

Welcome to AP Environmental Science!

You are receiving this email because you are enrolled in AP Environmental Science for next year. Happy to have you! Environmental science is an interesting course because compared to other science classes, it incorporates more history, policy, and cross-curricular topics. Overall, APES is an extremely popular class because of those topics and how they relate back to our everyday life. This class will ask you to not only memorize information, but to also make connections across disciplines and develop specific skill sets (and do some really fun labs).

We'll get into the bulk of it when we get back, but this summer assignment is designed to have you reflect on key concepts from ecology and to also give you the opportunity to get a head start on legislation so that you do not have to worry about it during September. A big part of the AP exam is this legislation and you'll continue to see it throughout the year.

The following must be handwritten and will be due on September 12/13th depending on which day we have class.

Ecology Review:

1. List the levels of Ecological organization from most specific to broadest.
2. Provide 3 examples of abiotic factors and 3 examples of biotic factors.
3. What is the difference between habitat and niche?
4. Define symbiosis.
 - a. Describe the 3 types of symbiosis.
 - b. Provide examples of each.
5. Construct a food chain. Label: producer, consumer, primary consumer, secondary consumer, 1st trophic level, 2nd trophic level, 3rd trophic level.
6. Describe the rule of 10
7. What is biomass?
8. What is the law of conservation of energy?
9. Describe the steps in Primary Land Succession; and Secondary Land Succession.
10. What is the primary energy source for ALL living things?

Environmental Legislation – Please complete a handwritten table for each of the following. If you prefer to make flashcards for each, that is an acceptable option as well. Your completed table should have a brief explanation/summary of each act with the main points. As an example:

Policy/Legislation Title	year	Summary
The Safe Drinking Water Act of 1974, 1984, 1996	1974, 1984, 1996	The EPA can set standards for drinking water quality and oversee all of the states, localities, and water suppliers who implement these standards. Groundwater used for drinking contamination is regulated here. 6 groups of contaminants: Microorganisms, Disinfectants, Inorganic Chemicals, Disinfection Byproducts, Organic Chemicals, Radionuclides

Air Pollution Control Act- 1955

Alaska National Interest Lands Conservation Act- 1980

Anadromous Fish Conservation Act- 1965

Coastal Zone Management Act- 1972

Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 1986, 1990 (CERCLA or Superfund)

Convention for the Conservation of Antarctic Marine Living Resources- 1980

Convention of Climate Change and the Kyoto Protocol of 1997 and 2001 (Kyoto Protocol)

Convention of Ozone Depletion and the Montreal Protocol of 1986

Convention on International Trade in Endangered Species of 1973 (CITES)

Convention on Persistent Organic Pollutants- 2001
Convention on the Law of the Sea of 1982 (or Law of the Sea Convention, LOSC)
Declaration of the Conference on the Human Environment of 1972
Energy Policy Act -1992
Federal Aid Highway Act- 1956
Federal Environmental Pesticides Control Act- 1972
Federal Food, Drug, and Cosmetic Act 1938, 1954, 1958 (FFDCA)
Federal Insecticide, Fungicide and Rodenticide Act 1972, 1988 (FIFRA)
Federal Land Policy and Management Act (FLPMA)- 1976
Federal Water Pollution Control Act- 1948
Fish and Wildlife Act- 1956
Fish and Wildlife Coordination Act- 1980
Food Quality Protection Act of 1996 (FQPA)
Forest and Rangeland Renewable Resources Planning Act (FRRRPA)- 1976
Forest Reserve Act- 1891
Fur Seal Act- 1966
General Mining Law-1872
Healthy Forest Initiative- 2003
Lacey Act of 1900
Land and Water Conservation Fund Act- 1965
Magnuson Fishery Conservation and Management Act- 1976
Marine Mammal Protection Act- 1972
Marine Plastic Pollution Research and Control Act- 1987
Marine Protection and Sanctuaries Act- 1972
Medical Waste Tracking Act- 1988
Migratory Bird Hunting Stamp Act -1934
Migratory Bird Treaty Act- 1918
Mineral Leasing Act- 1920
Montreal Protocol- 1987, 1990, 1992- London (1990), Copenhagen (1992)
Multiple Use and Sustainable Yield Act- 1960, 1968)
National Environmental Policy Act of 1969 (NEPA)
National Estuary Program- 1987
National Forests Management Act- 1976
National Park Service Act- 1916
National Trails System Act- 1968
National Wildlife Refuge System Act- 1966
Nonindigenous Aquatic Nuisance Prevention and Control Act- 1990
Nuclear Waste Policy Act (NWPA)- 1982
Ocean Dumping Ban Act (ODA)-1988
Oil Spill Prevention and Liability Act- 1990
Outdoor Recreation Act- 1963
Pollution Prevention Act- 1990
Public Rangelands Improvement Act- 1978
Ramsar Convention -1971
Renewable Energy Law, China- 2007
Renewable Resources Planning Act (RPA)- 1974
Resource Conservation and Recovery Act- 1976
Soil and Water Conservation Act (SWCA)- 1977
Soil erosion Act -1935
Solid Waste Disposal Act (SWDA)- 1965
Source Water Assessment Program (SWAP)- 1996
Source Water Protection Program (SWPP)- 1996
Surface Mining Control and Reclamation Act of 1977 (SMCRA)
Surface Water Treatment Rule (SWTR)- 1996
Taylor Grazing Act -1943
The Clean Air Act of 1963, 1965, 1970, 1977, 1990 (CAA)
The Clean Water Act 1972, 1977, 1981, 1987 (CWA)
The Emergency Planning & Community Right-To-Know Act (EPCRA)

The Endangered Species Act 1973, 1982, 1985, 1988 (ESA)
The Occupational Safety and Health Act (OSHA)
The Oil Pollution Act of 1990 (OPA)
The Resource Conservation and Recovery Act of 1976 and 1989 (RCRA)
The Safe Drinking Water Act of 1974, 1984, and 1996 (SDWA)
The Toxic Substances Control Act of 1976 (TSCA)
United Nations Treaty on the Law of the Sea- 1982
Waste Reduction Act- 1990
Water Quality Act- 1965
Water Resource Planning Act- 1965
Water Resources Development Act- 1986
Wild and Scenic Rivers Act -1968
Wilderness Act -1964
Yellowstone National Park Act- 1872

Quizlet can be a great resource for this. They even have APES legislation review decks. We're getting new textbooks for next year so for now, stick to looking these terms up online.

While it might seem annoying now, handwriting these terms will help you retain them better. If you have any questions you can email me at lforbes@monmouthregional.net When we return, I'll identify the first collection of legislation you should know and we will quiz on it during the 3rd week of school.

I look forward to excellent year, but for now, have a great summer!

Ms. Forbes