APES Multiple Choice Tips and Tricks

You have 90 minutes to answer 100 questions.

- Read each question carefully. Try to answer the question **BEFORE** you look at the answer choices.

- Cross off answers you know are wrong.

- If it helps, draw a picture.

- If you don't know the answer immediately, move on and go to the next question. The questions are randomly assorted by difficulty. It's completely possible that question 100 could be the easiest question on the test.

- Do **NOT** spend too long on one question. If you can't figure it out in a reasonable amount of time, move on. Come back to it if you have time.

- **YOU MAY GUESS. THERE IS NO PENALTY FOR GUESSING.**

- **DO NOT LEAVE ANY QUESTION BLANK.** If you can't narrow down the choices at all, pick your "Safety Letter" and don't look back.

- Some questions are just plain easy. Don't second guess yourself. There are always a few questions that they expect **EVERYONE** to get right, so those are designed to be really easy.

- Changing your answer is generally NOT a good idea unless you have a **REALLY REALLY** good reason for doing so. **Types of Questions: Traditional** *Basic factual recall. Straightforward. These should be the quickest questions for you to answer.* EX: The level of ecological organization described by field ecologists when studying multiple interacting species that live in the same area is a) the habitat. b) energy flow. c) the population. d) the community. e) the ecosystem Answer: D. **"Reverse"** *4 correct answers, only 1 incorrect. Think of sesame street - "which one of these is not like the others". These usually contain the words **not** or **except**.* EX: Which of the following is *not* a major greenhouse gas? a) carbon dioxide b) nitrous oxide c) chlorofluorocarbons d) water vapor e) carbon monoxide Answer: E. Remember water vapor is a greenhouse gas. Think how hot it feels outside when the humidity is high. **Least and Most Likely** *Two or more of the choices are often correct, but only one is **least** or **most** likely. It is important that you read **ALL** of the choices. DO NOT just pick the first right answer you see. Don't pick an answer*

until you rank all of the choices. These questions are likely to take the longest for you to answer. EX: When the I = PAT model is applied to the United States, the *least* important factor in determining the environmental effects of the U.S. population is a) the value of P b) the value of A c) the value of T d) thevalueofAandT e) the value of TFR Answer: A. Population is the least important of all of these.

Roman Numerals

Usually only a few of these. Three or four answers have roman numerals and more than one of them can be correct. You have to decide which are correct. EX: Catalytic converters remove which of the following from automobile exhaust?

I. Carbon monoxide II. Particulates III. Nitrogen oxide

. a) I only

. b) II only

. c) III only

. d) I and II only

. e) I and III only

Answer: E.

Data Interpretation/Analysis

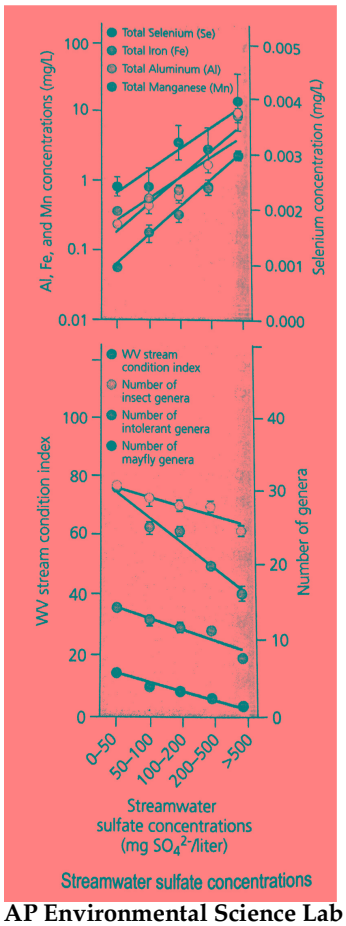
These will give you a set of data in graph or table form. Often more than one question will use the data provided. You may

have to do some calculations.

EX: Both graphs tell us that the West Virginia stream index a) improves as sulfate and other pollutants increase. b) has no effect on the abundance of insect genera in the streams. c) has caused both the increase of pollution and the decline of insects. d) will increase if the levels of aluminum and iron in the stream increase. e) declines as the level of pollutants increases.

The graph evidence lends support that the relationship between stream water sulfate concentration and selenium concentration is a) a negative exponential relationship. b) a positive linear relationship.

c) negatively influencing the total manganese concentration. d) an inverse linear relationship. e) positively influencing the number of mayfly genera.



Key Tips:

APES Free Response Tips and Tricks

You get 90 minutes to answer 4 questions.

- Do NOT write until you read everything. Read ALL parts of the question.

- Answer the easiest FRQ first and the hardest last. That way if you run out of time, you run out of time on the hardest one. Try to spend no more than 22 minutes/question.
- Underline all of the important verbs (the test makers also **BOLD** these words).
- Answer each part in order and **LABEL** them. This helps the reader give you points.
- Show **ALL OF YOUR WORK** when calculations are required.
- Use scientific notation and dimensional analysis (conversions) for math.
- **DESCRIBE** means more than **IDENTIFY**. If it says **DESCRIBE** and you only **IDENTIFY** you will not get points.
- **ECONOMIC** is different from **ENVIRONMENTAL**.
- If you don't know all parts of a question, **ANSWER THE PARTS YOU *DO* KNOW**.
- You are "supposed" to write complete answers in paragraph form, but don't waste time writing stuff from the question. The reader can read the question just as well as you can.
- Bulleted lists WILL NOT BE GRADED.
- DON'T be too general. **DESCRIBE** what type of pollution (air, water, noise, etc.). Do NOT say "is bad for the environment." A 5th grader could tell me that. **EXPLAIN** exactly HOW it is bad for the environment. If a 5th grader could write your answer, its probably not detailed enough to get college credit.
- Only give the number of responses asked for. If they ask for TWO, give TWO. If they ask for THREE, give THREE. The reader isn't allowed to read any more than that anyway, so you're wasting your time.
- Don't waste time erasing. Just put a line through your answer. The reader won't read anything you cross out.
- Write **NEATLY**. If the reader CAN'T READ your handwriting, they CAN'T give you credit.
- Know a few widely-applicable laws for when they ask for a law: *Endangered Species Act, Clean Air Act, Clean Water Act, etc*.
- If your math skills are lacking, now is the time to practice. Print out the summer assignment and practice the math.

Types of Questions

Document-based question

(DBQ) *They will give you a document and you have to use it. Do not expect to pull all of your answers straight from the document, because you won't be able to. Common mistake: students repeat info from the passage rather than providing new info.* **Data-set** *The "math question". You get statistics in the intro paragraph and then you'll use those to calculate your answers. A graph, diagram, table, or chart could also be provided.* ***Don't give up if you think you can't do the math*** *because you can get points on other parts of the question and some points are better than no points.* ***ALWAYS SHOW YOUR WORK. YOU GET NO POINTS IF YOU DON'T SHOW YOUR WORK.*** **Synthesis and Evaluation** *Demonstrate knowledge questions. Points determined by your ability to provide* ***in-depth knowledge*** *and support your statements with* ***specific scientific evidence.*** *You will be required to* ***IDENTIFY, DESCRIBE, EXPLAIN,*** *and* ***DISCUSS****. Focusing on the verb in bold will help you answer these questions.*