



Rewarding Learning

**General Certificate of Secondary Education
2025–2026**

**Single Award Science:
Biology**

Unit 1

Foundation Tier

[GSA11]

MONDAY 10 NOVEMBER 2025, MORNING

**MARK
SCHEME**

General Marking Instructions

Introduction

Mark schemes are intended to ensure that the GCSE examinations are marked consistently and fairly. The mark schemes provide markers with an indication of the nature and range of candidates' responses likely to be worthy of credit. They also set out the criteria which they should apply in allocating marks to candidates' responses.

Assessment objectives

Below are the assessment objectives for GCSE Single Award Science

Candidates must:

- AO1** Demonstrate knowledge and understanding of scientific ideas, scientific techniques and procedures;
- AO2** Apply knowledge, skills and understanding of scientific ideas, scientific enquiry, techniques and procedures; and
- AO3** Analyse information and ideas to interpret and evaluate; make judgements and draw conclusions; develop and improve experimental procedures.

Quality of candidates' responses

In marking the examination papers, examiners should be looking for a quality of response reflecting the level of maturity which may reasonably be expected of a 16-year-old which is the age at which the majority of candidates sit their GCSE examinations.

Flexibility in marking

Mark schemes are not intended to be totally prescriptive. No mark scheme can cover all the responses which candidates may produce. In the event of unanticipated answers, examiners are expected to use their professional judgement to assess the validity of answers. If an answer is particularly problematic, then examiners should seek the guidance of the Supervising Examiner.

Positive marking

Examiners are encouraged to be positive in their marking, giving appropriate credit for what candidates know, understand and can do rather than penalising candidates for errors or omissions. Examiners should make use of the whole of the available mark range for any particular question and be prepared to award full marks for a response which is as good as might reasonably be expected of a 16-year-old GCSE candidate.

Awarding zero marks

Marks should only be awarded for valid responses and no marks should be awarded for an answer which is completely incorrect or inappropriate.

Marking Calculations

In marking answers involving calculations, examiners should apply the 'own figure rule' so that candidates are not penalised more than once for a computational error.

Types of mark schemes

Mark schemes for tasks or questions which require candidates to respond in extended written form are marked on the basis of levels of response which take account of the quality of written communication.

Listing

Where one response is required to gain a mark, candidates will not gain credit if a correct response is given alongside one or more incorrect responses. This is referred to as listing.

1	(a) Double helix	[1]	4
	(b) (i) 5	[1]	
	(ii) Mutation	[1]	
	(iii) Ultra violet (UV) light	[1]	
2	(a) 2	[1]	5
	(b) Producer	[1]	
	(c) Sunlight	[1]	
	(d) Less rats [1] to eat the grasshoppers [1]	[2]	
3	(a) (i) Line labelled X pointing to the vagina/cervix	[1]	
	(ii)		
	Part ovary [1] oviduct [1] Function where fertilisation takes place produces eggs where implantation takes place	[2]	
	(b) (i) Arrow pointing down	[1]	5
	(ii) Oxygen	[1]	

4 (a) (i)

Substance	Mass /g	High	Medium	Low
sugar	16	✓		
fat	2			✓ [1]
salt	0.4		✓ [1]	

[2]

(ii) Lower mass of fat/salt present

[1]

(iii) Higher number of people with heart disease/more (expensive) drugs/
drugs are more expensive
(comparison required)

[1]

(b) Carbohydrates

[1]

(c) (i) D B A E C

Any two in the correct order [1]

[2]

(ii) Some energy is lost into the atmosphere/some energy goes into
heating the boiling tube [1]
some food drops off [1]

[2]

9

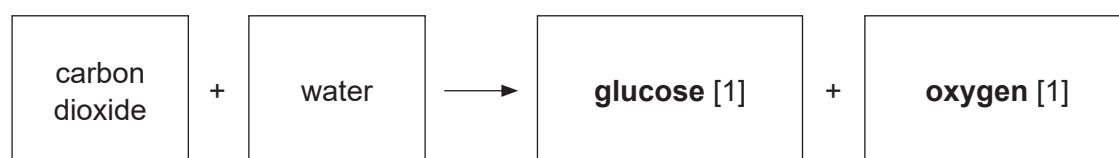
5 (a) Cell wall

[1]

(b) (i) Chlorophyll

[1]

(ii)



(either way around)

[2]

(c) (i) $144 \div 6$ [1]
24 [2]

[2]

(ii) Flamingo flower

[1]

7

AVAILABLE
MARKS

			AVAILABLE MARKS
6	(a)	Bars for 1992 and 2017 accurately plotted [1] both bars shaded correctly according to the key [1]	[2]
	(b)	C	[1]
	(c)	A	[1]
	(d) (i)	Glucose in the urine/lethargy/thirst	[1]
	(ii)	Insulin [1] pancreas [1]	[2]
	(iii)	Decreases (blood glucose levels) [1] Any two from: • converts glucose to glycogen • increased respiration • greater uptake of glucose into the cells	[3]
7	(a) (i)	Lymphocyte	[1]
	(ii)	Stage 1: antibodies are produced [1] Stage 2: antibodies attach to antigens/red blood cells clump together [1]	[2]
	(b) (i)	$53 - 34 = 19$	[1]
	(ii)	Tongue rolling/hand dominance	[1]
	(iii)	Bar chart	[1]
	(iv)	Genetic/environmental	[1]
8	(a)	Introduced by man [1] reproduces rapidly [1]	[2]
	(b)	Decrease (the biodiversity)	[1]
	(c) (i)	They will continue to reproduce/kills more voles	[1]
	(ii)	Other animals are not killed by the poison	[1]
			10
			7
			5

- 9 (a) (i) Liver [1]
- (ii) Binge drinking [1]

(b) Indicative content

- tar
- causes bronchitis
- emphysema
- lung cancer
- nicotine
- addictive
- affects heart rate
- carbon monoxide
- combines with red blood cells to reduce the oxygen – carrying capacity of the blood

Band	Response	Mark
A	Candidates must use appropriate specialist terms throughout to describe the chemicals in tobacco smoke and their effects on the body using six or more of the points above, in a logical sequence. They use good spelling, punctuation and grammar and the form and style are of a high standard.	[5]–[6]
B	Candidates use some appropriate specialist terms throughout to describe the chemicals in tobacco smoke and their effects on the body using four or five of the points above, in a logical sequence. They use satisfactory spelling, punctuation and grammar and the form and style are of a satisfactory standard.	[3]–[4]
C	Candidates describe the chemicals in tobacco smoke and their effects on the body using one, two or three of the above points. However, these are not presented in a logical sequence. They use limited spelling, punctuation and grammar and the form and style are of a limited standard.	[1]–[2]
D	Response not worthy of credit.	[0]

[6]

Total

**AVAILABLE
MARKS**

8

60