

A.P. Biology

The Essay Portion of the A.P. Exam

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Do Not Lose This Valuable Document. Make a copy of it for safekeeping, three-hole-punch it, and store it in a 4" three ring binder entitled "The Essay Portion of the A.P. Exam".

Introduction

The essay portion of the A.P. Biology Exam accounts for 50% of your final A.P. score. You will be asked to write 2 essays and 6 short responses. You will be given 10 minutes to read and plan your responses and then 80 minutes to write all responses, the second portion of the exam. Suggestions are to spend 20 minutes on the 2 longer essays and 5-6 minutes on the shorter responses. Your performance on the essay portion is critically important to your quest to earn a "4" or "5" on the exam (Hawks soar high), and there are strategies that you may utilize to increase your chances of success. If you experience frustration in authoring biological essays, remember these two key points:

- (1) A 65% on any essay question keeps you "in the hunt". Remember that a composite score of just above 60% earns you your "4", and 76%+ gets you a "5".
- (2) You probably know more about the answer to any essay than your first reading of the question will reveal. Remember that the essays are graded with a rubric. Rubric grading awards points for the inclusion of valid and pertinent points of science. When a grader reads an essay, your score starts at zero and moves up. The mere inclusion of any point of relevant science will earn you points, even in the absence of a train of logical thought. Graders are looking for specific statements of fact. If they show up, you get points. The point is this: You probably know more about each topic than you think you do. Use all of the time given for writing....all 1 1/2 hours. *"Other" students will leave early. Stay 'til the bitter end and try to earn those few extra points that will put you "over the top", like a true HAWK!*

Tips To Help You Be Successful on the Essay Portion of the A.P. Exam

- (1) Read all questions before you even begin writing. Read them with your pen still sheathed in your pocket protector. Read them while you are sitting on your hands. Search for the question that you are most confident in answering. Answer that question first, and the least familiar question last.
- (2) Once you have identified the question that you want to answer, carefully read it. Then read it again, and finally, read it for a third time. Be sure that you answer the question that is asked and only that question, and that you answer **all** parts of it. Determine if you must answer all parts or are given a choice of parts to answer. *If you are given a choice of parts, do not answer all parts.* If, for instance, you are given four choices and told to select two, but YOU go ahead and answer all four, the readers will only grade the first two. You can't beat "the man", "the man" will only bring you down.
- (3) Pay close attention to the verbs used in the directions (such as "describe", "explain", "compare", "give evidence for", "graph", "calculate", etc.) and be sure to follow those instructions. The "other pupils" won't, they will proceed wildly through the question, giving no thought as to what the question measures. Think ahead about your answer....this will help you avoid scratching out, asterisks, skipping around, and rambling.
- (4) WRITE AN ESSAY. (SENTENCES) Outlines and diagrams, no matter how elaborate and accurate, are not essays and will not earn you much credit, if any, *by themselves*. Exceptions: If you are asked as a part of an essay on a lab to calculate a number, this does not require that you write an essay, but be sure to show how you got your answer (show the formulas you are using and the values you have "plugged into" these formulas); or, if you are asked to draw a diagram in the question, do so, but be sure to annotate it carefully. Points for diagrams are not awarded unless you explain the diagram in your essay.

- (5) Define and/or explain the terms you use. Say something about each of the important terms that you use. *Points are commonly awarded for definitions and rarely awarded for the inclusion of single terms.*
- (6) Answer the question parts in the order called for and label them “a”, “b”, etc., as they are labeled in the question. It is best not to skip around within the question. The eight essay questions, of course, do not have to be answered in any order.
- (7) Write clearly and neatly. It is foolhardy to antagonize or confuse the reader with lousy penmanship.
- (8) Go into detail that is on the subject and to the point. Be sure to include the obvious (For example: Water is necessary for photosynthesis.) Answer each question thoroughly. *This will require that you use all of your time.*
- (9) If you cannot remember a word exactly, take a shot - get as close as you can. Even if you cannot remember the name of a concept, describe the concept. The description will earn you points.
- (10) Use a ball point pen with dark black ink. No exceptions.
- (11) Remember that no detail is too small to be included as long as it is to the point. Be sure to include the obvious - most points are given for the basics!
- (12) Carefully label your diagrams. Unlabeled diagrams earn no points. Place them in the text at the appropriate place - not detached at the end. Be sure to refer to the diagram in your essay.
- (13) Widen your margins a little. This will make the essay easier for graders to read. Underline terms that you want the reader to be certain to notice.
- (14) The AP exam always includes synthesis and conceptual questions. In one year past, for example, students were asked to describe protein synthesis and relate it to the processing and exportation of a protein from the cell. Another year, students were asked to relate patterns of embryonic development in animals to their phylogeny. Another year, students were asked how seeds, placentas, and diploidy contributed to the evolutionary success of organisms. Expect that you will see this type of question on the exam, and that you will not have practiced interrelating the topics. Even if you cannot recognize the relatedness of the topics, state what you know about each of the topics separately - you will still earn important points.

DON' Ts :

- (1) Don't outline or answer in a series of bulleted statements. Write Essays. 'Nuff said.
- (2) Don't waste time on background information or a long introduction unless the question calls for historical development or historical significance. The chances of being asked a historical question are very small, and the inclusion of point opportunities for the mention of historical figures or events in the grading rubric are RARE. You will never impress anybody with your knowledge of history in a biology class. (The opposite is, of course, not true.)
- (3) Don't ramble - get to the point and don't “B.S.” - say what you know and go on to the next question. The graders are highly trained professionals and they are easily angered by reading essays that “go nowhere”. This is not a philosophy test. Essays are graded by inclusion, not length. Be efficient (yet complete) in your writing. You can always come back if you remember something while you are answering a different question. Use the margins to jot down terms or thoughts as they occur to you...you won't forget them after finishing your sentence or paragraph.

- (4) Don't use a pencil, and don't use a pen with an ink color other than black. Don't use a felt-tip pen because the ink seeps through the page and makes both sides of the paper hard to read. Don't scratch out excessively. One or two lines through the unwanted word(s) should be sufficient. Don't write sloppily. Don't use a stinky pen.
- (5) Don't panic or get angry because you are unfamiliar with the question. You probably have been taught something about the topic - be calm and think about our curriculum, your Barron's study guide, and your textbook.
- (6) Don't worry about spelling every word perfectly or using exact grammar. These are not a part of the grading standards that readers use. It is important for you to know, however, that very poor spelling and grammar will hurt your chances because the grader will assume that if you know less grammar, you understand less science.
- (7) Don't say the same thing twice. *Don't restate the question while writing your essay.* In doing so, time is wasted and no additional points are awarded.
- (8) If given a choice of two or three topics to write about, understand that only the first one(s) you write about will count. You must make a choice and stick with it. If you decide that your first choice was a bad one, then cross out that part of the answer so the reader knows clearly which part you wish to be considered for credit.
- (9) Don't leave essay questions blank. Remember that each point you earn on an essay question is the equivalent of two correct multiple choice questions, and there is no penalty for a wrong guess, bad spelling, or, grammar. Make an effort on every question! Never yield....never give up. Hawks Rule!
- (10) Don't erase - cross out. It takes less time.

MISCELLANEOUS

If they ask you to design an experiment, here are a few tips.

Identify the control, and then determine the independent and dependent variables. Recall the labs we performed in your A.P. Biology class. *IF it is like a lab we did, use it to* "Design an experiment which....." There is no need to "make up your own experiment". Go with what you know.

Frequently, you will be asked to draw a graph. Remember to put the independent variable (often {but not always} time) on the X-axis, and the dependent variable on the Y-axis. Title your graph, scale your axes, provide labels for both axes, and be sure to include a legend. Explain your graph in the body of your essay. If you fail to describe your graph in text, you will receive no points.

If you are asked to describe your experiment:

- (1) Include a hypothesis or a prediction.
- (2) Identify the independent variable - what treatments you apply.
- (3) Identify the dependent variables - what you measure.
- (4) Identify several variables to be controlled (VERY IMPORTANT!)
- (5) Identify the control group
- (6) Describe how you will take quantitative measurements
- (7) Describe how you will verify your data (run multiple times).
- (8) Describe how the data will be statistically analyzed.
- (9) Compare your result with your hypothesis, and draw conclusions. (Note that you are following the requirements of the Scientific Method).

You have learned enough biology to be very successful on the essay portion of the A.P. exam. Experience teaches me that the chief mistake made by students while writing essays is failing to include the obvious.....points that were made in 9th grade biology or points that were used to introduce topics in this class. Do not leave out the lower-level or introductory points of biological process in your eagerness to impress the reader with your understanding of advanced science and detail. As an example, if you should be asked to share your understanding of cellular respiration, you would begin by writing several paragraphs about the basics of the process: the necessity for energy availability in all cells, the organelles involved, the respiratory raw materials and products, and the utilization of ATP in all energy transfers in living things. Only after you have described the process generally should you move into a discussion of the fine details of respiration: redox reactions, chemiosmotic phosphorylation, and electron transport systems. Use what your 9th grade teacher taught you first, and then what your friendly A.P. Biology instructor taught you. If you use this method, you will RACK UP BIGTIME POINTS. I guarantee it.

May the Force be with you!
(This from the baldish guy with glasses)

Mr. Sprick