



Types of Pollution

## Pollution Cards Answer Key

<p>Workers on a chicken farm bulldoze all of the farm's chicken manure into piles that are left unprotected from the rain and wind. <b>Nutrient and Bacterial.</b> <b>Manure is high in Nitrogen.</b></p>	<p>A family has extra paint and solvent left over after decorating the baby's nursery. They throw it out with their regular trash, and some spills onto the roadway. <b>Toxic. Pollution enters water through runoff.</b></p>
<p>Rather than plan ahead and shop for groceries once a week, a man drives to the store whenever he needs something for the next meal. Therefore he makes more than 10 times as many car trips as he would have had he planned ahead. <b>Toxic. Car exhaust enters air, then toxins settle to the ground or are picked up by rain and run into the watershed. Nutrient. Car exhaust is high in Nitrogen Oxide.</b></p>	<p>The family car needs a tune-up but does not get one. Therefore the car leaks oil, coolant, and other fluids. When the family does change the oil, they do it themselves and discard the used oil in a pile of sand in the backyard. <b>Toxic. Pollution enters the water through runoff.</b></p>
<p>A farmer plants the same crop in the same large field every year instead of rotating crops. This makes her crop much more susceptible to harmful insects, so she has to use pesticides often. <b>Toxic. Pollution enters the water through runoff.</b></p>	<p>A waterfront property owner wants an unobstructed view of the lake, so he cuts down all the trees and shrubs that were growing by the water. <b>Sediment. The buffer zone of vegetation is removed, so roots don't hold soil. Runoff water speed is increased thus increasing erosion.</b></p>

<p>While building a house in a new subdivision, the builders decide to cut down and sell all the large trees for extra money, even though only one-fourth of the lot needs to be cleared for the house and septic field. They also install only a few feet of silt fencing across the lower end of the property, leaving most of the lot open to erosion. For the entire year and a half it takes to complete the house, the builders leave the entire lot as bare soil. <b>Sediment results from erosion of bare soil, inadequate silt fencing, and increased water speed and flooding when rain runs off.</b></p>	<p>Members of a family waste water all day. They leave the water running while they brush their teeth and wash their hands; they turn the shower on to let it get hot and leave it running for a long time before getting in. They usually spend more time in the shower than is necessary. The wasted water is more than their local sewage treatment plant can handle; therefore, it must release some untreated water into the local river. <b>Nutrient and bacteria. The same plant treats toilet water as well, and human waste is high in Nitrogen and harmful bacteria.</b></p>
<p>A student wastes paper towels and likes to eat only lunches that are packaged in many individual cardboard containers. This causes increased demand for pulpwood, so more of Virginia's forests are cut. <b>Sediment is generated by the increased erosion that results from less forested areas to slow and absorb water.</b></p>	<p>When developers build a new shopping center, they pave the entire parking area and leave no vegetation. They also bulldoze the winding stream and the wildflowers and shrubs growing on its banks to replace it with a neater, more professional looking, concrete stormwater channel. <b>Sediment. Impervious concrete and asphalt increase the rate at which water flows and, thus, erosion occurs. Toxic. Runoff picks up engine fluids that drip onto parking lot and toxins that leach out of the asphalt.</b></p>
<p>A woman is fertilizing her lawn. She wants it to look better than her neighbor's lawn. She reads the directions on her water-soluble fertilizer and decides to use more than is called for so her lawn will look even better. <b>Nutrient. Plants can take only a certain amount of fertilizer in a given period of time. The extra amount washes away with the next watering or rain.</b></p>	<p>A man has been meaning to get his septic tank pumped for a while, but hasn't gotten around to it. It should be pumped every 3–5 years, but it has been 8 years since he last had it pumped. As a result, many solids have accumulated in the tank, and the water cannot be properly treated before it is released into the drain field. <b>Nutrient and bacterial pollution result from a failing septic system because human waste is high in Nitrogen and contains harmful bacteria.</b></p>