

2020 AP Biology Updates

Points of Emphasis for Students – Roy Lee

Hey students, hope you are safe and healthy in these unprecedented times. Here's a quick update for you guys taking the AP Biology exam this year. Thought it might be helpful to share my thoughts while reading the guidelines.

Obvious disclaimers : these are my personal thoughts about the exam. While probably more insightful than most, they are not “official” statements by the Collegeboard, nor should overturn anything stated by your school AP Bio teachers. **Just some friendly tips about the upcoming test.**

<Exam Timing>

>Total of 2 FRQ questions with 25, 15 minutes to respond

Traditional AP Bio FRQ Test

Long FRQ (10 point questions) were stated to “require about 22 minutes to answer”

Short FRQ (3-4 point questions) were stated to “require 6 minutes each to answer”

For 2020 AP Bio

25 and 15 minutes may go by much quicker than you expect, especially when you are trying to answer 2 questions that supposedly represents the entire AP Bio curriculum.

Stick to short, coherent responses that are neat and tidy. Careful not to ramble on about what YOU want to talk about, but isn't necessarily what the question asks.

REREAD the question multiple times (PLEASE!), make sure you are ANSWERING the question, without unnecessary fluff.

You don't have time to revise so stick to what you feel confident in.

<Question Description : Q1>

For 2020 AP Bio

key words that stand out to me : “models, experimental design, analyze, predictions”

You will be likely given a couple of data charts about an experiment you have not encountered before. Don't be thrown off; stick to the basics. Make sure you know what the purpose of the experiment is, and what the results are showing you.

Practice as many FRQ 1 questions from previous years as you can. You will find that many of the questions will give you an experiment in which you need to quickly analyze what is happening.

Make sure you understand basic experimental design, such as stating the Independent/dependent variables, control groups, null/alternative hypothesis, interpreting bar graphs, error bars. **I am almost certain at least one question will ask you to identify some of these factors.**

You probably won't need to draw any graphs this year, so stick with quickly analyzing many different types of graphs instead.

<Question Description : Q2>

Key words : “...with a disruption, ...predict causes or effects of a change”

Likely you will be given a scenario with an abrupt change. Make sure you can identify the beginning and the end of the process (for example : the substrates and products of a biochemical pathway). Again, you may come across a substance or chemical name you haven't seen before; stick to the basics. They are not asking you about an obscure thing. They are asking you about the underlying process and requesting you make very basic, straightforward predictions about what will happen next.

<Final Thoughts>

All AP Bio students tend to ramble when they first try FRQs. It takes practice to answer concisely and accurately. I know it's hard to feel motivated, especially for FRQs; but try to get at least some practice under your belt before the exams.

Please, please, please reread the question. Make sure you understand what the question is asking you to do. You will be amazed at the number of students that end up not answering the actual question, and instead answer a question that they make up themselves. Then they always respond the same way when I point it out. "Oh." Then continue to look perplexed as if the question somehow changed since they last read it. Surprised Pikachu face.

Previous year students had the luxury of time to reread and revise before the end of the exam. You, however, will not be allowed to look at question 1 after submission, meaning you do not have time to revise. Your first shot is your only shot, so you need to focus from the very beginning. I cannot emphasize this enough : make sure you understand what the question is asking you to do.

Unit 7 (Natural Selection) and Unit 8 (Ecology) being excluded this year is a HUGE DEAL. These two units have traditionally been the ones that were most emphasized in past exams. Their exclusion means the other units have become much more important now.

My advice is to review Unit 3 (energetics), Unit 5 (genetics), and Unit 6 (expression). They are traditionally the units that students find the most difficult (hence likely exam questions to spread the curve).

Be prepared to discuss predictions about "disruptions" to normal pathways.

Here are a few examples : effects of a drug that binds to and inhibits ribosomes during translation, mutations for diseases shown in family trees, lack of a particular enzyme during the Krebs cycle, effects of low sunlight in photosynthesis, unequal splitting of chromosomes during meiosis, communication between prokaryotic cells, or between eukaryotic cells and how it relates to cancer, etc.

The list is not exhaustive, so your best bet is to solve as many questions (both MCQ and FRQs!) as you can to ensure your foundational knowledge is strong, allowing you to think on the spot. Good luck and have fun!