INTRODUCTION

- Every day we generate garbage from our daily activities and throw it out from our houses, hospitals, schools, industries, shops etc.
- There are many types of waste items that we throw away like groundnut shells, used toys, pages from out notebook, plastic bags and packaging of tins of different materials, domestic wastes and many more.
- These waste if not properly managed then it will pollute our surroundings.
- Our Safai Karamcharis take all the garbage from our house and from many public places and dump somewhere in the outskirts so that it cannot cause any harm to us.
- This all-dumped garbage can be turned into something useful with our contribution. We can recycle many of the waste materials from these dumping yards.
- Swachh Bharat Mission was launched by prime minister of India to create an open defecation-free India by 2 October 2019.

Dealing with garbage

- The low-lying open area in which all the garbage is taken by Safai Karamcharis is called a landfill.
- In landfills the useful garbage that can be used again by some further process is separated by the garbage which is of no use.
- The useless garbage is then covered by the soil after spreading it over the landfills.
- No construction is done on landfills for 20 or more years.
- Some compost making areas are developed near landfills to make use of useful components of garbage.
 - Activity 1
 - 1. The waste materials or garbage thrown into the dustbins of your house collect them and separate into two groups.
 - 2. In group 1 put the garbage from the kitchen like waste food, fruits and vegetables peels, egg shells, tea leaves, paper bags also include newspapers and dry leaves.
 - 3. In group 2 put other domestic wastes like old toys, broken shoes, pieces of cloth, broken glass, polythene bags and aluminium wrappers.
 - 4. Not make two separate heaps of the contents from each group and name them as A, B, C and D.
 - 5. Now put these four heaps into four different plastic bags.
 - 6. Put these bags in different pits or in different pots and then cover it with soil.
 - 7. Now keep on checking these heaps after every two days and you have to observe them in following manner
 - i. Garbage does not smell and rot completely

- ii. Garbage rot only partially.
- iii. Garbage rot almost completely still smell bad.
- iv. Garbage did not rot change at all.

Now make a table on what happened to the garbage heaps

Garbage	After 4 days	After 6 days	After 2	After 4
heap			weeks	weeks
А				
В				
С				
D				

- Now mix the heap that completely rot and did not smell in the soil. This provides nutrients to plant as they form manure
- this process is known as composting in which the waste materials convert into manure.
- In many public places of many cities and towns categorized dustbins are placed. Blue colour dustbins are for the garbage which cannot be reused and green colour dustbins are for the garbage that can be used further.
- Separation of waste is very important so that we can manage the waste smartly.
- Instead of burning the leaves of plant and other part of the plant after the harvesting we should convert them into manure.

Vermicomposting

- Earthworm is known as farmer's friend. Redworm is a type of earthworm which helps in composting.
- The process of making manure with the help of redworms are called vermicomposting.
- We spent a lot of money on chemical fertilizers so vermicomposting can help us in making manure in much less cost.

Think and throw

- If we keep a track of amount of garbage, we generate everyday we can calculate how
 much garbage in total we generate and how dangerous it can be for us if these wastes
 are not properly managed.
- We can separate our garbage into two groups1) things that can be recycle and reuse and 2) things that cannot be recycled.
- When we throw garbage on the roadside, we notice that some children pick and collect some materials like plastic bottles, glass metallic things newspaper etc. they sell it to junk dealer or scrap dealer and wastepaper vendor etc.
- These scrap then further sent to many industries for recycling from these venders and dealers.

Recycling of paper

> Activity 2

- 1. We can recycle waste papers to make new paper for this we require old newspaper, envelops, notebooks or any other used paper.
- 2. Soak all the small pieces of paper in a tub full of water for one day.
- 3. Now pound the paper and make thick paste of it.
- 4. Now take a frame in which a wire mash is fitted or a net.
- 5. Now spread the paste that we made on that frame.
- 6. The thickness of the of the layer of the paste should be uniform.
- 7. Now once the water is drained off from the layer gently remove the layer from that frame and spread this on a sheet of paper.
- 8. Now let this thin sheet of the paste dry in sunlight.
- 9. Make sure that the corner should not get fold.
- 10. You can also change the colour and texture of the new paper by adding pieces of dry leaves, flower petals and coloured paper.
- 11. And from this way you are ready with your new recycled handmade paper sheets.

Plastic – boon or a curse?

- Plastic is of great use in our daily life that we cannot imagine a single day without using plastic. We use plastic bottles, toothbrushes, buckets, pens, plastic bags etc.
- Automobiles and electronic items also have plastic in its few parts.
- Using plastic is not the problem but not able to dispose their waste is a big problem.
- All of the food items come in plastic packaging. Some of the plastic may not be suitable of food items which can be harmful for our health.
- On burning plastic, harmful gases are produce which can even cause cancer.
- Sometimes animals eat up the plastic bags which is thrown away by us and eventually die.
- Sometime plastic can choke the drains and flood like situation may arise.
- So, we should dispose plastic carefully and ask our family and friends too.
- We know that it will be very difficult for us to get rid of the problems that arise because
 of the day by day increasing garbage.