

EarthCARE

Eco Quiz

True or False

1. **Pulp and paper is the third largest industrial polluter to air, water, and land in both the United States and Canada.**

True. It releases well over a hundred million kg of toxic pollution each year. Making paper also consumes vast quantities of trees.

2. **Over a billion trees are used to make disposable diapers.**

True. In North America, **1 billion trees go into diaper production** each year. In Canada alone, diaper production consumes approximately 65,500 tonnes of pulp, 8,800 tonnes of plastic and 9,800 tonnes of packing material. However, the waste that results after they are used is an even bigger problem. Over the course of their first two to three years, each baby uses approximately 6000 diapers, which creates two and a half tonnes of waste per child. **In Canada we throw away 1.7 billion disposable diapers every year.** This accounts for approximately 2.5% of all residential waste going to landfill. Once in the landfill, dirty diapers become very toxic. With their mixture of plastic, paper, and feces, diapers are prone to leach contaminants and diseases. They absorb large quantities of water (that's what they are designed to do, and their materials remain intact for many years. In landfills where composting conditions are less than ideal, **disposable diapers can take over 500 years to decompose.**

3. **The atmosphere's natural process of removing carbon dioxide takes between 20 – 50 years.**

True. **Greenhouse gases stay in the air for a long time and warm up the planet by trapping sunlight. This is called the "greenhouse effect" because the gases act like the glass in a greenhouse.** Some of the important greenhouse gases are carbon dioxide, methane, and nitrous oxide. Carbon dioxide is the most important greenhouse gas. It comes from the burning of fossil fuels in cars, power plants, houses, and industry. Methane is released during the processing of fossil fuels, and also comes from natural sources like cows and rice paddies. Nitrous oxide comes from industrial sources and decaying plants. The greenhouse effect can lead to changes in the climate of the planet. Some of these changes might include more temperature extremes, higher sea levels, changes in forest composition, and damage to land near the coast. Human health might be affected by diseases that are related to temperature or by damage to land

and water.

4. Seventy-five percent of a tree harvested for paper does not wind up as paper product.

True. This is true for Kraft pulping not Mechanical pulping which uses 90% of the tree. **The rest ends up as sludge which is burned, spread on land or landfilled.** A bonus of Kraft pulping is that the chemicals can be recycled and re-used in the mill. Another is that kraft fiber is strong – e.g., used in magazines, printing, graphics papers, grocery bags and corrugated packaging. Mechanical pulp unfortunately produces weaker fibers, tends to discolour over time and the process uses a lot of water and energy. Commonly used for newspapers and is often bleached. **In British Columbia, 17 kraft mills discharge about 641 billion liters of liquid effluent each year. Though effluent is much less toxic than it was 10 years ago, ‘accidents’ still kill test fish at one or two BC mills nearly every month.**

5. Canada does not have laws similar to Australia, Europe and the United States that regulates and limits acceptable levels of six air pollutants: ozone, particulates, sulphur oxides, nitrogen oxides, carbon monoxide, and lead.

True, Canada's air quality is **regulated by voluntary guidelines**. Canada is the 98-lb. weakling of the air quality standards. Our voluntary guidelines are weaker than standards of the European Union, Australia, and the World Health Organization's recommendations for air quality.

While Canadian guidelines are slightly better than those in the United States, the American limits are enforceable laws. **We only have voluntary goals that are easily ignored if polluters find them inconvenient.**