

Activity 5

Ecotoxicology Definitions

The vocabulary from Activity 1 on the scientific method is important for all your science lessons. Review the Activity 1 vocabulary, with emphasis on the words *control*, *experiment*, *hypothesis*, *measure*, *methods*, *variable (dependent)*, and *variable (independent)*.

Aquifer – An underground layer of rock, sand, or gravel that contains slow moving water.

Body of water – Forms of water in relationship to the land: lake, river, stream, wetland, ocean.

Concentration – The ratio of the amount of one substance to another in a mixture or solution; example—the *concentration of dissolved oxygen* in the water sample was 8 milligrams of oxygen per 1 liter of water, or 8mg/L.

Condensation – When a gas changes its form and becomes a liquid.

Contaminants – Chemicals that are present in places where they do not belong.

Ecotoxicology – The scientific study of how contaminants affect living organisms in their habitats.

Effluent –A liquid that flows out, such as wastewater flowing from a factory into a stream, or the outflow of a sewer.

Evaporation – Changing a liquid or solid into a gas (vapor).

Feces – Solid waste products from the digestive processes of living organisms.

Fertilizer – Nutritional chemicals, human-made or organic, that are placed in or on the soil to help plants grow.

Groundwater – Underground water within a zone of rock or soil that is “saturated.”

Herbicide – A chemical used to kill undesirable plants.

Mortality rate – A measurement of the number of organisms that have died.

Non-point source pollutants – Contaminants in the environment that do not have a single source of origin; you can't determine a single place where the contaminant came from.

ppt – Abbreviation for “parts per thousand,” a measure of the concentration of a solution. Example—ocean water usually contains 35 g of salt per 1000 milliliters of water, or 35 ppt.

Pesticide – A chemical used to kill unwanted animals, like roaches, rodents, and fleas.

Point source pollutants – Contaminants in the environment that have a single source of origin; you can determine exactly where the contaminant came from.

Pollutant – Organic or inorganic materials that contaminate the air, soil, or water.

Pollution – The process of contaminating the air, soil or water with toxic materials.

Precipitation – Water droplets or ice particles that condense from atmospheric water vapor and are heavy enough to fall to the earth's surface in any form (rain, snow, or ice).

Proportion – The relationship between two known quantities and how those quantities relate to the whole; similar to *ratio* and *percentage*. Example—if 9 out of 10 students love science, then 9/10 or 90% love science.

Reservoir – A large body of water that is collected and stored in a natural or artificial lake.

River basin – The area of land that a river runs through.

Runoff – Water that has traveled over any surface before it ends up in a body of water.

Serial dilution – Changing the concentration of a liquid by known amounts.

Surface water – Water that accumulates on top of, or travels through, land formations.

Transpiration – The release of water vapor through the pores of plants.

Toxic – Harmful or deadly.

Toxin – A poisonous substance.

Water table – An underground layer of rocks or sand where water accumulates.

Watershed – All the land in a specific area that water runs off of and seeps into.