

# Paper vs plastic essay



**ASSIGN  
BUSTER**

Final Draft: Comparison/Contrast Essay Paper or Plastic? It's an age old question when checking out at the local grocer: Paper or plastic? It seems like an easy choice but there is a myriad number of details hidden in each bag. Both types of bags are designed to make carrying a variety of items easier. The type of bag that is chosen will affect consumers health and the environment. Consumers need to be informed on how these bags are created, what effects these bags will have on the environment, and what will happen to the bags after they have been used. Both types of bags utilize natural resources to be created.

Plastic bags are made from petroleum, a non-renewable oil product. " Plastic is a by- product of oil refining and accounts for four percent of the worlds total oil production" (" Paper vs. Plastic," par. 16). While four percent might not seem that much, it amounts to twelve million barrels of oil a year.

The oil is then manipulated into polymers. Polymers are simple molecular configurations of carbon and hydrogen atoms that link together repeatedly to form chains (Wiseman 119). Polyethylene, one of five types of polymers, is used to create plastic. Besides the fuel burning machinery used to acquire the oil, electricity, which is produced through the burning of fossil fuels, is the main energy source used in the manufacturing of polyethylene plastics. Paper is derived from trees, which is a renewable resource.

To create paper, the logging industry must first find and mark all the trees to be felled. The trees are then cut down and removed from the area, mostly by truck. " Trees must dry at least three years before they can be used" ("

Paper vs. Plastic," par. 5). The bark is stripped from the tree, cut into one inch squares, and cooked in extreme heat.

The wood chips are then broken down into a pulp by soaking in a limestone and sulfurous acid bath for eight hours. " It takes approximately three tons of wood chips to make one ton of pulp" (" Paper vs. Plastic," par. 5). The pulp is then washed and bleached using thousands of gallons of fresh water. "

Coloring is added to more water, and is then combined in a ratio of one part pulp to four hundred parts water to make paper" (" Paper vs.

Plastic," par. 6). The mixture of pulp and water is poured through a series of bronze wires. The wires then catch the pulp and roll it into paper. It takes four times as much energy to manufacture paper bags than plastic bags. Both plastic and paper bags are a free convenience but there are consequences to the environment and human health? Plastic bags cling to trees, they drift down sidewalks, they swirl around in the oceans, and are consumed by wildlife.

In the North Pacific Ocean gyre, which is a vortex of swirling ocean currents, there is an accumulation of plastics and other debris totaling ten million square miles (Wiseman 125). Numerous animals are confusing these plastics for food and the result is often death. Plastic bags made before 1979 also contain Polychlorinated Biphenyls (PCBs). Since plastics don't bio-degrade these PCB's are still being leached into groundwater and the atmosphere. PCBs are a known carcinogen, and are linked to a variety of adverse health effects on the immune system, reproductive system, nervous system, and endocrine system (" Polychlorinated Biphenyls," par.

7). Paper bags, on the other hand, are responsible for the clear cutting of forests. Each year, fourteen million trees are cut to produce the ten billion paper grocery bags used by Americans " (" Paper Bags Are Better Than Plastic, Right" par. 3).

Harvesting that amount of trees destroys entire ecosystems and wildlife habitats. The paper industry is also cutting down the planets major absorbers of greenhouse gases and then by manufacturing paper bags they create tons of greenhouse emissions. Manufacturing paper bags creates tons of toxic chemicals. Chemicals are released into the atmosphere and waterways, and have been linked to acid rain and water pollution. Paper sacks generate seventy percent more air and fifty times more water pollutants than plastic bags" (" Paper Bags Are Better Than Plastic, Right" par.

6). The majority of plastic and paper bags end up in landfills, but both are able to be recycled or reused. When plastic bags end up in the landfill they stay intact for thousands of years since their decomposition rate is incredibly slow. " Plastic grocery bags and all plastic retail take up point four percent of space in landfills" (" Paper Bags In Landfills," par. 1). They can be burned to generate electricity but the result is a toxic waste known as dioxins.

Plastic bags can be reused as trash can liners, lunch holders, or to pick up your dog's waste but they still end up in the landfill. Not all plastic bags can be recycled. Those that can be recycled are simply re- melted and re- formed. " The re- melting process also sterilizes the plastic thus allowing any recycled plastic to be made into hospital grade products" (" Paper vs.

Plastic," par. 19). During the re-melting process dioxins are released into the environment. Plastics can only be recycled several times until it is deemed unfit or becomes too brittle. When paper bags end up at the landfill, they stay intact for thousands of years also. That is due to today's landfills being built to keep water, light, and oxygen out, which are needed for paper to decompose.

When paper bags do decompose in landfills they produce methane, a powerful greenhouse gas. " Even though consumers choose plastic bags four out of five times over paper, paper bags take up one percent of landfill space" (" Paper Bags In Landfills," par. 4). Since paper bags are made of organic materials they can be composted, requiring only oxygen to break down into a soil nutrient. Paper bags that are recycled cause the least damage.

Through the use of chemicals the bags are broken down into their original state, a pulp. The pulp is then run through screening and cleaning devices to remove any contaminants (" Paper vs. Plastic," par. 9).

The ink is removed from the pulp and the pulp is turned back into a paper product. Paper can be recycled an indefinite number of times. Paper and plastic bags require a great deal of energy and natural resources. Both bags destroy the environment and negatively impact the health of all sentient beings. Most bags will inevitably end up in landfills where they will remain intact relics for years to come.

For the bags to be recycled it will take responsible action not only by the municipal recycling centers but on the consumers part as well. So the next

<https://assignbuster.com/paper-vs-plastic-essay/>

time you are faced with the dilemma of which is the better bag to pick, the choice is simple. Neither. The best solution to carrying your products is to carry them in a reusable bag made from materials that are environmentally friendly. Works Cited “ Paper Bags Are Better Than Plastic, Right. ” Reusable Bag Fast Facts.

1Sep2008 . “ Paper Bags In Landfills.

” Save The Plastic Bag. 22Sep2008 .

“ Paper Vs. Plastic- The Shopping Debate. ” Greenfeet Net. Oct 2002.

19Sep2008.

greenfeet. net/newsletter/debate. shtml> . “ Polychlorinated Biphenyls (PCBs).

” U. S. Environmental Protection Agency. 08Aug2008.

EPA. 21Sep2008.

gov/epawaste/hazard/tsd/pcbs/pubs/about. htm> . Wiseman, Alan. The World Without Us. New York: St.

Martins, 2007.