

FINAL ADVICE & FREE RESPONSE SAMPLES

What to remember, do, and not do...

1. Multiple-Choice

- The multiple-choice portion counts for **50% of your final grade**. **TREAT EACH QUESTION AS A MINI FRQ** by **NOT** looking at the answers until you truly **READ and PONDERED** the question. Ask yourself:
 1. *what topic is this question about?*
 2. *what would a teacher want to check that I know about this topic?*
- **PACE YOURSELF** - 1 min & 10 seconds per question, about 12/13 every 15 minutes. Remember that you will hit **data analysis questions, which require more time** so move faster when you can.
- Complete the **GRID IN section FIRST!** Don't let time slip away though. Each grid in should take the same as a multiple choice.
- **TAKE YOUR TEST IN LAYERS**... first do all that seem easy and quick. Then, in a second layer, hit those that were a bit more tricky. If something is very confusing or you just do not remember the topic, **do not hang on it past 20 seconds!** Skip and move on. Save the hardest for last – they are all worth the same 1 point.
- **Analyze graphs by forcing yourself to DESCRIBE WHAT HAPPENS AS YOU WALK ALONG THE X-AXIS.**
- **DO NOT LEAVE ANY BLANKS!** Take a guess on everything in those final minutes before time is called. **There is NO penalty for guessing!** You could only get lucky and earn an extra point.

2. Free Response

- The essay portion of the exam counts for **50% of your final grade**.
- **Use your 10-minute reading time to dissect and make a quick topic outline of the two 1st Long FR's &, if time allows, one of more of the middle 3.** Don't waste time reading through all 8 in this short time period, but get no closer to being ready to writing any of them well.

- Once you start writing you have:
 1. *Two 20-minute, 10-point questions (50% of FR grade)*
 2. *Followed by three 6-minute, 4-point questions (30% of FR grade)*
 3. *Followed by three 5-minute 3-point questions (20% of FR grade)*

- **When the time is up for an FR sub-section or the whole FR MOVE ON TO THE NEXT SUB-SECTION or FR QUESTION!** It may not feel like it, but you accumulate more points if you get to answer a medium amount of all FR's & **ALL FR subsections** than if you spend a lot of time answering all parts of only a few.

- Simplify the question if the wording is complicated by **REWRITING THE QUESTION IN YOUR OWN WORDS** next to it.

- **Do NOT repeat the question. Get to the point IMMEDIATELY!** Think about that rubric. It's not about thesis statements, transitions, or fancy English vocabulary.

- **ANSWER EXACTLY WHAT IS ASKED**...in short sentences, jam-packed with AP-level terminology, details, and accurate language. **Vague, non-descriptive, generic language is a big no no!** Ask yourself regularly, did I answer the "**WHY?**"
 - Your explanations have to clearly highlight this understanding, flow logically from start to finish, and very definitely answer the exact question asked! **You are the surgeon and your words the scalpel...or so it should feel. Dissect the question carefully as you read it.** You need to be **direct, crystal clear**, and **right to the point, without fluff and floweriness.**

- **ASSUME THE READER KNOWS NOTHING!!!!** Define your terms and explain from start to end. Do not jump around. **State the details and don't be vague.**

- **State the OBVIOUS!** Don't assume the reader will assume you understand or know something. They won't!
 - If you have to discuss a graph:
 1. Walk along the x-axis, describe changes in y-axis values all along the way and changes of slope, **being sure to translate the shape of the line and the x and y axis data points into what it means as far as the biology is concerned.**
 2. Compare the y-values and slopes for all lines included in the graph.
 3. Explain what is happening that causes these changes in y-value or slope.

 - If you have to design an experiment state outright:
 1. What your hypothesis is (**statement explaining a phenomenon**)
 2. What your Independent Variable is (**what is manipulated & how**)
 3. What your Dependent Variable (**what is measured and how**). **Make a statement too about how you would measure or collect this data!**
 4. What your Control Group is (**group not getting your independent variable treatment**)

5. What your Treatment Group(s) is(are) (groups receiving your independent variable treatment)
6. At least 3 Constants (controlled variables that do not differ between the control and treatment groups)
7. That you would repeat the experiment several times to increase reliability of results and the validity of conclusions
8. That you would include a large sample sizes [>30] in your treatment and control groups.

- **DO NOT USE SYMBOLS or BULLETS.** Do not answer in one word or a number without putting these into a full sentence. Answer in short, specific, non-vague sentences that have a subject and a verb.
- **DO NOT USE METAPHORS or EXPLAIN A CONCEPT BY USING AN EXAMPLE (unless one is asked for).** Explain first with pure biological facts that apply to all similar scenarios. Add a specific example later only if you have explained the concept or mechanism well first.
- **If data is non-numerical (categorical), use a BAR GRAPH!**
- **If the data is numerical, use a LINE GRAPH!**
- **REVISIT THE QUESTION OFTEN WHILE YOU ARE WRITING!** Answer the first subpart of part a, then reread the second subpart of part a, and answer it, then read the third subpart of part a, and so on. Do not just start free writing about anything related to the subject without regularly checking that you are still targeting only what is asked and not going off topic.
- **ANSWER ALL SUBPARTS OF AN ESSAY TOGETHER.** Meaning, answer 2a then 2b then 2c. Do not answer 2a then start writing the answer to 3a then follow this paragraph with the answer to 2b etc... Answer all of 2 then move on.
- **NEVER LEAVE A SECTION BLANK!** Even if you do not know the answer, write some related facts, descriptions, or definitions. **SHOW OFF WHAT YOU DO KNOW ON THE TOPIC THEY SEEM TO ASK ABOUT.** The first few points are often quite easy to earn in each subsection. **You may get lucky with a point or two.**
- Remember, APs are different from traditional classroom exams. In APs you have to **BE AGGRESSIVE, DARING, TO THE POINT, AND JUST GO FOR IT!!!** **Being passive, cautious, or nervous that you may not be right does not get you ahead.** This is the time you do not worry about what anyone will think of what you write.
- **LEAVE WHITE SPACE BETWEEN ESSAY SUBSEQUENTIONS.** **Leave room for edits & additions later on!** There is more paper available if you run out of space in your answer booklet.
- **LABEL EVERY DIAGRAM OR GRAPH FULLY!** Refer in your text to your figure or table etc...

- **WRITE LEGIBLY.** Readers have a few minutes to read each question. If a word cannot be made out quickly, it will be skipped and no point will be awarded.
- Remember, AP readers are also not 18. Their eyesight is not always great. **MAKE DIAGRAMS BIG ENOUGH & CLEAN ENOUGH TO BE EASILY READ!**

3. You know what to do during your 10 minutes reading period (circle/underline key words in the question, make a quick word-outline to organize your answer, and determine your timing per section) but what about during the actual writing?

- **Five Golden Steps to Follow for 20 minute FRQs: Read, Quick Response, Reread, Detailed Response, Reread!**
 - **People tend to see what they expect to see.** In test-taking, this can be dangerous. Credit is lost when you misinterpret the directional aspects (e.g., key words) of an essay question. In order to minimize that possibility the following **five-step process is recommended:**
 - **During the first 3 minutes:**
 1. Read the question quickly but do not skim. Slow down at key words or other directional aspects of the question. Underline or circle important terms.
 2. **Quick Response:** On the white space, quickly respond to your first reading of the question in simple terms or short phrases. You may even diagram relationships as they come to you. Formulate a logical approach.
 - **During the next 15 minutes:**
 1. **Reread the question.** Make sure that you are responding to what is requested. If you have underlined or circled terms, do not disregard the unmarked terms.
 2. **Detailed Response:** Using the question as your guide, incorporate your quick responses (from your notes) into logical and coherent responses. As you write your detailed response, new ideas may come to you. Interrupt your writing for a moment in order to jot these ideas down. Then return to your detailed response.
 3. **Write in short, declarative sentences.** Do not become flowery. If there are multiple sub-questions, gauge your time appropriately. **Do not spend too much time on one aspect of the response. There are limits to the number of points awarded to any one sub-response.**
 4. When you are finished with that response, go back to the ideas you jotted down and shape them into responses.
 - **During the last 2 minutes:**
 1. **Reread.** Take time to quickly reread the question one more time. **You may find that you have left out one or more important sub-questions.**

2. Quickly proofread your response to make sure you answered all sub-questions and did not make logical errors.
- For the 5-6-minute FRQs – *Do the same just now in 1-minute, 3-4-minutes, 1-minute intervals.*
 - **Note***: When the time allotted for that essay is over, move on to the next essay no matter how much you feel that a few more minutes would improve the essay that you have just completed.** If you have time after completing the other essays, go back then.

4. What type of answer does College Board want to see?

- Respond to the **QUESTION ASKED!** Key words in the question should guide your response...**pay attention and don't just start writing until you've thought about what these words mean** - underline them, circle them!

If you are asked to...your essay should:

- Compare - Show similarities between objects, ideas, phenomena, etc.
 - Contrast - Show dissimilarities between two objects, ideas, phenomena, etc.
 - Define - Provide the accepted definition for a word. The response should be given as a complete sentence.
 - Describe - Provide a list of features that characterize objects, ideas, phenomena.
 - Discuss - Select a particular viewpoint and support your position with facts, examples, observations, reasoning, and descriptions.
 - Explain - Provide a series of well-developed and logical statements, which give the reason for or cause of an event or events.
 - List - Provide a simple series of words, sentences, or phrases as requested. Enhance clarity by labeling each word, sentence, or phrase with sequential numbers or letters.
 - State - In a logical progression, record the facts related to the question. You are not required to provide proof or illustrations.
 - Trace - Describe the sequence of the process or the evolutionary development of the concept.
 - Enumerate - List a number of reasons or attributes of something. For ex: enumerate the stages of mitosis
 - Interpret - Analyze critically or explain something does not clear
 - Prove or Show - Demonstrate the truth of a statement. Explain the reasons for events turning out as they did, or speculate on what might be the effects of certain causes.
- **DON'T!!!**
 1. Don't ramble.
 2. Don't waste time on background information, unless a historical development or significance is called for.
 3. Don't shoot the bull – people can tell when you are saying a lot of nothing.
 4. Don't panic or get angry because you aren't familiar with the question. **You probably have read or heard something about the subject – be calm and think.**
 5. Don't scratch out excessively. One line through is sufficient – the rest is a waste of time!
 6. Don't write in the margin if you want it to be read/graded.

7. **Don't worry about spelling every word perfectly or using sophisticated grammar.** Of course do not purposely do poorly in this area.
9. **Don't leave questions blank. There is no penalty for a wrong guess.** Every point on an essay question is worth more than a multiple-choice question. So...Go for it!

**Understand that the exam is written to be hard
so don't let that intimidate you.**

It is likely you will not know everything. Stay focused only on the question at hand & do not let yourself worry about a past question. *If you do not know it, chances are most of the nation doesn't either!*

Remember, there is a generous curve built in so no matter what, keep giving your best in each new question and don't quit!!!