EcoWaM Student's Workshop

2 February 2021

Answers to Student's Questions

1. Shouldn't paper bags be better from plastic bags cause it easily recyclable
   It will depend on the purpose for which you are using the bag. Though paper bags are easily recyclable, they come with a cost which is trees are cut down to prepare them. It is always advisable to use cloth bags as it can be used multiple times and is also safe for the environment.

2. How will we know how much the micron the plastic is?
   Thickness of the plastic is measured in micron. It is difficult to know the micron of plastic just by looking at it.

3. How many types of separation of dustbin are there?
   Household wastes are generally separated into 2 different dustbins for the different categories of waste such as Wet & Dry Waste and are disposed of separately. Wet wastes, which consist of leftover foodstuff, vegetables, peels etc. should be put in a Green Bin. Dry waste consisting of cans, aluminum foils, plastics, metal, glass and paper could be put in the blue bin. One should also keep a dustbin (black) for toxic/hazardous wastes such as medicines, batteries, dried paints, old bulbs and dried shoe polish etc.

4. Does Waste management have a connection with climate change?
   Yes. Waste management has a connection with climate change. In some of the larger cities, the amount of organic waste accounts for almost 70% of the total waste generated. Most of this rubbish ends up in dumpsites or in landfills. When
   organic waste decomposes, carbon dioxide and methane gas is created. Methane is created when there is no air present while carbon dioxide is the natural product when anything rots in air. Both carbon dioxide and methane are greenhouse gases, which contribute to global warming and climate change. Better management of waste can help minimize impact on global warming and climate change.

5. We all know that we produce all the waste but can you please suggest some ways to reduce it
   There are many ways we can reduce our waste. Few easy ways that you can practice at individual level are suggested in the video (link: https://youtu.be/xZ6IcjAoaG8)

6. How can tissue paper go into the compost bin
   Tissue papers are made of papers and papers are biodegradable. Tissue papers are thin and they degrade very easily. They can be added to the compost bin.

7. What are the three categories of municipal solid waste
   Municipal Solid waste can be separated into three categories: (i) biodegradable waste or organic waste (food and kitchen waste, green waste vegetables, flower, leaves, fruits and paper, etc.), (ii) inert and non-biodegradable waste (construction and demolition waste, dirt, debris, etc.) and (iii) recyclable waste (plastic, paper, bottles, glasses, etc.).

8. There are many recyclable plastics. So is it good to use or should we avoid?
   First, it's important to know that plastics are simply polymers, long chains of atoms "arranged in repeating units often much longer than those found in nature." Every time plastic is recycled, the polymer chain grows shorter, so its quality decreases. Also we need to understand, just because it has the recycling sign doesn't mean it actually gets

recycled. Only less than 10% of plastics actually get recycled. It is always better to avoid using plastics, especially single use plastics.

9. Is there a way in which we can use disposable masks?
   No, there is no way we can reuse a disposable mask. It has to be disposed off properly after use. Don't put disposable masks in the recycling. it should be disposed of as bio medical waste. It is recommended to use reusable masks whenever possible.

10. Can disposable masks affect the environment?
    Yes, disposable masks affect the environment. It is estimated that around 75 percent of the used masks end up in landfills, or floating in the seas. As they are made from layers of plastic and since they are being used – and disposed of – in such large numbers, they are posing a growing threat to wildlife and habitats. Just one mask can produce millions of particles, each with the potential to also carry chemicals and bacteria up the food chain and potentially even into humans. Over the medium to long term, animals and plants are also affected. Public health risks from infected used masks, and the open burning or uncontrolled incineration of masks, leading to the release of toxins in the environment, and to secondary transmission of diseases to humans is also possible

11. Is biscuit packet plastic and can it be recycled?
    Yes. Biscuit packet is plastic. Most packaging is recyclable but it will need to be separated and sorted. Most biscuit wrappers are a combination of plastic and aluminum and it is complicated to separate for recycling. There are very few recyclers (like Terracycle) who recycle them. So most of them end up in landfill.

12. Nowadays on many plastic bags which say 100% recyclable plastic so is there really an 100% recyclable plastic?
    No synthetic plastics are 100% recyclable.

13. What is Bioplastic and Why don't we replace that with real plastic?
    Bioplastics are plastic materials produced from renewable biomass sources, such as vegetable fats and oils, corn starch, straw, woodchips, sawdust, recycled food waste, etc. Not all bioplastics are biodegradable nor biodegrade more readily than commodity fossil-fuel derived plastics. They are not widely and commonly available as real plastic materials. So it is difficult to replace the real plastic with bioplastic.

14. What are the benefits of maximizing waste diversion?
    Waste diversion means reusing, recycling or composting materials that would otherwise be buried in the landfill. Waste diversion is very beneficial. Diverting materials like metals, organic waste, electronic, and hazardous waste from the landfill helps stop the production of toxic leachate. Separating organic waste also reduces the production of methane, a potent greenhouse gas.

15. In plastic things less germs attract than any other container . so ma'am why not to use plastic products?
    At household level, we have other options such as aluminum, steel, glass and other types of containers which are safe and can be used for storage purposes. Using plastics for storage of food items (especially single use plastics) is not good for health and also not good for the environment. It is better to avoid it.

16. Shouldn't we put organic waste in soil only (without segregation)?
    We cannot extract organic waste without segregation. Putting the organic waste directly into soil depends on the quantity of waste that is being generated. For a single household,

you can dig a hole in the ground and dump your organic waste there, converting it into a compost.

17. We can use organic waste for making humus too right?
    Both compost and humus are formed with decaying organic material. Humus is naturally made in soil and are dark, organic material formed when plant and animal matter decays. Basically, compost is any pile that is still decaying. When a compost has become “stable,” it is now considered as humus. To sum it up, when a leaf is still decaying, it is a compost. When leaf has “blended” into the soil, it is now humus. The term “compost” is used more often because it has human involvement in its decomposition compared to humus which natural.

18. Which plastic is better: Single use plastic OR Multiple use plastic???
    Multiple use plastic is better when compared to single use plastic. But it is better to use reusable alternatives like cloth bag, metal bottles and cutlery, etc

19. How to make a compost pit at home?
    You can make compost in the ground as well as in containers (compost bins), choose a location to make your pit or place your container, add layers of kitchen waste and/or garden waste in it. Continue to mix the compost layers and make sure they have a certain amount of moisture. Leave it for 3-4 weeks and your compost will be ready to use.

20. How can we recognize if the plastic product is bioplastic or not?
    It is difficult to distinguish between normal plastic and bioplastic just by looking at it, though there are certain items and companies which add labelling to make the classification easier.

21. Are there any inventions to make sure plastic is recycled properly?
    There are no specific inventions to ensure that plastic is recycled properly, though it is up to an individual to sort and segregate waste at source and give it for recycling.

22. Can planting trees help in reducing waste??
    No. We need to minimize waste production at an individual or household level only then will the overall waste be reduced.

23. How can we deal effectively with hazardous waste?
    At an individual level, the best you can do is to segregate hazardous waste from other household waste.

24. What are the problems faced when recycling?
    - Lack of segregation at source.
    - Lack of knowledge about different kinds of plastics leads to mixing up which makes it difficult to recycle.
    - The density of plastic is high which results in occupying extra space and thus doubling the cost of transportation.
    - Plastic requires manual segregation into different categories based on color, type and other characteristics, lack of infrastructure limits the recycling process.
    - People do not usually buy products made from recycled plastic, This low demand for recycled products ends up generating extra waste.

25. What is meant by biodegradable?

Biodegradability is the ability of an item to get decomposed with the help of microorganisms, fungi etc. and mix with nature.

26. Is glass biodegradable?
    No

27. Can't we convert the plastic to a paper?
    No

28. Mostly all the products contain plastic if we avoid them all it is difficult to live What kind of steps do we need to use less plastic
    It is important to give up on single use plastic like straw, disposable plates, cutlery, etc. You can use reusable materials wherever possible.

29. Which industry is responsible for the production of plastic in India?
    There are many industries which are responsible for producing different kinds of plastic. Out of the total plastic that is produced, the majority of plastics are used for packaging purposes.

30. Which gas is released when plastic is burnt?
    Open burning of plastics releases large amounts of toxic health and climate-damaging pollution including fine particles and black carbon, an important contributor to climate change. Polychlorinated biphenyls (PCBs), polycyclic aromatic hydrocarbons (PAHs), dioxins, and furans are among the most toxic chemicals commonly released into the air when burning plastic waste; chronic exposures cause cancer and interfere with hormone functions.

31. Wood toys are so difficult to find and even if we find one it takes more money than plastic toys so what should we do?
    Taking into consideration the health of the child and environment, we should go for wooden toys as they are more durable, ecofriendly and safe for health than the plastic ones.

32. In your opinion what matters the most in a clean and green India and what is stopping India from achieving this goal.
    For a clean and green India, it is very important to create awareness among the citizens about environment issues its importance and problems related to it. When it comes to clean India, it is important the people should be aware of not littering in public places and about waste management in general. Lack of knowledge amongst the people regarding the same is stopping or hindering us from achieving the goal. In order to achieve this goal, we need to Inform and motivate the citizens, educate, spread awareness and encourage more people follow sustainable lifestyle and take up Handprint actions to minimize waste generation in their daily life. Involvement of all citizen matters in achieving the goal and so all the citizens should come together and participate in this drive.

Dear Students,
To work on the plastic related issues, we are inviting students and youth to participate in Tide Turner Plastic Challenge. For more details visit ***www.tide-turners.org****. Feel free to contact us for any queries on tideturner@ceeindia.org or ecoschools@ceeindia.org*