

Living with the Trinity

Lesson Plan Glossary

From Lesson 1: The Natural Water Cycle/Urban Water Cycle

Water Cycle-(n) the continuous movement of water from the earth to the sky and back again. Water transforms from a liquid to a gas and back again during the process. Steps include evaporation, condensation and precipitation (and sometimes transpiration). Also known as the hydrologic cycle.

Urban Water Cycle-(n) a process that temporarily interrupts the natural water cycle in order to capture, prepare and store water to make it available for human use, and then cleanses it after human use before returning it to the natural water cycle.

precipitation-(n) rain, sleet, snow or hail that falls from the clouds when they become too heavy with moisture.

evaporation-(n) when the sun heats up water and it becomes a vapor or steam.

condensation-(n) when water vapor or steam gets cold and changes back to its liquid form. This is how clouds are formed.

transpiration-(n) when plants lose water out of their leaves; it is sometimes included as a part of the water cycle since it adds evaporated water to the cycle.

infiltration-(n) when water/precipitation soaks into the ground.

runoff-(n) water that does not soak into the ground after precipitation falls.

catchment-(n) land near a reservoir that helps catch the water and feed it into the reservoir.

river-(n) body of water that usually flows towards a lake, ocean, sea or another river.

stream-(n) a small river that usually flows towards a larger body of water.

dam-(n) structures that block the flow of water, creating a reservoir so that water can be stored and used.

wastewater treatment plant-(n) a facility that uses chemicals and natural processes to remove toxins and waste from water. Water is then returned to the natural water cycle.

water purification-(n) the process of treating wastewater and turning it into water that can be used again.

supply mains-(n) pipes that carry water from the treatment plants to water towers and other storage facilities.

groundwater-(n) water that flows beneath the ground that is often the source of water for wells and crop irrigation.

reservoirs-(n) artificial lakes created by dams that store water for recreational use and water supply.

household water supply-(n) water that has been cleaned and is ready for use in our homes, schools and businesses. Water is brought in through a series of pipes after water has been treated at a treatment plant.

wastewater sewer-(n) a system of pipes used to move human waste.

wastewater-(n) dirty water that has been used in homes, schools and business in toilets, sinks, tubs, etc.

watershed-(n) the area of land where all of the water that is under it or drains off of it flows towards the same place.

levee-(n) a structure designed to hold water back to protect low-lying areas during a flood.

From Lesson Plan 2: The Trinity River Watershed

watershed-(n) the area of land where all of the water that is under it or drains off of it flows towards the same place.

flood-(n) when more precipitation falls than the ground can absorb, causing an overflow of water that covers the land.

impervious surfaces-(n) materials such as pavement and asphalt that cannot absorb water.

runoff-(n) water that does not soak into the ground after precipitation falls.

pollution-(n) the introduction of any harmful material into an ecosystem.

From Lesson Plan 3: Water Quality Testing, Session 1

dissolve-(v) when a substance completely blends into a liquid, like sugar in water.

waft-(v) to fan a scent towards your nose. It is especially useful when directly smelling a substance could be harmful to the nose.

hypothesis-(n) what you think will happen during an experiment given a certain set of facts.

data-(n) facts collected during tests conducted during an experiment.

conclusion-(n) your educated opinion of what happened during all of the tests conducted during an experiment.

From Lesson Plan 3: Water Quality Testing, Sessions 2 and 3

organism-(n) any living thing.

dissolved solids-(n) the measure of the amount of a solid that has disintegrated into water.

nutrients-(n) any chemical that an organism needs to survive.

acid-(n) any chemical compound with a pH less than 7 (i.e. lemon juice).

oxygen-(n) a colorless, odorless element that is breathed by most animals, including humans.

habitat-(n) the area in which a plant or animal lives.

ecosystem-(n) a group of living and non-living things working together.

pollution-(n) the introduction of any harmful material into an ecosystem.

dissolve-(v) when a substance completely blends into a liquid, like sugar in water.

dissolved oxygen-(n) oxygen that has broken up and dissolved in water; it is the air that fish and other underwater organisms use to breathe.

pH-(n) a measure of the level of acid or base in a substance; the pH scale is from 1 to 14, with 1-6 being acidic, 7 being neutral and 8-14 being basic. Healthy streams have a pH of about 7.

turbidity-(n) a measure of how clear or cloudy a body of water is.

bacteria-(n) microscopic organisms that decompose things (or feed off of dead organisms).

fecal coliform-(n) decomposer bacteria that live in the intestines of warm-blooded animals that cause the dissolved oxygen level of a body of water to go down when present in large quantities.

biological demand-(n) the space, food and nutrients needed for all the living things in a system to thrive.