

## WELCOME TO APES! (A.P. ENVIRONMENTAL SCIENCE)

From <http://www.collegeboard.com> – your site for AP course information:

“The goal of the AP Environmental Science course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving and/or preventing them.”

### ABOUT APES

- 1) It is an applied science.
- 2) It is interdisciplinary:  
biology, chemistry, physics, geology, ecology, economics, political science, and math.
- 3) It is both theoretical and practical.
- 4) It has a relevant lab component.

### THEMES

- 1) Science is a process.
- 2) Energy conversions underlie all ecological processes.
- 3) The earth itself is one interconnected system.
- 4) Humans alter natural systems.
- 5) Environmental problems have a cultural and social context.
- 6) Human survival depends on sustainability.

### BIG IDEAS

- 1) energy conversions
- 2) tragedy of the commons
- 3) sustainability
- 4) connectedness

### STUDENT CHARACTERISTICS

- Highly motivated
- Skilled reader
- Fluid writer
- Critical thinker
- Problem solver
- Interested in learning
- Strong work ethic
- Strong math skills
- Expertise in absorbing large amounts of material

## THE APES EXAM

- 1) Objective Questions – 60% of the grade
  - 100 multi-choice questions in 90 minutes
  - always 5 responses, *no* “all of the above” and “none of the above”
  - graph interpretation; simple math problems; more application than rote memory
  - blanks don’t count for or against
  - score is based on the number of questions answered *correctly*
  - points are not deducted for incorrect answers
  - Try not to second-guess the MC answers. Changes usually are wrong.
  - White polymer erasers are best for erasing pencil marks.
  
- 2) FRQ (Free Response Questions) – 40% of grade
  - 4 FRQ’s in 90 minutes (22.5 min. per FRQ)
  - Four types:  
1 Data Set, 1 DBQ (Document-Based Question), 2 Synthesis & Evaluation
  - 10 pts. maximum given per question
  - There are no more elaboration points possible
  - Energy and pollution are important topics

### FRQ GENERAL TIPS:

- Use regular ball-point pen, black ink. No roller-balls, gel pens, or marker tips.
- First, read all the FRQs through twice.
- Students tend to speak and write too generally. They may know the information but if they do not write it out clearly, they can’t get points.
- The test readers are looking for key content. Spelling and grammar do not have to be perfect.
- If the readers can’t read it, it will get a zero.
- Prose response does not mean a bulleted or numbered list.
- Avoid unclear and vague pronouns.
- Write sentences (with a subject and verb, etc.).
- Use single-line cross outs; no white-out, no huge scribbles or erasures. Anything crossed out (except units in math work) will not be read.
- If they ask for 2 pieces of info and the student gives 4, the first two of which are wrong and the last two are right, they will not get points. The reader will stop at the first two asked for.
- Answer the questions as asked. Be specific. No generalizations. State the obvious. In discussions, give examples and details.
- Answer as many parts of a multi-point question as you can.
- Do the hardest FRQ first. Leave the easiest one for last. You can do the questions out of order as long as everything is labeled.
- Label essay answers like the questions are set up: a), b), c)...
- Actual math setup, with all units, must be shown in the answer section.
- Do not box in or circle math answers. You may highlight the wrong thing or contradict yourself.
- Always write something. Don’t ever leave essays blank.
- Pacing is important.