The Positive and Negative Effects of Recycling

Recycling is the processing of waste materials in order to make them reusable. This helps conserve energy and reduce the consumption of natural resources. Recycling used products is one of the best ways to save the environment. It is important to recycle, so as to avoid environmental harm. Used plastic bottles, glass, and newspapers can be effectively recycled to make useful items. Here are some positive effects of recycling.

Positive Effects of Recycling

Recycling Preserves the Environment: The process of recycling protects the environment. For instance, we know that paper is manufactured from trees. As the demand for paper increases, a number of trees are being cut to produce paper. By recycling paper, we can prevent the destruction of forests. Today, a number of forests are being destroyed to meet the ever-increasing demand of paper. We can save our natural resources by recycling products made from raw materials. Recycling a ton of mixed paper or newspaper, is equivalent to saving 12 trees.

On the other hand, studies show that around 28000 liters of water, 4000kw hours of electricity and 2 barrels of oil are utilized for producing one ton of new paper. Moreover approximately 2200 pounds of solid waste is generated during this process. Did you know that 20% of logs (that involves cutting of trees) collected from the forest area of the world are reserved for producing new paper. Shocking statistics! Isn’t it? Thus, making one ton of new paper needs a number of resources amounting to 98 tons. No wonder, producing new paper is indeed a burden on our resources.

Recycling Saves Energy: Processing raw materials consumes a considerable amount of energy resources. Recycling used materials reduces energy requirements in many manufacturing processes such as refining and mining. Recycling materials like aluminum and glass can greatly reduce the pressure on energy resources. This can be gauged from the fact that the energy requirement for recycling aluminum cans reduces by 95% when compared to conventional methods of manufacturing brand new cans. Using recycled aluminum is definitely one step closer to protecting the environment. This is because recycling a ton of aluminum means a reduction of 12 tons of carbon dioxide emissions.

Recycled Products are Budget Friendly: Buying a brand new item is always costlier than a product that is made by recycling. To be precise, a recycled product would not make a dent into your pocket the way a new one does. Recycled products are affordable for the supplier as well as for the customer. Companies involved in manufacturing recycled items can afford to sell them at a budget-
Recycling reduces pollution: Pollution means the introduction of hazardous substances in the form of plastics, empty cans, chemicals and ordinary waste into the environment. These substances contaminate our environment. Plastic waste is responsible for causing increased soil and water pollution. Plastic recycling is an effective solution to this problem. The recycling process involves recovering used materials from the plastic waste, which is then used in the manufacturing industry.

Recycling can also help reduce the amount of greenhouse gas emissions, thereby helping to mitigate global warming effects. In a study that involved recycling 35,116 tons of material, it was found that the reduction in green gas emissions was equivalent to taking 22,140 cars off the road.

Manufacturing plastics and paper from recycled material, requires less amount of energy as compared to making them from new or virgin materials. Additional energy is consumed to extract and transport these virgin materials. Transportation means using vehicles that run on fuels like diesel and gasoline. These fuels are considered the main source of green gas emissions. As recycling conserves energy, this results in less fuel being utilized. Thus, a lower amount of carbon dioxide will be released into the environment.

**Negative Effects of Recycling**

Are there any harmful effects of recycling? There can be a few, if the sites, where recycling is done, are not managed properly. As lot of debris is collected everyday for recycling, the recovery sites can become unhygienic. Abandoned dump sites can severely damage the surrounding environment. Harmful chemicals in the trash, can mix into water and soil. This can cause water and soil pollution and harm plants and fish in the streams and lakes. When it gets mixed with rainwater, a poisonous mixture known as leachate, is formed. This mixture can be highly dangerous if it reaches the water supplies. When rainwater falls on open dumps, most of the contaminated water (leachate) percolates deep into the ground and pollutes the ground water.

The issues with the effects of recycling paper are often associated with cleanliness and transportation. Paper recycling can be a bit costly, as additional industrial processes such as bleaching, are required to make the paper reusable. There is no guarantee that the new recycled product obtained will be of good quality. This is because recycling involves manufacturing products from used materials. Also, in the process of bleaching, harsh chemicals are used that can cause health problems on exposure. Although many find plastic convenient for everyday use, it is quite difficult to recycle this material. There are different kinds of plastic and one has to sort them
systematically so as make a useful recycled product. One cannot simply manufacture a new product by combining different kinds of plastic.

However, it is observed that benefits of recycling outweigh the risks related with the mismanagement of dump sites. The government is also implementing effective waste management. So everyone who wants to preserve and protect our planet, must take the initiative to recycle waste material. Taking everyday trash to your nearest recycling center can definitely make a positive impact on the environment.


**Vocabulary you should know:**

**Contaminate:** ________________________________
__________________________________________
__________________________________________

**Conservation:** ________________________________
__________________________________________
__________________________________________

**Consumption:** ________________________________
__________________________________________
__________________________________________

**Natural Resources:** ________________________________
__________________________________________
__________________________________________

**Hazardous:** ________________________________
__________________________________________
__________________________________________

**Greenhouse Gas Emissions:** ________________________________
__________________________________________
__________________________________________

**Mitigate:** ________________________________
__________________________________________
__________________________________________
RECYCLING: PRO OR CON?
Group 1 Worksheet

Directions: Write three warrants that support your claim: Recycling is a waste of time. When you are finished, pass the sheet to someone from the opposing team and have them write three warrants that refute yours.

Claim:
Recycling is a waste of time.

Counterargument
Recycling is not a waste of time

Warrant 1:

Refuting Warrant 1:

Warrant 2:

Refuting Warrant 2:

Warrant 3:

Refuting Warrant 3:
Directions: Write three warrants that support your claim: Recycling is not a waste of time. When you are finished, pass the sheet to someone from the opposing team and have them write three warrants that refute yours.

Claim:
Recycling is not a waste of time.

Counterargument
Recycling is a waste of time

Warrant 1:

Refuting Warrant 1:

Warrant 2:

Refuting Warrant 2:

Warrant 3:

Refuting Warrant 3:
ARGUMENT WRITING

Recycling

Directions: Write a paragraph defending either the claim that “Recycling is a waste of time” or “Recycling is not a waste of time.” Remember to include three warants and a counterargument. Use the “Recycling: Pro or Con?” worksheet to help you.

☐ Recycling is a waste of time.  ☐ Recycling is not a waste of time.

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Paragraph Checklist:

☐ Claim
☐ Warrant 1
☐ Warrant 2
☐ Warrant 3
☐ Counterargument