

GCSE

**Science A (4461) /
Biology (4411)**

Specification A

BLY1BP, BL1BSF & BL1BSH

Mark Scheme

2012 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 students' responses.

Further copies of this Mark Scheme are available to download from aqa.org.uk

Copyright © 2012 AQA and its licensors. All rights

reserved. COPYRIGHT

AQA retains the copyright on all its publications. However, registered schools for AQA are permitted to copy material from this booklet for their own internal use, with the following important exception: AQA cannot give permission to schools to photocopy any material that is acknowledged to a third party even for internal use within the school.

Set and published by AQA.

AQA Education (AQA) is a registered charity (number 1073334) and a company limited by guarantee registered in England and Wales (number 3644723). Our registered address is AQA, Devas Street, Manchester M15 6EX.

GCSE
SCIENCE A (4461)/BIOLOGY (4411)
 Objective Test Answer Key
BLY1BP (Evolution and Environment)
November 2012
 Foundation Tier

Question	Key			
One	A	causes acid rain		2
	B	causes less carbon dioxide to be taken out of the atmosphere		1
	C	may pollute farmland with poisonous chemicals		3
	D	produces methane		4
Two	A	evolution		4
	B	mutation		2
	C	selection		3
	D	variation		1
Three	A	fish		3
	B	amphibians		1
	C	reptiles		2
	D	mammals		4
Four	A	Some heat energy escapes into space.		3
	B	Heat energy is re-radiated by greenhouse gases.		4
	C	Heat energy is radiated into the atmosphere.		2
	D	Solar radiation warms the Earth's surface.		1
Five	A	genes		2
	B	gametes		3
	C	embryos		4
	D	characteristics		1
	A	B	C	D
Six	3	4	1	4
Seven	4	1	1	4
Eight	3	4	1	4
Nine	2	2	2	1

GCSE
SCIENCE A (4461)/BIOLOGY (4411)
 Objective Test Answer Key
BLY1BP (Evolution and Environment)
November 2012
 Higher Tier

Question	Key			
One	A	genes	2	
	B	gametes	3	
	C	embryos	4	
	D	characteristics	1	
Two	A	mutation	3	
	B	natural selection	1	
	C	extinction	4	
	D	variation	2	
	A	B	C	D
Three	3	4	1	4
Four	2	2	2	1
Five	1	3	3	2
Six	4	2	4	1
Seven	3	1	3	1
Eight	3	1	4	1
Nine	2	1	4	3

The AQA UMS Conversion Calculator can be found at the following web address:

<http://www.aqa.org.uk/umsconversion>

Unit : BLY1BP BIOLOGY UNIT 1B

Centre :

Candidate Number :

UCI :

Series : BG12

Candidate Name :

06-NOV-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	genes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1B	gametes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1C	embryos	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1D	characteristics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

QUESTION TWO		1	2	3	4
2A	mutation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2B	natural selection	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2C	extinction	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2D	variation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

QUESTION THREE		1	2	3	4
3A		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3B		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3C		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3D		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

QUESTION FOUR		1	2	3	4
4A		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4B		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4C		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4D		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

QUESTION FIVE		1	2	3	4
5A		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5B		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5C		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5D		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

QUESTION SIX		1	2	3	4
6A		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6B		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6C		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6D		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

QUESTION SEVEN		1	2	3	4
7A		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7B		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7C		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7D		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

QUESTION EIGHT		1	2	3	4
8A		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8B		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8C		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8D		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

QUESTION NINE		1	2	3	4
9A		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9B		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9C		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9D		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

For AQA Office Use Only

2207



2207

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	causes acid rain	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1B	causes less carbon dioxide to be taken out of atmosphere	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1C	may pollute farmland with poisonous chemicals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1D	produces methane	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

QUESTION TWO		1	2	3	4
2A	evolution	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2B	mutation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2C	selection	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2D	variation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

QUESTION THREE		1	2	3	4
3A	fish	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3B	amphibians	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3C	reptiles	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3D	mammals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

QUESTION FOUR		1	2	3	4
4A	Some heat energy escapes into space.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4B	Heat energy is re-radiated by greenhouse gases.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4C	Heat energy is radiated into the atmosphere.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4D	Solar radiation warms the Earth's surface.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

QUESTION FIVE		1	2	3	4
5A	genes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5B	gametes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5C	embryos	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5D	characteristics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

QUESTION SIX		1	2	3	4
6A		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6B		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6C		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6D		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

QUESTION SEVEN		1	2	3	4
7A		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7B		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7C		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7D		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

QUESTION EIGHT		1	2	3	4
8A		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8B		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8C		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8D		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

QUESTION NINE		1	2	3	4
9A		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9B		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9C		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9D		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

For AQA Office Use Only

2207



2207