

## **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.
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

# PHY1B (Radiation and the Universe) November 2010

#### **Foundation Tier**

Question			Key				
	Α	infra red	1				
0	В	ultraviolet	4				
One	С	visible light	3				
	D	X-rays	2				
	Α	can be used	by anyone to view the	ne surface of the mod	on <b>2</b>		
Two	В	in orbit arour	nd the Earth		3		
I WO	С	<b>c</b> built on the top of a mountain and can be used to view planets					
	D	used by scie	ntists to detect radio	waves from space	1		
	Α	infra red	4				
Three	В	microwaves	3				
111100	С	radio waves	1				
	D	visible light	2				
	Α	gamma	1				
Four	В	infra red	3				
	С	radio	4				
	D	ultraviolet	2				
	Α	decreased	3				
Five	В	increased	2				
	С	shifted	1				
	D	not changed	4				
		_	_		_		
		Α	В	С	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	
	Α	decreased	3		
One	В	increased	2		
One	С	shifted	1		
Three Four Five Six	D	not change	ed <b>4</b>		
A categoric					
	Α	categoric	3		
Two	В	continuous	s 1		
	С	dependent	t <b>2</b>		
	D	reliable	4		
		Α	В	С	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



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: O

#### **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

	Total Consideration	QUESTION ONE	1	2	3	4
1A	decreased		0	0	0	0
1B	increased		0	0	0	0
1C	shifted		0	0	0	0
1D	not changed		0	0	0	0
	As an accomplished the control of th	QUESTION TWO	1	2	3	4
2A	categoric		0	0	0	0
2B	continuous		0	0	0	0
2C	dependent		0	0	0	0
2D	reliable		0	0	0	0

	QUE	STIO	N TH	IREE	
		1	2	3	4
3A		0 -	0	0	0
3B		0	0	0	0
3C		0	0	0	0
3D		0	O-	0	0

	QUEST	ION	SIX	
	1	2	3	4
6A	0	0.	0	0
6B	0	0	0	0
6C	0	0	0	0
6D	0	. 0	0	0)

	QUESTI			
	1	2	3	4
4A	0	0	0	0
4B	0	Ó	0	0
4C	0	0	0	0
4D	0	0	0	0

QUESTION SEVEN				
	i sure de la como	2	3	4
7A	0	, O.	0	0
7B	0	0	0	0
7C	0	0	0	0
7D	0	0	0	0

	QUEST	TION	NINE	
	1	2	3	4
9A	0	0	0	0
9B	0	0	0	0
9C	0	0	0	0
9D	0	0	0	0

	QUES	STION	FIVE	
	1	2	3	4
5A	0	: O	0	0
5B	0	, O	0	0
5C	0	0	0	0
5D	0	0	0	0

	QUES	TIO	N EI	GHT	
		00000000	2	3	4
A8	C	)	0	0	Ö
8B	C		0	0	0
8C	C	).	Ο.	0	0
8D		)	0	0	0

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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

sylcan		QUESTION ONE	1	2	3	4
1A	infra red		0	0	0	0
1B	ultraviolet		0	0	0	0
1C	visible light		0	0	0	0
1D	X-rays	id.	0	0	0	0
	can be used by anyo	QUESTION TWO	1	2	3	4
2A			0	0	0	0
2B	in orbit around the E		0	0	0	0
2C	built on top of a mou	ntain, can be used to view planets	0	0	0	0
2D	used by scientists to	detect radio waves from space	0	0	0	0
Berne.	infra radicessal assuressa	QUESTION THREE	1	2	3	4
3A	infra red		0	0	0	0
3B	microwaves		0	0	0	0
3C	radio waves		0	0	0	0
3D	visible light		0	0	0	0
		QUESTION FOUR	1	2	3	4
4A	gamma		0	0	0	0
4B	infra red		0	0	0	0
4C	radio		0	0	0	0
4D	ultraviolet		0	0	0	0
		QUESTION FIVE	1	2	3	4
	decreased		0	0	0	0
5B	increased		0	0	0	0
iC	shifted		0	0	0	0
5D	not changed		0	0	0	0
יאר	CIV	OUECTION CEVEN			<u> </u>	

	QUEST	TION	SIX				
	1	2	3	4			
6A	0	0	0	0	-		
6B	0	0	0	0	de la		
6C	0	0	0	0	- Constitution		
6D	0	0	0	0			

QUESTION SEVEN						
	1	2	3	4		
7A	0	0	0	0		
7B	0	0	0	0		
7C	0	0	0	0		
<b>7</b> D	0	0	0	0		

	QUESTION EIGHT				
		1	2	3	4
A8		) :-	.0	Ò	0
8B	C		0	0	0
8C	(	)	0	0	0
8D		)	0	0	0

	QUEST	ION	NINE	
	1	2	3	4
9A	0	0	0	0
9B	0	0	0	0
9C	0	0	0	0
9D	0	0	0	0

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