ASSESSMENT and QUALIFICATIONS ALLIANCE

GCSE

Science A (4461) / Physics (4451)

Specification A

PHY1BP, PH1BSF & PH1BSH

Mark Scheme

2010 Examination – November 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.

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GCSE

SCIENCE A (4461) / PHYSICS (4451)

Objective Test Answer Key

PHY1B (Radiation and the Universe)

November 2010

Foundation Tier

Question			
One	**A**	infra red	**1**
	B	ultraviolet	**4**
	C	visible light	**3**
	D	X-rays	**2**
Two	**A**	can be used by anyone to view the surface of the moon	**2**
	B	in orbit around the Earth	**3**
	C	built on the top of a mountain and can be used to view planets	**4**
	D	used by scientists to detect radio waves from space	**1**
Three	**A**	infra red	**4**
	B	microwaves	**3**
	C	radio waves	**1**
	D	visible light	**2**
Four	**A**	gamma	**1**
	B	infra red	**3**
	C	radio	**4**
	D	ultraviolet	**2**
Five	**A**	decreased	**3**
	B	increased	**2**
	C	shifted	**1**
	D	not changed	**4**

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

GCSE

SCIENCE A (4461) / PHYSICS (4451)

Objective Test Answer Key

PHY1B (Radiation and the Universe)

November 2010

Higher Tier

Question	Key		
One	**A**	decreased	**3**
	B	increased	**2**
	C	shifted	**1**
	D	not changed	**4**
Two	**A**	categoric	**3**
	B	continuous	**1**
	C	dependent	**2**
	D	reliable	**4**

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

OTQ3

GCSE SCIENCE

AQA

Unit : PHY1BP PHYSICS UNIT 1B

Centre :

Candidate Number : **UCI :**

Series : BG10

Candidate Name :

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	decreased	○	○	○	○
1B	increased	○	○	○	○
1C	shifted	○	○	○	○
1D	not changed	○	○	○	○

QUESTION TWO

		1	2	3	4
2A	categoric	○	○	○	○
2B	continuous	○	○	○	○
2C	dependent	○	○	○	○
2D	reliable	○	○	○	○

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	○	○	○	○
1B ultraviolet	○	○	○	○
1C visible light	○	○	○	○
1D X-rays	○	○	○	○

QUESTION TWO	1	2	3	4
2A can be used by anyone to view the surface of the Moon	○	○	○	○
2B in orbit around the Earth	○	○	○	○
2C built on top of a mountain, can be used to view planets	○	○	○	○
2D used by scientists to detect radio waves from space	○	○	○	○

QUESTION THREE	1	2	3	4
3A infra red	○	○	○	○
3B microwaves	○	○	○	○
3C radio waves	○	○	○	○
3D visible light	○	○	○	○

QUESTION FOUR	1	2	3	4
4A gamma	○	○	○	○
4B infra red	○	○	○	○
4C radio	○	○	○	○
4D ultraviolet	○	○	○	○

QUESTION FIVE	1	2	3	4
5A decreased	○	○	○	○
5B increased	○	○	○	○
5C shifted	○	○	○	○
5D not changed	○	○	○	○

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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