

## Garbage in, Garbage out

All the unwanted wastes are dumped as garbage but it also contains useful components that can be recycled back.

### Dealing with Garbage

The garbage collected from the all sources is brought to a low lying area or landfill. The useful components are separated out and the unwanted wastes are dumped into the landfill and covered with a layer of soil. The organic material of the waste breaks down into simpler components (nutrients) that are returned back to the soil. These wastes are biodegradable.



Polythene bags, plastics, glass and aluminums foils are non-useful garbage or non-biodegradable. These take longer to decay. Decaying of these non-useful components is known as decomposition. When non-useful components decay, they release harmful gases that damage the environment. To avoid the adverse impact, these garbage items are sent for recycling.

For example, when leaves burn, they release harmful gases and causes air pollution. Moreover, they lead to asthma and lung diseases. That is why leaves should be buried so as to convert them into manure.

### Vermicomposting

The process of utilization of red worms for preparing compost is called vermicomposting.

#### Process of vermicomposting

The organic waste comprising of the vegetables, papers, green leaves and peels of fruits are dumped in a pit after which a layer of sand is deposited followed by sprinkling of some water over it. The red worms are then allowed to act on the waste and after 3 to 4 weeks it will convert into manure which is rich in



nutrients. Put some amount of food waste next to the pit and the red worms would move away from the pit. Now the manure is in usable form.

The red worm requires moisture for their growth and grinds the food with the help of gizzard. It can consume food equivalent to its body weight.

### Recycling Paper

It is important to reuse things than discarding them as waste. Many nice articles can be made out of waste.

Industries use recycled or waste paper to regenerate paper. Paper that is suitable for recycling is called "scrap paper". You can recycle old newspapers, magazines, notebooks and used envelopes, but not waxed paper, oil-soaked paper, paper contaminated with food, carbon paper, thermal fax paper, plastic laminated paper, stickers, and sanitary products or tissues.

#### Activity

##### Recycling paper

Put them in a tub or a bucket and pour water in it. Let the pieces of paper remain submerged in water for a day. Make a thick paste of paper by pounding it. Now, spread the wet paste on the wire mesh fixed to the frame. Pat it gently to make the thickness of layer of the paste as uniform as possible. Wait till water drains off. If required spread an old cloth or a sheet of newspaper on the paste to let it soak up the extra water. Now, carefully remove the layer of paste from the frame, spread it on a sheet of newspaper in the sun. Keep the corners of the newspaper sheet pressed by putting some weights so that these do not curl up. You get a recycled paper with beautiful.

### Plastics

Plastics are non-biodegradable materials which cannot be decomposed by nature and are harmful for health.

We use many plastic items such as tooth brush, combs, containers, bottles, shoes, toys, wires, frames and bags every day. Certain parts of vehicles like cars and buses, and electronic goods like radios, televisions and refrigerators, are all made of plastic. All these are useful to us in many ways, but using plastic is very



harmful in terms of health and as well as the environment.

### **Demerits of using plastics**

1. Plastics are not suitable for storing cooked food because they emit harmful chemicals when they are exposed to high temperatures. Using plastics causes health problems such as heart disease, diabetes and reproductive dysfunction. Harmful gases are emitted from burning plastics, which cause cancer and they kill living beings. That is why plastics should be disposed in the right way.
2. Plastics thrown casually get into drains and sewages, often blocking the way and causing water-logging. A major cause of the floods in Mumbai, India, in August 2005 was the choking of the drainage system by plastic waste. So polythene bags should not be used for garbage disposal.