

Review of Terms for Answering Essay Questions for APES and AP Biology

(Adapted from a list from Bobbi Hinson on the AP Bio list serve 2008)

- **Compare**
 - Point out similarities, to examine 2 or more objects and consider the likenesses. Including but not limited to: events, ideas, theories...
- **Contrast**
 - Point out differences, to examine 2 or more objects and consider the differences between two or more events, periods, theories...
- **Identify**
 - Name, list, give an example
- **Explain**
 - Tell how to do, tell the meaning of, or why...give reasons for. Support or qualify a given generalization
- **Describe**
 - To give a picture or account of in words, give the characteristics of something
- **Discuss**
 - To consider from various points of view of an issue, parts of an event, parts of a process, theory or technique.
- **Define**
 - Give a meaning for a word or phrase.
- **Effect**
 - Give both positive and negative effects
 - To “disrupt” or “change” can be both ways...up &down...+ and –
- **Interpret**
 - Analyze critically or explain something not clear
- **Justify**
 - Demonstrate or prove the truth of a statement, explain the reasons for events turning out as they did, or speculate on what might be the effect of certain causes.

- **Predict**

--To declare or tell in advance, foretell, based on knowledge or observations, scientific reason or experience. (May have to draw a curve that is a prediction...)

- **Remember the 3 E's for answers...**

- Explain
- Elaborate
- Example

Graphing Tips

- Label both axes (independent variable on the X-axis and dependent variable on the Y-axis)
- Include units on both axes
- Provide a descriptive title
- If the instruction is to plot rather than graph the data points, no line needs to be drawn.
- If a line is drawn, do not extend the line beyond the last point plotted (unless asked to make a prediction) or connect the line from the origin (unless there is a time zero reading.)
- If multiple lines are drawn on the same graph, label each line clearly.

Lab Design: Answering the questions could include any of the following

- Form a concise hypothesis which is testable. State It Clearly!
- May be asked for a control to use for comparison with the experiment
- What is the independent variable
- What is the dependent variable
- Types of Measurement— quantify—Be specific, rate of CO₂ produced per minute...
- Statistical data—Chi Square, rate determination...be ready for this
- Graph: See above

Calculations:

- Remember Units
- Check your work
- Show your work/set up for ALL QUESTIONS.
- AP Bio: READ THE GRID ANSWER BOXES CAREFULLY.