	○	○	○
9D	○	○	○	○

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