

# Examiners' Report/ Principal Examiner Feedback

March 2010

GCSE

360Science

GCSE Science  
Multiple Choice Paper B1b (5006)

GCSE Biology  
Multiple Choice Paper B1b (5026)

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Publications Code UG023198

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## 5006 Science/ 5026 Biology (B1b) Examiners' Report

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### Foundation Tier

Foundation tier candidates accessed the first eight questions well with over 50% of candidates able to get the correct response to the questions on the blood. The questions on reaction times were also answered well with 80% of candidates able to correctly identify the fastest reaction time and the sense organs involved. An increase in reaction time caused problems with only 11% of candidates able to correctly identify that drinking a glass of wine would increase the time it took a person to react. The section on disease control continues to be a problem with only 43% of candidates able to correctly identify a pathogen as a disease causing organism. The effect of paracetamol on the liver in large doses was also not well answered with only 23% of candidates able to get the correct response. The crossover questions highlighted the difference between the foundation tier candidates and higher tier candidates with approximately 20% more candidates gaining the correct response at the higher tier as opposed to the foundation tier in this section. A very disappointing 12% of foundation candidates could identify that neurotransmitters are chemical messengers which travel across the synapse.

### Higher Tier

The crossover questions were generally answered well by the higher tier candidates although there were problems with reaction times again here with only 39% of higher tier candidates able to correctly state that stimulants speed up reactions and decrease reaction times. Candidates have a good understanding of the role of insulin and where it is produced with 84% recognising that insulin is produced in the pancreas. The main areas of the brain continue to be an area which even the higher candidates find challenging. The majority of thinking and reasoning occurs in the cerebral cortex, only 31% of candidates were able to correctly identify the cerebral cortex in a diagram. Interpretation of graphs was generally good but the data interpretation on the effects of cannabis on psychosis was less well answered with only 17% of candidates able to get the correct answer. Candidates are still having problems with the use of LH and FSH and their effects on oestrogen and progesterone with only 16% of candidates able to correctly link them up and only 25% able to identify FSH and LH as hormones used for infertility.



## Grade Boundaries - March 2010

### Multiple Choice Papers - GCSE Science

#### Raw Mark Grade Boundaries

5005/5025	Max mark	A*	A	B	C	D	E	F	G
H	24	19	17	15	13	9	7		
F	24				16	13	10	8	6

5006/5026	Max mark	A*	A	B	C	D	E	F	G
H	24	18	16	14	12	9	7		
F	24				16	13	11	9	7

5007/5035	Max mark	A*	A	B	C	D	E	F	G
H	24	16	13	10	8	5	3		
F	24				16	13	10	8	6

5008/5036	Max mark	A*	A	B	C	D	E	F	G
H	24	18	15	12	10	6	4		
F	24				18	15	12	10	8

5009/5045	Max mark	A*	A	B	C	D	E	F	G
H	24	19	17	15	14	11	9		
F	24				19	16	14	12	10

5010/5046	Max mark	A*	A	B	C	D	E	F	G
H	24	18	16	14	12	8	6		
F	24				15	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

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