

EXAM TWO EXPECTATIONS

ENVIRONMENTAL SCIENCE EXAM TWO

“EARTH SYSTEMS, RESOURCES AND THE LIVING WORLD”

- STATE** the rate of soil production
- STATE** the energy source that drives the hydrological cycle
- STATE** the implications of the “law of conservation of matter”
- STATE** the factors that define specific biomes
- STATE** the purpose behind California’s Arcata sanctuary
- DEFINE** lateritic soils
- DEFINE** biogeochemical cycling
- DEFINE** tolerance limits
- DEFINE** soil
- DEFINE:** peat, humus, clay and loams
- DEFINE** soil leaching
- LIST** inorganic components of soil
- LIST** organic components of soil
- LIST** two fundamental ecosystem services (processes)
- LIST** the two most important abiotic factors that distinguish terrestrial biomes
- LIST** causes of desertification
- LIST** important ecosystem services and benefits provided by natural organisms
- LIST** human activities that release sulfur into the atmosphere
- LIST** pros and cons of each soil type
- LIST** the soil horizons
- OUTLINE** the Gaia hypothesis
- OUTLINE** the relationship between erosion and the carbon cycle
- OUTLINE** mineral resources
- OUTLINE** indicator species
- OUTLINE** the biodiversity of life as it relates to latitude
- OUTLINE** each biome (include its general locations)
- OUTLINE** the physical characteristics of each zone of an aquatic biome
- OUTLINE** the importance of wetlands
- OUTLINE** the classification of rocks
- DESCRIBE** soil formation
- DESCRIBE** various farming methods that reduce the effects of erosion
- DESCRIBE** various farming methods that maintain or increase soil fertility
- DESCRIBE** the following cycles: hydrological, carbon, nitrogen, phosphorous, sulfur
- IDENTIFY** the ecosystems with the highest biodiversity
- IDENTIFY** a biome from description of its climate, flora (plants) and fauna (animals)
- COMPARE** the different biogeochemical cycles
- COMPARE** the different soil horizons
- COMPARE** species richness(diversity) and abundance
- COMPARE** the different soil types
- COMPARE** the soil characteristics of each biome
- COMPARE** igneous, metamorphic and sedimentary rock
- DISCUSS** the distribution of life globally and locally
- EXPLAIN** the importance of nitrogen fixing bacteria to life in general
- EXPLAIN** the negative effects of soil erosion on lakes, streams and rivers
- EXPLAIN** the change in the number of deserts over the last few decades
- ANALYZE** an “aquatic zones” diagram and predict that type of life found in each zone
- ANALYZE** a climograph and identify specific biomes

