

EXAM TEN EXPECTATIONS

ENVIRONMENTAL SCIENCE EXAM TEN “Solid / Hazardous Waste and Toxicology”

STATE the country with the highest solid waste production
STATE the chemical class of DDT
STATE the fastest growing component of municipal waste (and why)
STATE the country with the highest percentage of recycled municipal waste
STATE the most successful recycling program in the U.S. (by type of waste)
STATE the percentage of hazardous waste in the total waste stream of the U.S.
DEFINE acute toxicity
DEFINE persistence
DEFINE biological magnification
DEFINE body burden
DEFINE bioaccumulation
LIST diseases that have been linked to environmental contaminants
LIST actions that intentional or unintentional that contribute to outbreaks of disease
LIST the top five (largest to smallest) components of solid municipal waste
LIST the top three causes of death in the U.S. today
LIST factors that affect “lethal doses”
LIST four major categories of hazardous waste
LIST long term and short term effects of pesticides
LABEL the ED50 on a dose response curve
LABEL the threshold level on a dose response curve
IDENTIFY sources of municipal waste (examples and non-examples)
IDENTIFY examples and non-examples of endocrine disrupters
IDENTIFY the goals of waste prevention
IDENTIFY examples of source reduction
IDENTIFY different forms of hazardous waste with its source (limit to those in your text)
OUTLINE the precautionary principle
OUTLINE endocrine disrupters
OUTLINE carcinogens
OUTLINE emerging diseases
OUTLINE composting
OUTLINE incineration
OUTLINE the amount of trees, land, water and energy that is conserved by recycling one ton of paper
OUTLINE source reduction
OUTLINE problems associated with improper disposal of hazardous waste
ANALYZE a pie chart
ANALYZE dose response curves
DEDUCE the most and least toxic chemicals from a mortality graph
DESCRIBE integrated waste management
DESCRIBE a dose response curve
DESCRIBE risk analysis
DESCRIBE risk assessment
DESCRIBE bioremediation
COMPARE synergists and atagonists
COMPARE organophosphates, carbamates, chlorinated hydrocarbons
COMPARE organic and inorganic compounds (particularly as it relates to pesticides)
COMPARE “open dumps” and sanitary land fills
COMPARE the effects of pesticides in children and adults
EXPLAIN pros/cons of sanitary land fills
EXPLAIN LD50 doses
EXPLAIN why the FDA has approved bisphenol A (BPA)
EXPLAIN the Delaney Clause (and any inconsistency)

PREDICT an organism in a food web that shows the most and least biological magnification of DDT
PREDICT which chemical is most toxic from a table with LD50 values
CALCULATE percentages through simple addition
DISCUSS municipal waste disposal methods (include “%’s of use” for each disposal method)
DISCUSS problems associated with pesticide use
DISCUSS why such a small percent of plastics are recycled
DISCUSS the boomerang paradigm
DISCUSS the paradigm of “solution to pollution is dilution”