Environmental Science Study Words

**Scientific Analysis, Observing the Natural World**

qualitative/quantitative
hypothesis

Earth’s Systems

chlorophyll
density
chemical energy
potential energy
kinetic energy
nitrogen cycle
carbon cycle
phosphorous cycle
solar energy
photosynthesis
fermentation low, high quality energy
spontaneous
CO2(from the air) + water + sun’s energy (light) —-> C6H12O6 (glucose)

Atmosphere, Weather, Air Quality

barometric pressure
isobars
condensation
wind
tornado
vortex
latitude
Fujita scale
convection cell
Coriolis effect
El Nino Southern Oscillation (ENSO)
Nor’easter
tropical depression
typhoon, monsoon
hurricane nor’easter
eye, eye wall
Saffir/Simpson
storm surge
marine climate
continental
orographic effect (Chinook winds)
stratosphere
troposphere
jet stream
turbulence
ozone, ozone layer
anthropogenic
combustion
fossil fuels
acid rain
pH scale
spectrum
UV radiation
CFC (Chlorofluorocarbons)
Montreal Protocol
Clean Air Act
dissemination
hydroxyl radical (OH-)
smog – photochemical, industrial
National Ambient Air Quality Standards
temperature inversions
auto emissions standards
open burning
stack emissions
precipitators
suspended particulate matter (SPM)
aerosols
PM-10
carbon monoxide (CO)
volatile organic compounds (VOC’s)
Reasonably Available Control Technology
scrubbers
electrostatic
nitrogen oxides (NOx)
sulfur oxides
catalytic converter
command and control
lead
criteria pollutants
radon? asbestos
Sick Building Syndrome
Legionnaires Disease
microwave

Ecosystems, Biomes, Populations

biomass
species
ecosystem
self-regulating
producers
consumers
energy cycle
food web
food chain
trophic levels
inaccessible
niches
self-regulating
energy cycle
food web
food chain
inaccessible
niches
community
population
primary producers
herbivores
carnivores
consumers
decomposers
detritus feeders
omnivores
abiotic factor
biome
conifer
evergreen
deciduous forests
adapted
coral reefs
dynamic state of equilibrium
fluctuations
population dieback
population explosion
genetic diversity
population crash
carrying capacity
habitat
exponential curve
J-shaped curve
S-shaped curve
species
catastrophic
optimal
fertility
mortality
migration
fragmentation
biodiversity
exotic species
isolated
extinction
uncontrolled
sport hunting
commercial harvesting
commercial breeding
gene pools
CITES treaty
endangered
breeding
zebra mussel
ballast
recreational fishing
introduced species
native species
estuaries
extinction
threatened

Human Population Dynamics

famine
fertility rate
family planning
birth control
“baby boom”
histogram
demographics
plague
demographic transition
total fertility rate

Global Changes

greenhouse gas
hydrocarbons
photosynthesis
refracted
reflected
scattered
aerosol
climate
albedo
carbon cycle
carbon sinks
global nitrogen cycle
regional consequences
anaerobic
urban heat island
Kyoto Conference
phytoplankton
anomalies
upwelling

Water

zone of saturation
groundwater
aquifer
artesian wells
karst
topography
pore spaces
hard water
gray, black water
brackish water
potable water
Ogallala Aquifer
desalinization
drought
tributary
aqueduct
drought cycle
recharge zones
evaporation
evapotranspiration reverse osmosis
distillation
1976 flood control devices
condensation
percolation
transpiration
sublimation
runoff
subsoil
porosity
capillary water
zone of aeration
caprock
infiltration
sink hole
watershed/basin
consumptive
water table
reservoir/aqueduct
permafrost
storm water
residence time
overdrawn
offset
channelization
Tennessee Valley Authority
xeroscaping
spillways
meander
Aswan High Dam
Three Gorges Dam
Mono Lake
lake effect snow

Land

desertification
topsoil
erosion
contour plowing
fertilization
strip farming
siltation
drip irrigation

Environmental Quality

contaminants
soluble
concentration
relative
residue
oxidation
absorption
distillation
disinfection
feces
ammonia
phosphates
nitrates
bacteria
chlorine
underutilized
heavy metals
resistant
point, non-point
tertiary
DDT
pathogenic organisms
heavy metals
hemoglobin
dose threshold level
bioaccumulation
Bhopal, India
pesticide
acute, chronic
carcinogenic
teratogens
mutagens
toxic
hazardous chemicals
thermal pollution
coliform bacteria
routinely monitored
mutate
pathogenic
algae
aqueduct
systems
discharges
dissolved oxygen (DO)
cultural eutrophication
nutrient

Waste

municipal sewage
sludge
Love Canal
waste lagoons
landfills
secure landfills
incinerator
ash
leachate
impervious
clay
waste stream
intermittent
proximity
tipping fee
biodegradable
mutagenic, corrosive
National Priority List (NPL)
CERCLA (Superfund) Act of 1980
Resource Conservation & Recovery Act (RCRA)
Primary sewage treatment
organic matter
transparent

Energy

entropy
thermodynamics
heat tax
alternative renewable energy
conventional energy
energy crisis
abated
kinetic energy
petrochemicals
OPEC
oil glut
energy reserves
synfuels
fuel cells
photovoltaic cells
proven reserves
estimated reserves
home energy audits
Alaska pipeline
salt domes
watt, kilowatt
tax incentive
convert
coal liquefaction
cogeneration
eutectic fluid
fuel wood
dung
distillation/cracking
hydrocarbons
containment building
viscous
diesel
gasoline
kerosene
friction
U-238
Yucca Mountain, NV
breeder reactor
depository
stabilize
enriched uranium
moderators
low level waste
high level waste
spent fuel
casks
seismic activity
leukemia
sterilization
REM
parent
daughter
hidden energy
nucleus
radioactive decay
Chernobyl
Three Mile Island
isotopes, neutrons
half-lives
radioactive waste
strip mining
black lung disease
heat exchanger
steam generator
melt down
cooling water
lignite
bituminous
tar sands
oil shale
gas hydrates
synfuels
methane
ethanol
Surface Mining Control & Reclamation Act
General Mining Law of 1872
resource recovery
cogeneration
gasification
entombed
dismantle
tidal power
radioactive waste
refineries
joule
hydropower
first law of thermodynamics
dissipates
law of conservation of matter
steam turbine
reactor core
passive solar heating
roof overhangs
solar collectors on roof
drapes
insulated
biogas
geothermal
photovoltaics
conservation/efficiency
differential heat
deuterium
tritium
turbines
ocean thermal electric conversions (OTEC)
ethanol
gasohol
hydroelectric?James Bay Project
BTU, QUAD, calorie
REM
cooling systems
chain reactions
sustainable development
fuel rods
cooling towers
airborne particulates
thermal pollution
operating efficiency
mitigate
industrial revolution
Arab oil embargo
depletion
regional
blackouts
insulation
greenhouse effect
infrared radiation
terrestrial reradiation
utility companies
incentive programs
finite resources
global warming
dominant
Public Utility
Regulatory Policies Act of 1978( PURPA)
tidal power? tsunamis
peak
uranium
plutonium
fuel assembly?encased
nuclear fission

Choices for the Future

ecotourism
utilitarian
conservationists
biosphere
conservation
aesthetic values
Wilderness Act