AP Environmental Science

Common Mistakes · 常见错误

APES answers are marked to a formula: name the process, give the direction, and show the arithmetic with units. Most lost points are for vagueness – a "solution" with no mechanism, a trend with no numbers, a calculation with no set-up. 环境科学按固定要点给分*:* 过程、方向、带单位的计算。

Calculations

Writing an answer with no set-up. Show the numbers and units being multiplied or divided; the working carries most of the marks.

Dropping units mid-calculation, so an energy answer arrives in the wrong quantity entirely.

Confusing power with energy: kW is a rate, kWh is an amount. Multiply by hours before comparing.

Calculating percentage change from the new value rather than the original.

Using the rule of 70 with a decimal rather than a percentage, giving an answer out by a factor of 100.

Halving by the total time instead of counting half-lives.

Explanation

Naming a consequence without the mechanism. 'Eutrophication harms fish' needs the algal bloom, its decomposition, and the oxygen depletion.

Proposing a solution with no explanation of HOW it addresses the specific problem, or one that is not feasible for the scenario given.

Confusing bioaccumulation (within one organism over time) with biomagnification (up the trophic levels).

Confusing stratospheric ozone depletion with the greenhouse effect. Different gases, different altitudes, different consequences – a routine conflation.

Saying a resource is renewable without qualification. It is renewable only if harvested at or below its replacement rate.

Describing point-source and nonpoint-source pollution without the feature that distinguishes them: whether the discharge can be traced to one identifiable location.

Data and reading

Describing a trend with no magnitude. Quote the values and the period.

Misreading a logarithmic or per-capita axis. Check the axis label before reading a value.

Treating a correlation in the data as evidence of cause, when the question wants a confounding variable named.

Answering only part of a multi-part prompt. 'Identify and explain' is two marks, and 'describe one environmental and one economic effect' is two distinct categories.