Biology marks go to answers that use the right word and answer the right command. Everything below comes from Cambridge's own examiner reports. The × line is what candidates write; the ✓ line is what scores. × ,✓

Across every paper

✗ Writing everything you know because you recognised one or two words in the question.

✓ **Read the whole question, then answer only what it asks.**

Examiners raise this in four separate reports – it wastes the time the later questions need and earns nothing.

ER 4 sessions P4

✗ Answering DESCRIBE with a reason, or EXPLAIN with a description.

✓ **DESCRIBE says what happens, with reference to the data; EXPLAIN gives the cause; SUGGEST applies your biology to something new; COMPARE needs both sides in one sentence.**

The single most repeated key message across ten sessions.

ER 10 sessions P4

✗ Writing one long point for a three-mark question.

✓ **Three marks means three separate points.**

Examiners tell candidates to match their answer to the marks available; a developed single point still scores one.

ER 3 sessions P4

✗ Leaving a question blank because you are unsure.

✓ **Write your best attempt. Nothing can be awarded for a blank.**

Examiners state it is essential that all questions are attempted even where the candidate is unsure.

ER 7 sessions P4

✗ Writing over a mistake, or answering in pencil.

✓ **Cross the mistake out and write again in pen.**

Examiners raise legibility and overwriting in five separate reports – an unreadable answer is an unmarked answer.

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ER 5 sessions P5

■ Show your working in every calculation. Examiners state credit can then be given for the method even when the final answer is wrong.

ER 2 sessions P5

2 · Organisation of the organism

✗ Saying a root hair cell contains chloroplasts.

✓ **It has a cell wall and a large vacuole but NO chloroplasts – it is underground.**

Examiners record this belief in two separate sessions of the same comparison question.

ER 2 sessions P1

✗ Naming the nucleus and cell membrane as plant-only structures.

✓ **Nucleus, cell membrane, cytoplasm and mitochondria are in BOTH; wall, chloroplasts and permanent vacuole are plant-only.**

Examiners record candidates incorrectly selecting shared structures as plant-specific.

ER 2 sessions P1

5 · Enzymes

✗ Choosing boiled amylase as the best condition for digesting starch.

✓ **Boiling denatures the enzyme, so it cannot work at all.**

Examiners record this exact wrong choice and remind candidates what boiling does to an enzyme.

ER Jun24 P12

6 · Plant nutrition

✗ Selecting respiration as the process that uses the principal energy input to living systems.

✓ **Photosynthesis – it captures the light energy that everything else then uses.**

Examiners record respiration as the common wrong choice here.

ER Jun23 P12

7 · Human nutrition

✗ Testing for protein with Benedict's solution.

✓ **Biuret solution for protein; Benedict's for reducing sugar; iodine for starch.**

Examiners record Benedict's given for protein – the three tests have to be kept apart.

ER 2 sessions P1

✗ Calling chewing 'chemical digestion'.

✓ **Chewing is MECHANICAL digestion; chemical digestion is enzymes breaking bonds.**

Examiners note that some candidates are unclear about the distinction.

ER 2 sessions P1

✗ Including the large intestine when asked to measure the small intestine.

✓ **Identify the boundary before you measure.**

Examiners record candidates measuring accurately along the wrong structure.

ER Jun24 P12

11 · Gas exchange in humans

✗ Saying the pressure in the lungs increases when you breathe in.

✓ **The volume increases, so the pressure FALLS below atmospheric, and air moves in.**

Examiners record few candidates appreciating the sequence, and this reversal as the common error.

ER Jun23 P12

✗ Giving the oxygen content of expired air as very low.

✓ **About 16% – expired air still contains most of the oxygen that was inhaled.**

Examiners state the figure was not widely known.

16%

ER Nov24 P12

12 · Respiration

✗ Calling the release of energy from nutrient molecules 'nutrition'.

✓ **Respiration releases the energy; nutrition is taking the materials in.**

Examiners record nutrition as the common wrong selection.

ER Jun24 P11

8 · Transport in plants

✗ Saying transpiration increases as humidity increases.

✓ **It DECREASES – a humid atmosphere reduces the water-potential gradient out of the leaf.**

Examiners record many candidates selecting the opposite because they reasoned from the amount of water present.

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ER Jun23 P12

✗ Reading a stomata graph as more stomata open in the light because plants photosynthesise then.

✓ **Read what the graph shows, not what you expect.**

Examiners record candidates concluding the opposite of the data in front of them.

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ER Nov23 P12

14 · Coordination and response

✗ Saying a rotating shoot grows upwards because of gravity.

✓ **Continuous rotation removes any one-sided stimulus, so the shoot grows horizontally.**

Examiners describe this as a demanding question where many candidates believed the shoot would grow up.

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ER Nov24 P42

✗ Confusing cilia in the airways with root hairs.

✓ **Cilia line the trachea and bronchi; root hairs are on plant roots.**

Examiners record both this confusion and one with the alimentary canal in the same question.

ER Jun24 P12

17 · Inheritance

✗ Using 'gene' and 'allele' as if they meant the same thing.

✓ **A gene is a length of DNA coding for a protein; an allele is one version of that gene.**

Precision with the genetics vocabulary is what examiners describe as separating the answers that score.

ER 4 sessions P4

✗ Writing a genetic cross with the genotypes and phenotypes in no particular order.

✓ **Set out parents, gametes, offspring genotypes, then phenotypes – each line under the one it comes from.**

Examiners credit clearly set-out crosses; an unaligned diagram cannot be followed to its ratio.

ER 3 sessions P4

19 · Organisms and their environment

✗ Defining a population as all the organisms living in a place.

✓ **All the members of ONE SPECIES living in the same area at the same time.**

Examiners record many candidates unfamiliar with the definition and unable to apply it to the context.

ER Nov23 P42

The practical paper – tables, graphs and planning

✗ Drawing a results table with no units in the headings.

✓ **Put the quantity and its unit in the heading, and no units in the body: 'time / s'.**

Named as the most common error in table drawing across two sessions.

ER 2 sessions P5

✗ Labelling graph axes differently from the table the data came from.

✓ **Use the same wording and the same units on both.**

Examiners state axis labels should be complete, include units, and match the table's headings.

ER 2 sessions P5

✗ Plotting the temperatures when the question asked for the temperature CHANGES.

✓ **Plot the quantity named, and check the axis scale is right for it.**

Examiners record temperatures plotted instead of changes, together with an incorrect y-axis scale.

ER 2 sessions P5

✗ Drawing two lines on one graph and not labelling them.

✓ **Label each line where the instructions say to.**

Examiners list unlabelled lines among the common errors even in otherwise excellent graphs.

ER 2 sessions P5

✗ Continuing a line of best fit along the previous trend past the last point.

✓ **Stop at the data, and let the curve turn where the points turn.**

Examiners describe lines following the original direction for too long as a skill needing more care.

ER 2 sessions P5

✗ Writing ‘wear goggles’ as the whole safety answer.

✓ **Identify the risk AND the way of reducing it: hot water can scald, so use tongs.**

Examiners state in six reports that both halves are required.

ER 6 sessions P5

✗ Starting a plan without deciding what will be changed and what measured.

✓ **Identify the independent and dependent variables first, then the controls.**

Examiners raise identification of variables in eight separate reports as the thing that makes a plan work.

ER 8 sessions P5

■ Check every calculation and ask whether the answer is sensible. Examiners state that mathematics is an essential part of the practical assessment.

ER 8 sessions P5