

# GCSE

# Science A (4461)

Specification A

# BLY1BP, BL1BSF & BL1BSH

# **Mark Scheme**

2009 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)/BIOLOGY (4411) Objective Test Answer Key BLY1BP (Evolution and Environment)

## November 2009

### Foundation Tier

Question	Key					
	Α	helps the mole	e to detect its prey in the	e burrow 3		
	В	helps the mole	e to dig through the soil	2		
One	С	helps to stop the	he mole from losing hea	at 1		
	<ul><li>D helps to stop the mole to sense the size of the tunnel</li></ul>					
	А	Carbon dioxid	e taken in by plants	3		
Two	В	Methane relea	sed by cow	1		
1 w0	С	Oil used in the	e factory	4		
	D	Sulfur dioxide	released by the chimne	ey 2		
	Α	clones		3		
Three	В	cuttings		4		
	С	gametes				
	D	variations		2		
		1				
	A	evolution		1		
Four	B	extinction		3		
	C	natural selection	on	4		
	D	reproduction		2		
	A	has needle-sha	nped leaves		3	
	B		root system spread over	· a wide area	4	
Five	C		bulbs on its roots		2	
	D		e numbers of seeds		-	
		produces large				
		Α	В	С		D
Six		1	2	1		3
Seven		4	4	2		2
Eight		4	4	2		3
Nine		2	2	2		1

# GCSE SCIENCE A (4461)/BIOLOGY (4411) Objective Test Answer Key

# **BLY1BP (Evolution and Environment)**

## November 2009

# Higher Tier

Question		Key				
	Α	has needle-sł	naped leaves		3	
One	В	has a shallow	v root system spread ov	ver a wide area	4	
One	С	stores water	in bulbs on its roots		2	
	D	produces larg	ge numbers of seeds		1	
	Α	Some heat er	nergy escapes into space	ce.	3	
Two	В	Heat energy is re-radiated by greenhouse gases.				
Iwo	С	Heat energy is radiated into the atmosphere.				
	D	Solar radiatio	on warms the Earth's s	urface.	1	
		Α	В	С		D
Three		4	4	2		3
Four		2	2	2		1
Five		3	1	4		1
Six		3	1	2		2
Seven		2	3	3		4
Eight		3	2	3		4
Nine		2	1	2		2

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Unit : BLY1BP	<b>BIOLOGY UNIT 1</b>	B
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#### Centre :

Candidate Number :

**Candidate Name :** 

UCI:

Series : BG09

19-NOV-09

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

	QUESTION ONE	1	2	3	4	
1A	has needle-shaped leaves	0	0	0	0	
1B	has a shallow root system spread over a wide area	0	0	0	0	
1C	stores water in bulbs on its roots	0	0	0	0	
1D	produces large numbers of seeds	0	0	0	0	
·						
	QUESTION TWO	1	2	3	4	
2A	QUESTION TWO Some heat energy escapes into space.	<b>1</b> 0	<b>2</b> 0	<b>3</b> ○	<b>4</b> 0	
2A 2B	이 것 같은 것 같은 것 같아요. 이 같은 것 같은 것 같은 것 같이 있는 것 같이 있다. 것 같은 것 같은 것 같이 있는 것 같이 없는 것 같이 있는 것 같이 없는 않는 것 같이 없는 것 같이 없는 것 같이 않는 것 같이 없는 것 같이 않는 것 같이 없는 것 같이 않는 것 같이 않는 것 같이 않는 것 같이 않는 것 같이 없는 것 같이 않는 것 않이 않는 것 않이 않는 것 않이 않이 않는 것 같이 않는 것 않이 않 않 않이	<b>1</b> 0	<b>2</b> 0	-	-	
	Some heat energy escapes into space.	<b>1</b> 0 0	<b>2</b> 0 0	0	0	

QL	JESTI	ΟΝ Τ	HRE	E
	1	2	3	4
3A	0	0	0	0
3B	0	0	0	0
3C	0	0	0	0
3D	0	0	0	0

	QUES	TION	SIX	
	1	2	3	4
6A	0	0	0	0
6B	0	0	0	0
6C	0	0	0	0
6D	0	0	0	οJ

	QUEST	ION F	OUF	2
	1	2	3	4
<b>4</b> A	0	0	0	0
4B	0	0	0	0
4C	0	0	0	0
4D	0	0	Ó	0

QUESTION SEVEN						
	1	2	3	4		
7A	0	0	0	0		
7B	0	0	0	0		
7C	0	0	0	0		
7D	0	0	0	0)		

1     2     3     4       9A     0     0     0     0       9B     0     0     0     0       9C     0     0     0     0       9D     0     0     0     0		QUEST	ION	NINE	
9B 0 0 0 0 9C 0 0 0 0		1	2	3	4
	9A	0	Ó	0	0
	9B	0	0	0	0
	9C	0	0	0	0
	9D	$\sim$	0	0	0

(	QUEST	ION	FIVE	
	1	2	3	4
5A	0	0	0	0
5B	0	0	0	0
5C	0	0	0	0
5D	0	0	0	0

	QUES	TION	EIGH	IT
	1	2	3	4
8A	0	0	0	0
8B	0	0	0	0
8C	0	0	0	0
8D	0	0	0	0

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		Questions ONI	E to NINE C	hoose one resp	onse 1-	4 for each	of the pa	arts .	A - D				
		holoo the male to		UESTION			1	2	3	4	Ì		
	1A 1B	helps the mole to detect its prey in the burrow					0	0	0	0			
							0	0	0	0			
	1	<ul><li>D helps the mole to sense the size of the tunnel</li></ul>					0	0	0	0			
							1			4	/ .		
	2A	QUESTION TWO Carbon dioxide taken in by plants				0	<b>2</b> 0	3 0	<b>4</b>				
	2B							0	0	0	-		
	2C							0	0	0	æ		
	2D	Sulfur dioxide rele	ased by the	chimney			0	0	0	0			
	$\sim$		QL	JESTION T	HREE		1	2	3	4	)		
	3A	clones					õ	0	0	õ	•		
	3B	cuttings					0	0	0	0	•		
	3C	gametes					0	0	0	0	•		
	3D	variations		Negal			0	0	0	0			
	(		Q	UESTION	FOUR		1	2	3	4			
	<b>4</b> A	4A evolution					0	0	0	0	•		
		extinction					0	0	0	0	•		
		c natural selection					0	0	0	0	•		
	4D	reproduction	1999 1111 1111 1111 1111 1111 1111 111				0	0	0	0	)•		
	1	QUESTION FIVE					1	2	3	4			
	<ul> <li>5A has needle-shaped leaves</li> <li>5B has a shallow root system spread over a wide area</li> <li>5C stores water in bulbs on its roots</li> </ul>						0		0	0	•		
							0	0	0	0			
							0	0	0	0			
		produces large nu		eus			0	0	0		•	,	
QUEST		SIX 3 4	Q	UESTION : 1 2	SEVEI 3	N )			QU	EST 1	10N <b>2</b>	EIGH 3	IT
0	<b>2</b> O	0 0	7A	0 0	0	0		8A		0	0	ں ا	
0	0	0 0	7B	0 0	0	0	9 Million 4 Million	8B		0	0	0	
0	0	0 0	7C	0 0	0	0		8C		0	0	0	
0	0	0 0	7D	o    o	0	0)		8D		0	0	0	
			G	UESTION	NINE								
				1 2	3	4							
			9A	0 0	0	0							
			9B	0 0	0	0							
			9C	0 0	0	0							
			9D		~								
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