

WASTE MANAGEMENT

STUDENT BOOK

• Std - VII

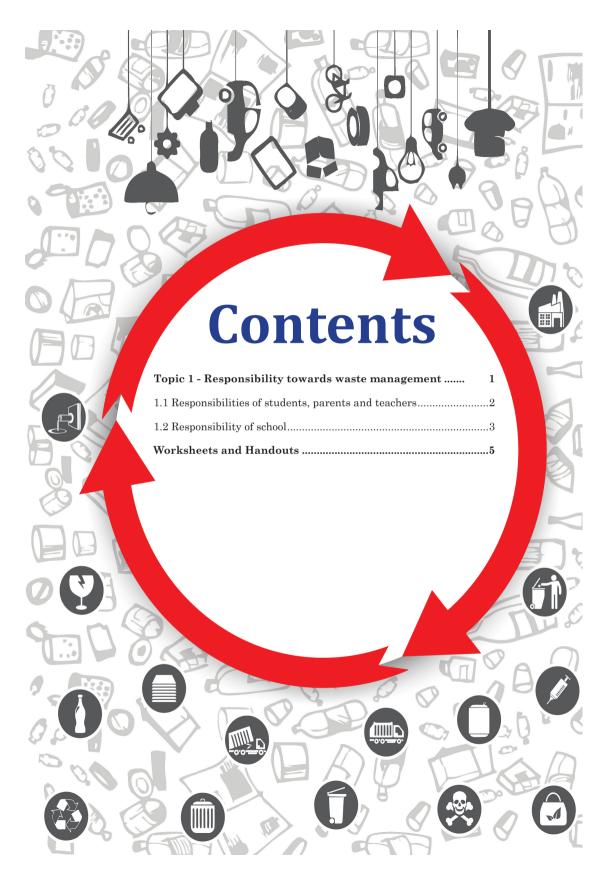












Note for Teacher

	Subject Linkages Sheet for Waste Management Std-VII				
No.	ECE Activities	Subject Linkages Chapter Number, Name & Page No			
	Topic 5. Responsibility towards waste management	Science - Part 2			
1	Lesson/Activity plan: Concept teaching - Responsibility towards waste management	 Science book, CH 18, Wastewater Story Page no - 337 CH- 18 - 18.6 - BETTER HOUSE KEEPING PRACTICES; Page no - 242 			
2	Activity 1 - Decorate dustbins for waste segregation	Chapter - 18 - Wastewater Story, 18.6 - BETTER HOUSE KEEPING PRACTICES; Page no - 242			
3	Activity 2 - Speech on "Waste problem in my village and my responsibility"	Chapter - 18 -Wastewater Story, 18.9 - SANITATION AT PUBLIC PLACES; Page no - 244			
4	Activity 3 - Eco monitors in the classroom				
5	Activity 4 - Campaigning towards "Zero-waste" Living	Chapter- 18 Wastewater 18.9 - SANITATION AT PUBLIC PLACES; Page no - 244			
	School - level activities/events				
1	Litter-free zone in school	(To be planned in the school yearly			
2	Display of good practices of waste management	plan as part of exposure visits/eco			
3	"Joy of giving" event	clubs/science commitees/value education/art & craft period/			
4	Jumble sale	work experience period/scouts &			
5	Pet bottle recycling plant	guides, science exhibition/science experiments or on Special day like			
6	Observe the recyclable vs. non-recyclable waste	15th August or 26th January)			
	Community-level projects				
1	Community drive				
2	Interview with sanitary workers				

Topic 1 - Responsibility towards waste management

- 1.1 Responsibility of students and parents
- 1.2 Responsibility of school



It is important to understand that as all of us produce waste, all of us have to take responsibility for it; waste is not just the responsibility of the government or the sanitation workers alone.

Efficient and effective waste management begins at home. If each of us gets involved, we can have a powerful and positive impact on the environment.

Very often, people want to do the right thing, but they feel they are alone, and their actions will not make any difference - Wrong!

There are lakes of good students like you who understand the seriousness of the waste problem and are doing the right thing to help. But we can do more, and get others who are not doing enough to do better.



1.1 Responsibilities of students, parents and teachers

Students, parents, and teachers can together make a difference in reducing waste at school. By practising the 3 R's of waste reduction - reduce, reuse, and recycle - all of them can do their part.

- 1. Think green before you shop. Before starting the new school year, look through last year's materials. Many items can be reused or recycled.
- 2. Purchase and use school supplies made from recycled products, such as an eco-friendly pencil.
- 3. Keep waste out of landfills by using school supplies wrapped in minimal packaging, and buying in bulk when possible.
- 4. Save packaging, coloured paper, egg cartons and other items for arts and crafts projects. Look for other ways that you can reduce the amount of packaging that you throw away.
- 5. Maintain new school supplies. Keep track of pens and pencils. Make an effort to put your things in a safe place every day. This will not only reduce waste, but also help you save money.
- 6. If you bring your lunch to school, pack it in reusable containers instead of disposable ones. Carry food, water and other liquids in reusable plastic or cloth bags, water bottles, and reusable bottles. Remember to recycle your bottles after you finish drinking.
- 7. Work with your teachers to set up a composting programme at school.
- 8. Make posters that remind your school friends of things that can be composted or recycled.



1.2 Responsibility of school

Separating, reducing, reusing, recycling and composting are good options for managing school waste.

1. Segregate waste

Separating is the first step in managing your school's waste. Set up bins for the different kinds of waste, and make sure the right bins are used. You should clearly label bins for glass, paper, plastic and organic waste.

2. Reduce waste

Avoidsending waste to a landfill. Landfills cause environmental problems, such as unpleasant smell, contaminants and toxins leaching into the water and the air. Educate the staff and students about the other ways of waste disposal, such as recycling, reusing and composting.

3. Reuse waste

Think about reusing waste around the school and the school community, for instance:

- Using plastic bags as bin liners or packaging instead of bubble wrap.
- Making students recycle paper and use shredded paper as bedding for pets at home.

4. Recycle waste

Contact your local council/Gram Panchayat to find out what can be recycled in your area. Generally, you can recycle:

- Glass
- · Paper and cardboard
- Cans
- Plastic



Make sure the recycling bins are used correctly and the items are clean when they go into the bin. For recycling to work, educating students and the staff is essential.

5. Compost organic waste

Separate organic waste like food scraps, plants, paper and lawn clippings from the other rubbish. Use organic waste for composting and teach students how it works. You can use the compost in the school gardens, saving the cost of fertiliser. You could set up worm farms which can be used to teach parts of the curriculum to the students.

6. Burning the waste

Very few schools use incinerators now. They are usually only in remote schools without easy access to other waste disposal facilities. Incinerators release contaminants into the air and can be a health hazard. However, for schools which still use an incinerator, the following precautions should be taken:

- a. Burn only appropriate materials, for example, don't burn plastic, rubber etc.
- b. Make sure the incinerator is working efficiently.
- c. Make sure the incinerator is maintained and regularly cleaned.

7. Landfills or waste pits at school

Use a landfill or waste pit only as a last resort. They can:

- a. Contaminate groundwater
- b. Attract pests and be a health hazard
- c. Create unpleasant smells and dust
- d. Take up space and need to be continuously maintained
- e. Be very expensive to build and maintain

Apart from all this, schools need to make students aware of the harmful effects of the waste and motivate them to adopt the practice of the 3 R's in their daily life and also in school premises.



Worksheets and Handouts

- 1.1 Responsibility of students and parents
- 1.2 Responsibility of school

Handout 1 - Swachhata App

The Swachhata-MoHUA is the official app of the Ministry of Housing and Urban Affairs (MoHUA), GoI (Government of India). The app enables a citizen to post a civic issue (e.g., a waste dump) which is then forwarded to the respective city corporation and thereafter assigned to the sanitary inspector of the particular ward.

The app has been built by I Change My City - a division of Janaagraha, a Bengaluru-based non-profit organisaiton working to improve the quality of life in India's cities and towns.



How does it work?

Take a picture showing a civic issue using your smartphone, and post it in one of the following categories:

- Waste dump
- Dustbins not cleaned
- Dead animals
- Public toilet(s) blockage
- No electricity in public toilet(s)
- Waste vehicle not arrived
- Sweeping not done
- Public toilet(s) cleaning
- No water supply in public toilet(s)

The app will capture the location while the picture is being taken. Just type in the landmark of the complaint location. The complaint will then be assigned to the sanitary inspector/engineer concerned.

You can also vote up on any other complaint relevant to you. You will get regular updates on the status of the complaint in the form of a push notification with the 'Resolved' image uploaded by the assigned sanitary inspector/engineer.

You can also reopen the complaint if you are not satisfied with the resolution of the complaint.

Install the app here:

(https://play.google.com/store/apps/details?id=com.ichangemycity.swachhbharat&hl=en)



Worksheet 1 - What can be reduced, reused and recycled?

We have already heard the phrase "Reduce, reuse and recycle" but we forget it while throwing things away. This badly impacts the environment. Think of at least five things which are quickly thrown away by you at home or in the class and make a chart as per their category and usage.

Things which we can reduce	Things which we can reuse			
Things which we can recycle	How I'll reduce waste			
	Food -			
	Paper -			
	Pencil/Pen -			
	Water -			
	Other -			
Five things I'd like to teach my younger sibling or other family members to save the environment -				
1. 2.				
3.				
4. 5.				



Worksheet 2 - Your decision

Think about the given scenarios and give your opinion on what you would do in such situations:

1. You are going to school and eating a banana on your way. After finishing it, you search for a dustbin on the road, but there is not a single one in sight	What will you do?
2. You go on a picnic with your school friends. You play, have food and enjoy. When the teacher asks you to return to your bus, you notice that many of your friends have thrown away their garbage and there is no one to clean the place	What will you do?
3. Your younger brother has many clothes. He saw one of his friends wearing a Spider-Man T-Shirt and demanded the same from your parents. But it's not affordable for your parents right now	What will you do?



4. You have leftover food in your tiffin-box every day. It goes waste as your mother throws it in the dustbin when you return home	What will you do?
5. One day, your mother tells you that the dump	What will you do?
yard near your home is	
full of trash and no waste collection has happened	
in the last seven days.	
She then asks you to take	
the dustbin and throw the	
trash into the nearby	
playground at night	



Worksheet 3 - Make an action list for school waste management

Based on your learnings on waste reduction and management, suggest some action points which your school can use. Mark them as "High priority", "Medium priority" and "Low priority".

1.	Example: Setting up dustbins in classrooms	High priority
2.		
3.	Example: Making a compost pit	Low priority
4.		
5.		
6.		
7.		
8.		
9.		
10.		

