

WRITING A FREE RESPONSE FOR A.P. ENVIRONMENTAL SCIENCE

THE FREE RESPONSE SECTION HAS 4 PROBLEMS (1 DATA, 1 DOCUMENT-BASED, 2 SYNTHESIS) WORTH 40% OF THE EXAM.

THE MULTIPLE CHOICE SECTION HAS 100 PROBLEMS WORTH 60% OF THE EXAM.

CALCULATORS ARE NOT ALLOWED AND NO FORMULA SHEETS ARE PROVIDED.

90 MINUTES IS GIVEN FOR THIS SECTION.

BEFORE ANSWERING ANY QUESTIONS

- READ THE QUESTION TWICE.
- UNDERLINE (HIGHLIGHT, OUTLINE, ETC.) WHAT THE QUESTION IS ASKING FOR.
- BEGIN ANSWERING THE QUESTION IN THE ORDER IT IS WRITTEN; **DO NOT RESTATE THE QUESTION OR WRITE AN INTRODUCTORY PARAGRAPH!**

IF THE QUESTION SAYS TO 'DISCUSS' OR 'DESCRIBE'

1. DEFINE THE TOPIC
2. DESCRIBE OR ELABORATE ON THE TOPIC
3. STATE AN EXAMPLE OF THAT TOPIC

IF THE QUESTION SAYS TO 'COMPARE AND CONTRAST'

1. CLEARLY STATE WHAT THE ITEMS HAVE IN COMMON
2. CLEARLY STATE HOW ITEMS ARE DIFFERENT

IF THE QUESTION ASKS FOR A GRAPH TO BE MADE

1. LABEL EACH AXIS WITH A NAME AND WITH UNITS
2. TITLE THE GRAPH
3. SCALE AND NUMBER THE AXES CORRECTLY
4. USE THE CORRECT TYPE OF GRAPH (2 SETS OF NUMBERS = LINE GRAPH, 1 SET OF NUMBERS & 1 SET OF WORDS = BAR GRAPH)

IF THE QUESTION ASKS A MATHEMATICAL PROBLEM, (ESPECIALLY APES)

1. SHOW EVERY SINGLE STEP OF ALL WORK
2. SET UP PROBLEMS SO THAT LABELS CANCEL OUT (DIMENSIONAL ANALYSIS)
3. WRITE ANSWERS WITH LABELS
4. IF NUMBERS ARE VERY LARGE OR VERY SMALL, USE SCIENTIFIC NOTATION IF AT ALL POSSIBLE

IF THE QUESTION ASKS FOR LAB DESIGN

1. STATE A HYPOTHESIS IN THE "IF, THEN" FORMAT
2. DESCRIBE EACH STEP OF A PLANNED EXPERIMENT IN DETAIL
3. STATE EXACTLY WHAT THE CONTROLS ARE
4. MAKE SURE TO MENTION THAT THE EXPERIMENT USES MULTIPLE SAMPLES (50+) OR IS REPEATED MULTIPLE TIMES
5. DESCRIBE EXPECTED RESULTS

FOR ALL QUESTIONS

- ANSWER IN COMPLETE SENTENCES; DO NOT USE LISTS, CHARTS, OUTLINES, ETC.
- LABEL EACH SECTION AS IT IS LABELED IN THE QUESTION (E.G. A, B, C OR I, II, III)
- ADD A CLEARLY LABELED DIAGRAM TO SUPPORT YOUR ANSWER, BUT IT CANNOT BE THE ENTIRE ANSWER
- FOR EVERY STATEMENT YOU WRITE, ASK YOURSELF "WHY." IF THERE IS AN ANSWER TO THAT 'WHY' KEEP ON WRITING!!!!
- DO NOT ANSWER MORE THAN WHAT IS ASKED FOR; E.G. IF THE QUESTIONS SAYS TO CHOOSE 3 OUT OF 5 TOPICS, ONLY ANSWER THREE OUT OF 5; E.G. IF THE QUESTION ASKS SPECIFICALLY ABOUT RNA, DON'T DISCUSS DNA DUPLICATION.

REMEMBER - TIME IS OF THE ESSENCE. YOU have 22.5 minutes per question.