GCSE

Science A (4461) / Physics (4451)

Specification A

PHY1BP, PH1BSF & PH1BSH

Mark Scheme

2012 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 students' responses.

Further copies of this Mark Scheme are available to download from the AQA Website: www.aqa.org.uk

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GCSE
SCIENCE A (4461)/PHYSICS (4451)

Objective Test Answer Key

PHY1BP (Radiation and the Universe)

March 2012

Foundation Tier

Question	Key		
One	**A**	infra red waves	**2**
	B	microwaves	**1**
	C	radio waves	**3**
	D	visible light	**4**
Two	**A**	bones	**4**
	B	film	**2**
	C	soft tissue	**3**
	D	X-ray tube	**1**
Three	**A**	electron	**1**
	B	neutron	**4**
	C	nucleus	**3**
	D	proton	**2**
Four	**A**	2	**4**
	B	6	**3**
	C	150	**2**
	D	600	**1**
Five	**A**	alpha	**4**
	B	beta	**1**
	C	gamma	**2**
	D	X-ray	**3**

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

GCSE

SCIENCE A (4461)/PHYSICS (4451)

Objective Test Answer Key

PHY1BP (Radiation and the Universe)

March 2012

Higher Tier

Question	Key		
One	**A**	alpha	**4**
	B	beta	**1**
	C	gamma	**2**
	D	X-ray	**3**
Two	**A**	alpha particles	**4**
	B	beta particles	**2**
	C	gamma rays	**3**
	D	alpha, beta and gamma radiation	**1**

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

OTQ3

GCSE SCIENCE

AQA

Unit : PHY1BP PHYSICS UNIT 1B

Centre :

Candidate Number : **UCI :**

Candidate Name :

Series : 3G12

01-MAR-12

For completion by the Examination Invigilator. **Please fill this circle if the candidate is absent:** ○

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	alpha	○	○	○	○
1B	beta	○	○	○	○
1C	gamma	○	○	○	○
1D	X-ray	○	○	○	○

QUESTION TWO		1	2	3	4
2A	alpha particles	○	○	○	○
2B	beta particles	○	○	○	○
2C	gamma rays	○	○	○	○
2D	alpha, beta and gamma radiation	○	○	○	○

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

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	infra red waves	○	○	○	○
1B	microwaves	○	○	○	○
1C	radio waves	○	○	○	○
1D	visible light	○	○	○	○

QUESTION TWO

		1	2	3	4
2A	bones	○	○	○	○
2B	film	○	○	○	○
2C	soft tissue	○	○	○	○
2D	X-ray tube	○	○	○	○

QUESTION THREE

		1	2	3	4
3A	electron	○	○	○	○
3B	neutron	○	○	○	○
3C	nucleus	○	○	○	○
3D	proton	○	○	○	○

QUESTION FOUR

		1	2	3	4
4A	2	○	○	○	○
4B	6	○	○	○	○
4C	150	○	○	○	○
4D	600	○	○	○	○

QUESTION FIVE

		1	2	3	4
5A	alpha	○	○	○	○
5B	beta	○	○	○	○
5C	gamma	○	○	○	○
5D	X-ray	○	○	○	○

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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