

Examiners' Report/ Principal Examiner Feedback

June 2010

GCSE

360Science

GCSE Science
Multiple Choice Paper B1b (5006)

GCSE Biology
Multiple Choice Paper B1b (5026)

Edexcel is one of the leading examining and awarding bodies in the UK and throughout the world. We provide a wide range of qualifications including academic, vocational, occupational and specific programmes for employers.

Through a network of UK and overseas offices, Edexcel's centres receive the support they need to help them deliver their education and training programmes to learners.

For further information, please call our GCE line on 0844 576 0025, our GCSE team on 0844 576 0027, or visit our website at www.edexcel.com.

If you have any subject specific questions about the content of this Examiners' Report that require the help of a subject specialist, you may find our **Ask The Expert** email service helpful.

Ask The Expert can be accessed online at the following link:

<http://www.edexcel.com/Aboutus/contact-us/>

Alternately, you can speak directly to a subject specialist at Edexcel on our dedicated Science telephone line: 0844 576 0037

June 2010

Publications Code UG024706

All the material in this publication is copyright

© Edexcel Ltd 2010

5006 Science/ 5026 Biology Examiners' Report
Multiple Choice paper B1b
June 2010

Foundation tier

The early questions on the paper were accessed well by all candidates with 95% able to answer correctly on questions related to the senses, this was in contrast to only 46% of candidates able to correctly identify how messages are carried along neurones. The components of the blood continue to be a challenge to candidates with only 27% of candidates able to correctly identify the role of blood plasma. The 'how science works' style of questions related to ethics are showing improvement with 61% of foundation candidates able to correctly identify the problems involved in IVF in more mature clients. Mathematical calculations once again prove to be an issue with only 44% of candidates able to calculate a simple percentage. Recall regarding the eye and accommodation was not well accessed with only 24% of candidates able to relate focusing on near and distant objects as accommodation and with 54% believing it to be the iris reflex. Graph interpretation was good with 83% of candidates able to interpret a graph on accommodation. The crossover questions proved to be a problem for foundation candidates with only 25% of candidates able to answer questions related to diabetes and insulin. The section on painkillers proved to be a particular difficulty to foundation tier candidates with only 14% able to identify alcohol as a depressant that increases the time it takes for a person to react.

Higher tier

The crossover questions performed well with significantly more candidates able to answer correctly on the higher tier than on the foundation tier. Interpretation of blood glucose graphs was completed well with 86% of candidates able to answer correctly and 84% able to identify that insulin is made in the pancreas. It is important to note that only 44% of candidates were able to correctly identify the problems associated with diabetes. Questions related to disease transmission were well answered with 85% of candidates able to correctly identify TB and 79% able to correctly describe the first line of defence. Interpretation of graphs related to the hormones progesterone and oestrogen with 69% of candidates able to correctly describe the ovulation although only 48% were able to relate low levels of hormones to menstruation. The A/A* questions towards the end of the paper were accessed less well as to be expected with candidates being confused with the various methods of disease transmission such as vehicle and vector borne methods. Candidates also found it difficult to apply knowledge to real life situations such as the effect of HIV on the immune system. Overall the higher tier paper was well accessed overall although the areas and functions of the brain were less well known with only 41% of candidates able to correctly identify the cerebral cortex as responsible for hearing and only 43% able to correctly identify stimulants.

Grade Boundaries - June 2010

Multiple Choice Papers - GCSE Science

Raw Mark Grade Boundaries

5005/5025	Max mark	A*	A	B	C	D	E	F	G
H	24	20	18	15	12	9	7		
F	24				16	13	10	7	4

5006/5026	Max mark	A*	A	B	C	D	E	F	G
H	24	20	17	14	12	9	7		
F	24				15	13	11	9	7

5007/5035	Max mark	A*	A	B	C	D	E	F	G
H	24	20	17	14	11	8	6		
F	24				16	13	10	8	6

5008/5036	Max mark	A*	A	B	C	D	E	F	G
H	24	19	17	14	12	9	7		
F	24				16	13	10	8	6

5009/5045	Max mark	A*	A	B	C	D	E	F	G
H	24	16	14	12	11	8	6		
F	24				14	12	10	8	6

5010/5046	Max mark	A*	A	B	C	D	E	F	G
H	24	19	17	14	12	8	6		
F	24				14	12	10	8	6

Uniform Mark Grade Boundaries for these units

	Max UMS	A*	A	B	C	D	E	F	G
H	40	36	32	28	24	20	18		
F	27				24	20	16	12	8

Note: On higher tier papers, the "allowed" grade E is calculated as half a grade width

Further copies of this publication are available from
Edexcel Publications, Adamsway, Mansfield, Notts NG18 4FN

Telephone 01623 467467
Fax 01623 450481

Email publications@linneydirect.com

Order Code UG024706 June 2010

For more information on Edexcel qualifications, please visit www.edexcel.com/quals

Edexcel Limited. Registered in England and Wales no.4496750
Registered Office: 190 High Holborn, London WC1V 7BH