

Non-Majors or Intro. Majors (Biology)

1. What might one say that plant and animal cells are more similar than different?

Human Anatomy and Physiology

1. Describe in your own words how the human body maintains homeostasis.

Gen. Biology (Majors)

1. In your own words explain what cellular respiration is.
How/why does cell division occur?
2. What is the difference (similarity) between photosynthesis and respiration?

General Biology

1. In your own words explain what it means to be alive or describe what constitutes a living organism.
2. In your opinion, what does a scientist do?

Second Semester Intro. Biology

1. How might one apply MacArthur and Wilson's Theory of Island Biogeography to the Field of Conservation Biology?

Biology of Women

1. Explain the difference between a negative and a positive feed back loop.
2. Hormonally, how do men and women differ?

Microbiology

1. Explain why microbiology is important? (usually followed by "do all microbes make us sick") in response to "they cause disease".
2. Should we get rid of all microbes?

Microbiology

1. In your own words, explain why antibiotics should not be prescribed for every common illness that leads to a doctor visit.
2. What is the difference between a pathogen and an opportunistic pathogen?

Nutrition – Principles of Nutrition

1. Explain the similarities between saturated fatty acids and trans fatty acids.
2. Explain how these types of fats can increase the risk of cardiovascular disease.

Math for Elementary Education

1. How would you explain the result of division by zero to a 5th grader?
2. Compare the standard algorithm for division with repeated subtraction. Why would you model one over the other in a classroom?

College Algebra

1. How are the x-intercepts of a polynomial equation related to its solutions? Explain why.
2. Is it possible to have only one real solution to a quadratic equation? When does that happen, if so?

Math Methods

1. A parent complains that the new ways of the technique of math means students don't know their "basic" facts. Do you agree? Why or why not?
2. What is the difference between summative assessment and formative assessment?

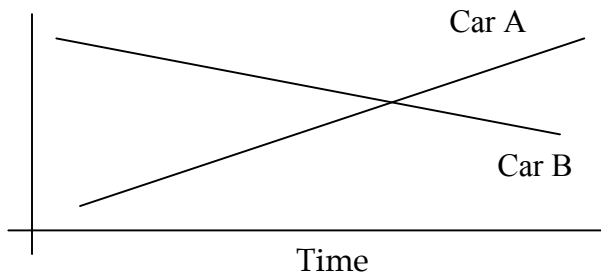
Introduction to Environmental Science

1. Metro state will be installing a wind turbine this summer. How big? Sited where? (These will be outrageous until further developed)
2. Will your next vehicle purchase be an alternative fuel (ethanol, hybrid, etc.) or conventional? Why? Discuss pros and cons.

Physical Geology

1. Where would you take me to see Rhyolite rocks and why?
2. Which path would you take to reach location A and why? (pieces of topographic map are shown with different routes on them)

Physics Kinematics



1. The graph above describes two objects (cars). Describe what happens at the intersection?