Lesson 1

"Coming Clean About Toxic Pollution"

Background Information

Pollution is the presence of something in the environment that is harmful. There are seven types of pollution: air, water, land, light, thermal, noise, and visual.

The first three are the most well-known types of pollution. Air pollution happens when harmful gases and smoke are released into the air. When humans, animals, and plants use the contaminated air, they can get sick or die. Air pollution affects people's allergies and even asthma.

Water pollution is the contamination of any body of water. This includes lakes, oceans, and groundwater. Sometimes, sewage (the nasty water that comes from your toilets and trash) can get into drinking water supplies. Who would want to drink that? Mold and bacteria are other things that can contaminate water.

Land pollution is caused by humans not disposing of their waste properly. Littering on the side of the road or in a lake can harm more than just the dirt or water. Animals can be seriously hurt when they try to eat our trash.

Light pollution might not harm the environment the way trash can, but it does have consequences. In big cities, it's hard to see the stars at night. Why is that? It's because of all the extra light around. Street lights, car lights, and porch lights all contribute to light pollution. The use of excess light can drain energy resources. It may also affect sleep cycles.

Thermal pollution is the rising temperatures caused by all of our activities. *Thermal* means "related to heat." Sometimes, companies use lake water to cool their equipment. This isn't a problem until the company pumps the hot water back into the lake. Thermal pollution can hurt the animals who live in the water. If the fish are harmed, the birds who eat the fish are also affected. Humans use cars or buses almost every day. Our buildings are made of glass that reflects the sun's rays. All of this can make city life much warmer than usual. Thermal pollution can happen anywhere.

Noise pollution is any loud noise that is harmful or annoying to humans and animals. Airplanes, cars, and construction equipment contribute to noise pollution. Loud sounds drive away animals from their natural habitats. It can distract them from feeding or prevent their hearing a predator. Loud noises can also stress out humans and raise their blood pressure. Listening to music too loudly with headphones can lead to hearing loss.

Visual pollution is a little different. This happens when billboards, graffiti, and buildings are put up that look unattractive. These objects can obscure or ruin the nearby landscape. Visual pollution does not directly hurt the environment. But if nature starts to lose its beauty, fewer people will appreciate it. All types of pollution increase when people stop appreciating their environment.