|  |  |  |
| --- | --- | --- |
| **conservation** | **agricultural revolution** |  |
| **conservation biologist** | **environmental movement** |  |
| **conservationist** | **environmental wisdom worldview** |  |
| **developed country** | **EPA** |  |
| **developing country** | **frontier environmental worldview** |  |
| **doubling time** | **hunter-gatherers** |  |
| **earth capital** | **industrial revolution** |  |
| **earth resources** | **information and globalization revolution** |  |
| **ecological footprint** | **multiple use** |  |
| **ecologist** | **preservationist** |  |
| **ecology** | **shifting cultivation** |  |
| **economic development** | **slash-and-burn cultivation** |  |
| **economic growth** | **spaceship-earth worldview** |  |
| **environment** | **sustainable yield (sustained yield)** |  |
| **environmental degradation** |  |  |
| **environmental ethics** | **accuracy** |  |
| **environmental science** | **alpha particle** |  |
| **environmental wisdom worldview** | **atom** |  |
| **environmental worldview** | **atomic number** |  |
| **environmentalist** | **beta particle** |  |
| **environmentally sustainable economic development** | **biodegradable pollutant** |  |
| **environmentally sustainable society** | **calorie** |  |
| **exponential growth** | **CFCs** |  |
| **globalization** | **chain reaction** |  |
| **gross domestic product (GDP)** | **chemical** |  |
| **gross national product (GNP)** | **chemical change** |  |
| **gross world product (GWP)** | **chemical formula** |  |
| **input pollution control** | **chemical reaction** |  |
| **natural capital** | **chlorinated hydrocarbon** |  |
| **natural resources** | **chlorofluorocarbons (CFCs)** |  |
| **nonpoint source** | **chromosome** |  |
| **nonrenewable resource** | **closed system** |  |
| **per capita GNP** | **compound** |  |
| **perpetual resource** | **concentration** |  |
| **planetary management worldview** | **consensus science** |  |
| **point source** | **critical mass** |  |
| **pollutant** | **deductive reasoning** |  |
| **pollution** | **degradable pollutant** |  |
| **pollution cleanup** | **deuterium (D; hydrogen-2)** |  |
| **preservationist** | **electromagnetic radiation** |  |
| **recycling** | **electron (e)** |  |
| **renewable resource** | **element** |  |
| **resource** | **energy** |  |
| **reuse** | **energy efficiency** |  |
| **rule of 70** | **energy productivity** |  |
| **secondary sewage treatment** | **energy quality** |  |
| **solar capital** | **experiment** |  |
| **solar energy** | **feedback loop** |  |
| **sustainability** | **first law of energy** |  |
| **sustainable development** | **first law of thermodynamics** |  |
| **sustainable living** | **fissionable isotope** |  |
| **sustainable society** | **flows** |  |
| **sustainable yield (sustained yield)** | **Freons** |  |
| **tragedy of the commons** | **frontier science** |  |
|  | **gamma rays** |  |
| **abiotic** | **genes** |  |
| **absolute humidity** | **half-life** |  |
| **acclimation** | **heat** |  |
| **acid** | **high-quality energy** |  |
| **acid deposition** | **high-quality matter** |  |
| **acid rain** | **high-throughput economy** |  |
| **aerobic respiration** | **high-waste society** |  |
| **anaerobic respiration** | **hydrocarbon** |  |
| **animals** | **inductive reasoning** |  |
| **asexual reproduction** | **inorganic compounds** |  |
| **atmosphere** | **input** |  |
| **autotroph** | **ion** |  |
| **bacteria** | **ionizing radiation** |  |
| **biodegradable** | **isotopes** |  |
| **biodiversity** | **kilocalorie (kcal)** |  |
| **biogeochemical cycle** | **kinetic energy** |  |
| **biological community** | **law of conservation of energy** |  |
| **biological diversity** | **law of conservation of matter** |  |
| **biomass** | **low-quality energy** |  |
| **biome** | **low-quality matter** |  |
| **biosphere** | **low-throughput economy** |  |
| **biotic** | **low-waste society** |  |
| **carbon cycle** | **mass** |  |
| **carnivore** | **mass number** |  |
| **cell** | **material efficiency** |  |
| **chemosynthesis** | **matter** |  |
| **climate** | **matter quality** |  |
| **community** | **matter-recycling economy** |  |
| **condensation nuclei** | **metabolism** |  |
| **consumer** | **mixture** |  |
| **cyanobacteria** | **model** |  |
| **decomposer** | **molecule** |  |
| **detritivore** | **natural ionizing radiation** |  |
| **detritus** | **natural law** |  |
| **detritus feeder** | **natural radioactive decay** |  |
| **dew point** | **negative feedback loop** |  |
| **dissolved oxygen (DO) content** | **neutron (n)** |  |
| **DNA (deoxyribonucleic acid)** | **nondegradable pollutant** |  |
| **ecological diversity** | **nonionizing radiation** |  |
| **ecological efficiency** | **nonpersistent pollutant** |  |
| **ecology** | **nuclear change** |  |
| **ecosphere** | **nuclear energy** |  |
| **ecosystem** | **nuclear fission** |  |
| **ecosystem services** | **nuclear fusion** |  |
| **ecotone** | **nucleus** |  |
| **eukaryotic cell** | **open system** |  |
| **evaporation** | **organic compounds** |  |
| **fermentation** | **output** |  |
| **food chain** | **persistence** |  |
| **food web** | **persistent pollutant** |  |
| **fossil fuel** | **pH** |  |
| **freshwater life zones** | **physical change** |  |
| **functional diversity** | **plasma** |  |
| **fungi** | **positive feedback loop** |  |
| **genetic diversity** | **potential energy** |  |
| **global warming** | **precision** |  |
| **gross primary productivity (GPP)** | **proton (p)** |  |
| **habitat** | **radiation** |  |
| **herbivore** | **radioactive decay** |  |
| **heterotroph** | **radioactive isotope** |  |
| **hydrosphere** | **radioactivity** |  |
| **infiltration** | **radioisotope** |  |
| **invertebrates** | **resource productivity** |  |
| **law of tolerance** | **science** |  |
| **limiting factor** | **scientific data** |  |
| **limiting factor principle** | **scientific hypothesis** |  |
| **lithosphere** | **scientific law** |  |
| **microorganisms** | **scientific methods** |  |
| **monera** | **scientific model** |  |
| **natural greenhouse effect** | **scientific theory** |  |
| **net primary productivity (NPP)** | **second law of thermodynamics** |  |
| **nitrogen cycle** | **slowly degradable pollutant** |  |
| **nitrogen fixation** | **storage area** |  |
| **nutrient** | **subatomic particles** |  |
| **nutrient cycle** | **sustainability** |  |
| **omnivore** | **synergistic interaction** |  |
| **organism** | **synergy** |  |
| **percolation** | **system** |  |
| **phosphorus cycle** | **temperature** |  |
| **photosynthesis** | **throughput** |  |
| **phytoplankton** | **throwaway society** |  |
| **plankton** | **time delay** |  |
| **plants (plantae)** |  |  |
| **population** | **adaptation** |  |
| **precipitation** | **adaptive radiation** |  |
| **primary consumer** | **adaptive trait** |  |
| **primary productivity** | **allele** |  |
| **producer** | **animals** |  |
| **prokaryotic cell** | **aquatic** |  |
| **protists (protista)** | **artificial selection** |  |
| **pyramid of biomass** | **background extinction** |  |
| **pyramid of energy flow** | **biodiversity** |  |
| **pyramid of numbers** | **biological evolution** |  |
| **range of tolerance** | **chemical evolution** |  |
| **relative humidity** | **coevolution** |  |
| **respiration** | **differential reproduction** |  |
| **runoff** | **domesticated species** |  |
| **salinity** | **ecological niche** |  |
| **scavenger** | **evolution** |  |
| **secondary consumer** | **extinction** |  |
| **sexual reproduction** | **fossils** |  |
| **species** | **fundamental niche** |  |
| **species diversity** | **gene mutation** |  |
| **stratosphere** | **gene pool** |  |
| **sulfur cycle** | **generalist species** |  |
| **surface runoff** | **genetic adaptation** |  |
| **tertiary (higher-level) consumers** | **genome** |  |
| **threshold effect** | **geographic isolation** |  |
| **transpiration** | **habitat** |  |
| **trophic level** | **invertebrates** |  |
| **troposphere** | **macroevolution** |  |
| **vertebrates** | **mass depletion** |  |
| **water cycle** | **mass extinction** |  |
| **zooplankton** | **microevolution** |  |
|  | **mutagen** |  |
| **altitude** | **mutation** |  |
| **arid** | **natural selection** |  |
| **biome** | **niche** |  |
| **broadleaf deciduous plants** | **plants (plantae)** |  |
| **broadleaf evergreen plants** | **realized niche** |  |
| **climate** | **reproduction** |  |
| **cold front** | **reproductive isolation** |  |
| **coniferous evergreen plants** | **specialist species** |  |
| **coniferous trees** | **speciation** |  |
| **deciduous plants** | **theory of evolution** |  |
| **desert** | **vertebrates** |  |
| **ecotone** |  |  |
| **evergreen plants** | **aquatic** |  |
| **forest** | **aquatic life zone** |  |
| **front** | **barrier islands** |  |
| **global warming** | **benthos** |  |
| **grassland** | **coastal wetland** |  |
| **greenhouse effect** | **coastal zone** |  |
| **greenhouse gases** | **coral reef** |  |
| **high** | **cultural eutrophication** |  |
| **latitude** | **decomposer** |  |
| **low** | **drainage basin** |  |
| **mangrove swamps** | **estuary** |  |
| **microclimates** | **euphotic zone** |  |
| **ozone depletion** | **eutrophic lake** |  |
| **ozone layer** | **floodplain** |  |
| **permafrost** | **freshwater life zones** |  |
| **rain shadow effect** | **inland wetland** |  |
| **succulent plants** | **intertidal zone** |  |
| **terrestrial** | **lake** |  |
| **troposphere** | **mesotrophic lake** |  |
| **upwelling** | **nekton** |  |
| **warm front** | **oligotrophic lake** |  |
| **weather** | **open sea** |  |
| **wetland** | **phytoplankton** |  |
|  | **plankton** |  |
| **alien species** | **runoff** |  |
| **climax community** | **salinity** |  |
| **commensalism** | **surface water** |  |
| **community development** | **thermocline** |  |
| **competition** | **watershed** |  |
| **competitive exclusion principle** | **zooplankton** |  |
| **constancy** |  |  |
| **disturbance** | **asexual reproduction** |  |
| **early successional plant species** | **bioinformatics** |  |
| **ecological succession** | **biotic potential** |  |
| **ecotone** | **carrying capacity (K)** |  |
| **edge effect** | **conservation biology** |  |
| **epiphyte** | **dieback** |  |
| **exotic species** | **ecological population density** |  |
| **exploitation competition** | **environmental resistance** |  |
| **fundamental niche** | **exponential growth** |  |
| **homeostasis** | **gene flow** |  |
| **host** | **immigration** |  |
| **immature community** | **intrinsic rate of increase (r)** |  |
| **immigrant species** | **J-shaped curve** |  |
| **indicator species** | **K-selected species** |  |
| **inertia** | **K-strategists** |  |
| **interference competition** | **linear growth** |  |
| **interspecific competition** | **logistic growth** |  |
| **intraspecific competition** | **minimum viable population (MVP)** |  |
| **keystone species** | **population density** |  |
| **late successional plant species** | **population dispersion** |  |
| **mature community** | **population distribution** |  |
| **midsuccessional plant species** | **population dynamics** |  |
| **mutualism** | **population size** |  |
| **native species** | **r-selected species** |  |
| **natural rate of extinction** | **r-strategists** |  |
| **nonnative species** | **reproduction** |  |
| **parasite** | **reproductive potential** |  |
| **parasitism** | **S-shaped curve** |  |
| **persistence** | **sexual reproduction** |  |
| **pioneer community** | **survivorship curve** |  |
| **pioneer species** |  |  |
| **precautionary principle** | **agroforestry** |  |
| **predation** | **alley cropping** |  |
| **predator** | **animal manure** |  |
| **predator-prey relationship** | **commercial inorganic fertilizer** |  |
| **prey** | **compost** |  |
| **primary succession** | **conservation-tillage farming** |  |
| **realized niche** | **contour farming** |  |
| **resilience** | **conventional-tillage farming** |  |
| **resource partitioning** | **convergent plate boundary** |  |
| **secondary succession** | **core** |  |
| **soil** | **crop rotation** |  |
| **species diversity** | **crust** |  |
| **species equilibrium model** | **desertification** |  |
| **stability** | **divergent plate boundary** |  |
| **succession** | **earthquake** |  |
| **symbiosis** | **erosion** |  |
| **symbiotic relationship** | **geology** |  |
| **territoriality** | **green manure** |  |
| **theory of island biogeography** | **gully reclamation** |  |
| **tolerance limits** | **humus** |  |
|  | **igneous rock** |  |
| **benefit-cost analysis** | **infiltration** |  |
| **bioaccumulation** | **inorganic fertilizer** |  |
| **biological amplification** | **land classification** |  |
| **biomagnification** | **leaching** |  |
| **cancer** | **lithosphere** |  |
| **carcinogen** | **loams** |  |
| **cost-benefit analysis** | **mantle** |  |
| **DDT** | **manure** |  |
| **dose** | **metamorphic rock** |  |
| **dose-response curve** | **mineral** |  |
| **epidemiology** | **minimum-tillage farming** |  |
| **gene mutation** | **no-till farming** |  |
| **hazardous chemical** | **organic fertilizer** |  |
| **homeostasis** | **permeability** |  |
| **LD50** | **plate tectonics** |  |
| **median lethal dose (LD50)** | **plates** |  |
| **meltdown** | **porosity** |  |
| **metastasis** | **rock** |  |
| **mutagen** | **rock cycle** |  |
| **mutation** | **salinization** |  |
| **nontransmissible disease** | **sedimentary rock** |  |
| **parts per billion (ppb)** | **shelterbelt** |  |
| **parts per million (ppm)** | **soil** |  |
| **parts per trillion (ppt)** | **soil conservation** |  |
| **pathogen** | **soil erosion** |  |
| **persistence** | **soil horizons** |  |
| **poison** | **soil permeability** |  |
| **pollution prevention** | **soil porosity** |  |
| **ppb** | **soil profile** |  |
| **ppm** | **soil structure** |  |
| **ppt** | **soil texture** |  |
| **precautionary principle** | **strip cropping** |  |
| **probability** | **subduction zone** |  |
| **response** | **tectonic plates** |  |
| **risk** | **transform fault** |  |
| **risk analysis** | **volcano** |  |
| **risk assessment** | **waterlogging** |  |
| **risk communication** | **weathering** |  |
| **risk management** | **windbreak** |  |
| **risk-benefit analysis** |  |  |
| **synergistic interaction** | **age structure** |  |
| **teratogen** | **birth rate** |  |
| **toxic chemical** | **crude birth rate** |  |
| **toxicity** | **crude death rate** |  |
| **toxicology** | **death rate** |  |
| **transmissible disease** | **demographic transition** |  |
|  | **family planning** |  |
| **agroforestry** | **infant mortality rate** |  |
| **alley cropping** | **life expectancy** |  |
| **annual** | **linear growth** |  |
| **aquaculture** | **population change** |  |
| **arable land** | **population density** |  |
| **commercial extinction** | **population distribution** |  |
| **drift-net fishing** | **replacement-level fertility** |  |
| **famine** | **total fertility rate (TFR)** |  |
| **feedlot** | **zero population growth (ZPG)** |  |
| **fertilizer** |  |  |
| **fish farming** | **aquatic life zone** |  |
| **fish ranching** | **aquifer** |  |
| **fishery** | **common law** |  |
| **gene splicing** | **desalination** |  |
| **genetic engineering** | **drainage basin** |  |
| **genetically modified organism (GMO)** | **drought** |  |
| **green revolution** | **floodplain** |  |
| **high-input agriculture** | **groundwater** |  |
| **industrialized agriculture** | **hydrologic cycle** |  |
| **intercropping** | **natural recharge** |  |
| **interplanting** | **permeability** |  |
| **kwashiorkor** | **porosity** |  |
| **low-input agriculture** | **prior appropriation** |  |
| **macronutrients** | **recharge area** |  |
| **malnutrition** | **reliable runoff** |  |
| **marasmus** | **saltwater intrusion** |  |
| **micronutrients** | **stream** |  |
| **monoculture** | **subsidence** |  |
| **net primary productivity (NPP)** | **surface runoff** |  |
| **nutrient** | **water table** |  |
| **organic farming** | **watershed** |  |
| **overfishing** | **zone of aeration** |  |
| **overgrazing** | **zone of saturation** |  |
| **overnutrition** |  |  |
| **pasture** | **area strip mining** |  |
| **perennial** | **bitumen** |  |
| **plantation agriculture** | **breeder nuclear fission reactor** |  |
| **polyculture** | **chemosynthesis** |  |
| **polyvarietal cultivation** | **coal** |  |
| **primary productivity** | **coal gasification** |  |
| **rangeland** | **coal liquefaction** |  |
| **riparian rights** | **contour strip mining** |  |
| **riparian zones** | **core** |  |
| **ruminants** | **crude oil** |  |
| **subsistence farming** | **depletion time** |  |
| **sustainable agriculture** | **deuterium (D; hydrogen-2)** |  |
| **sustainable yield (sustained yield)** | **dredging** |  |
| **terracing** | **economic depletion** |  |
| **traditional intensive agriculture** | **exhaustible resource** |  |
| **traditional subsistence agriculture** | **fissionable isotope** |  |
| **undergrazing** | **gangue** |  |
| **undernutrition** | **high-quality energy** |  |
|  | **identified resources** |  |
| **active solar heating system** | **kerogen** |  |
| **animal manure** | **life cycle cost** |  |
| **biofuel** | **liquefied natural gas (LNG)** |  |
| **cogeneration** | **liquefied petroleum gas (LPG)** |  |
| **energy efficiency** | **LPG** |  |
| **geothermal energy** | **magma** |  |
| **hydroelectric power plant** | **meltdown** |  |
| **hydropower** | **mineral resource** |  |
| **kilowatt (kW)** | **mountaintop removal** |  |
| **life cycle cost** | **natural gas** |  |
| **manure** | **net energy** |  |
| **micropower systems** | **nonrenewable resource** |  |
| **net energy** | **nuclear energy** |  |
| **passive solar heating system** | **nuclear fission** |  |
| **photovoltaic cell (solar cell)** | **nuclear fusion** |  |
| **radioactive waste** | **oil** |  |
| **solar cell** | **oil shale** |  |
| **solar collector** | **open-pit mining** |  |
| **superinsulated house** | **ore** |  |
| **watt** | **other resources** |  |
| **wind farm** | **overburden** |  |
|  | **petrochemicals** |  |
| **acid deposition** | **petroleum** |  |
| **acid rain** | **precipitation** |  |
| **air pollution** | **reserve-to-production ratio** |  |
| **atmosphere** | **reserves** |  |
| **buffer** | **shale oil** |  |
| **dust dome** | **smelting** |  |
| **dust plume** | **spoils** |  |
| **industrial smog** | **strip mining** |  |
| **inversion** | **subsurface mining** |  |
| **PANs** | **surface mining** |  |
| **photochemical smog** | **synfuels** |  |
| **primary pollutant** | **synthetic natural gas (SNG)** |  |
| **radiation temperature inversion** | **tailings** |  |
| **secondary pollutant** | **tar sand** |  |
| **smog** | **undiscovered resources** |  |
| **stratosphere** |  |  |
| **subsidence temperature inversion** | **albedo** |  |
| **temperature inversion** | **CFCs** |  |
| **thermal inversion** | **chlorofluorocarbons (CFCs)** |  |
| **troposphere** | **Freons** |  |
|  | **global warming** |  |
| **acid solution** | **greenhouse effect** |  |
| **advanced sewage treatment** | **greenhouse gases** |  |
| **basic solution** | **mesosphere** |  |
| **biological oxygen demand (BOD)** | **ozone depletion** |  |
| **coastal zone** | **ozone layer** |  |
| **cultural eutrophication** |  |  |
| **dredge spoils** | **biological pest control** |  |
| **eutrophication** | **coevolution** |  |
| **indicator species** | **DDT** |  |
| **neutral solution** | **economic threshold** |  |
| **nonpoint source** | **fungi** |  |
| **oxygen-demanding wastes** | **fungicide** |  |
| **parts per billion (ppb)** | **genetic engineering** |  |
| **parts per million (ppm)** | **herbicide** |  |
| **parts per trillion (ppt)** | **insecticide** |  |
| **point source** | **integrated pest management (IPM)** |  |
| **primary sewage treatment** | **persistence** |  |
| **secondary sewage treatment** | **pest** |  |
| **septic tank** | **pesticide** |  |
| **sludge** |  |  |
| **stream** | **dioxins** |  |
| **subsidence** | **fertilizer** |  |
| **tertiary sewage treatment** | **hazard** |  |
| **water pollution** | **hazardous waste** |  |
|  | **landfill** |  |
| **ancient forest** | **municipal solid waste** |  |
| **clear-cutting** | **PCBs** |  |
| **controlled burning** | **plasma** |  |
| **corridors** | **polychlorinated biphenyls (PCBs)** |  |
| **crown fire** | **radioactive waste** |  |
| **debt-for-nature swap** | **resource productivity** |  |
| **deforestation** | **sanitary landfill** |  |
| **ecological restoration** | **solid waste** |  |
| **even-aged management** | **toxic waste** |  |
| **gap analysis** |  |  |
| **ground fire** | **adaptive management** |  |
| **inherent value** | **coastal wetland** |  |
| **instrumental value** | **commercial extinction** |  |
| **intrinsic value** | **coral reef** |  |
| **multiple use** | **cultural eutrophication** |  |
| **old-growth forest** | **estuary** |  |
| **reforestation** | **inland wetland** |  |
| **restoration ecology** | **lake** |  |
| **second-growth forest** | **nonnative species** |  |
| **seed-tree cutting** | **overfishing** |  |
| **selective cutting** | **saltwater intrusion** |  |
| **shelterwood cutting** |  |  |
| **strip cutting** | **city** |  |
| **surface fire** | **degree of urbanization** |  |
| **sustainable yield (sustained yield)** | **ecological land-use planning** |  |
| **tree farm** | **immigration** |  |
| **tree plantation** | **land-use planning** |  |
| **uneven-aged management** | **mass transit** |  |
| **utilitarian value** | **megacity** |  |
| **wilderness** | **metropolitan area** |  |
|  | **noise pollution** |  |
| **appropriate technology** | **rural area** |  |
| **benefit-cost analysis** | **smart growth** |  |
| **capitalism** | **urban area** |  |
| **capitalist market economic system** | **urban growth** |  |
| **centrally planned economy** | **urban heat island** |  |
| **cost-benefit analysis** | **urban sprawl** |  |
| **discount rate** | **urbanization** |  |
| **economic decision** | **village** |  |
| **economic development** | **zoning** |  |
| **economic resources** |  |  |
| **economic system** | **civil suit** |  |
| **economy** | **class action suit** |  |
| **environmental justice** | **common law** |  |
| **environmental revolution** | **defendant** |  |
| **external benefit** | **democracy** |  |
| **external cost** | **environmental justice** |  |
| **externalities** | **plaintiff** |  |
| **financial resources** | **politics** |  |
| **full cost** | **precautionary principle** |  |
| **GDP** | **prior appropriation** |  |
| **GNI** | **riparian rights** |  |
| **GNP** | **statutory law** |  |
| **gross domestic product (GDP)** |  |  |
| **gross national income (GNI)** | **anthropocentric** |  |
| **gross national income in purchasing power parity (GNI PPP)** | **biocentric** |  |
| **human capital** | **Gaia hypothesis** |  |
| **human resources** | **restoration ecology** |  |
| **intermediate goods** | **spaceship-earth worldview** |  |
| **internal cost** | **stewardship** |  |
| **life cycle cost** | **utilitarian value** |  |
| **manufactured capital** | **worldview** |  |
| **manufactured resources** |  |  |
| **market equilibrium** |  |  |
| **market price equilibrium point** |  |  |
| **natural capital** |  |  |
| **natural resources** |  |  |
| **per capita GNI** |  |  |
| **per capita GNI in purchasing power parity (per capita GNI PPP)** |  |  |
| **per capita GNP** |  |  |
| **poverty** |  |  |
| **pure capitalism** |  |  |
| **pure command economic system** |  |  |
| **pure free-market economic system** |  |  |
| **throwaway society** |  |  |
| **totally planned economy** |  |  |
| **true cost** |  |  |