



ENHANCING CIVIC
ENGAGEMENT

PERSONAL HYGIENE AND WASTE MANAGEMENT

TEACHER'S GUIDEBOOK

Class VIII



**State Council of Educational Research and Training
Government of Goa**

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Guidebook for teachers which will provide directions to carry out different activities, conduct school events and also provide guidelines to execute community engagement projects

Approved for pilot by -

**State Council of Educational Research and Training (S.C.E.R.T.)
Government of Goa**

Subject Linkages Sheet for Waste Management Std-VIII

No.	ECE Activities	Subject Linkages Chapter Number, Name & Page No
	Topic 1. Personal hygiene practices	Science - Part 01
1	1.1 Lesson/Activity Plan: Concept teaching - Understanding personal hygiene practices	
2	1.2 Lesson plan: Concept teaching - Oral care	
	Topic 2. Introduction to waste and product lifecycle	
1	Lesson/Activity plan: Concept teaching - Introduction to waste and product lifecycle	Chapter 03 - Synthetic Fibers & Plastics, 3.5 Plastics as Materials of Choice, Page 38
2	Activity 1 - Visit to recycling centre/Waste treatment plant video.	
3	Activity 2 - Trash trail of your community.	Chapter 03 - Synthetic Fibers & Plastics. Page no - 43: Extended Learning : Activities & Projects)
4	Activity 3 - Art and craft: T-Shirt bag making.	Chapter 03 - Synthetic Fibers & Plastics. Page no - 43: Extended Learning : Activities & Projects)
5	Activity 4 - Debate on "Responsibility of government for waste management"	Chapter 03 - Synthetic Fibers & Plastics. Page no - 43: Extended Learning : Activities & Projects)
6	Activity 5 - Presentation on waste management.	Chapter 07 -Conservation of Plants and Animals, 7.11 Recycling of Paper Page 87
	Topic 3. Composting and kitchen gardening	Science - Part 01
1	Lesson/Activity plan: Concept teaching - Composting and kitchen gardening	Chapter - 01 - Crop Production and Mangement, 1.5 Adding Manure and Fertilisers, Page 5
2	Activity 1 - Presentation on composting and kitchen gardening	Chapter 07 -Conservation of Plants and Animals
3	Activity 2 - Visit to agriculture farm	
	School-level activities/events	Science - Part 01/ 02
1	Compost pit/Vermi compost pit	Chapter - 01 - Crop Production and Mangement, 1.5 Adding Manure and Fertilisers, Page 5
2	Kitchen garden in school	Chapter - 01 - Crop Production and Mangement, 1.5 Adding Manure and Fertilisers, Page 5
3	Zero-waste clubs	(To be planned in the school yearly plan as part of exposure visits/eco clubs/science commitees/ value education/art & craft period/work experience period/scouts & guides, science exhibiition/science experiments)
4	Thanksgiving Day for helpers	
4	Sapling plantation drive	
5	Litter-free zone in school	
6	Photo magazine/Collage	
	Community-level activities/events	Science - Part 02
1	Waste segregation drive	"Chapter - 18 - Pollution of Air and Water, Extended Learning — Activities and Projects, Page 263"
2	Feild Visits	(To be planned in the school yearly plan as part of exposure visits/eco clubs/ science commitees/ value education/art & craft period/ work experience period/scouts & guides, science exhibiition/science experiments)

Contents

Topic 1 - Personal hygiene practices	1
1.1 Lesson/Activity plan: Concept teaching - Understanding personal hygiene practices	1
1.2 Lesson plan: Concept teaching - Oral care	2
Student's book worksheets	3
Topic 2 - Introduction to waste and product lifecycle	4
Lesson/Activity plan: Concept teaching - Introduction to waste and product lifecycle	5
Activity 1 - Visit to recycling centre/Waste treatment plant video	6
Activity 2 - Trash trail of your community	6
Activity 3 - Art and craft: T-Shirt bag making	7
Activity 4 - Debate on "Responsibility of government for waste management"	7
Activity 5 - Presentation on waste management	8
Student's book worksheets	8
Topic 3 - Composting and kitchen gardening	9
Lesson/Activity plan: Concept teaching - Composting and kitchen gardening	9
Activity 1 - Presentation on composting and kitchen gardening	10
Activity 2 - Visit to agriculture farm	10
Student's book worksheets	11
School level activities/events	12
Community level projects	14

Topic 1. Personal hygiene practices

1.1 Understanding personal hygiene practices

1.2 Oral care

Expected outcomes

At Student level -

The students will be able to -

1. Know and apply the methods for practising personal hygiene
2. Explain to others how to follow personal hygiene practices properly

At School level -

The school will be able to -

1. Introduce standard practices of personal hygiene to the students
2. Establish and maintain standard culture and facilities at school for practising personal hygiene

1.1 Lesson/Activity Plan: Concept teaching - Understanding personal hygiene practices

Time	Activities	Resources/ TLM
30 min	Part-I Step 1: Introduce the topic and revise previous knowledge about how students are practising personal hygiene in their daily life. Step 1.1: Listen to the responses of the students about following personal hygiene practices: <ul style="list-style-type: none">• Face washing and nose hygiene• Hand washing• Body washing, including leg, skin, private parts, etc.• Armpit hygiene• Ear hygiene	Blackboard



	<ul style="list-style-type: none"> • Haircare • Mouth and teeth: Brushing <p>(Refer to sub-section 1.2 for detailed student understanding of oral care. Pg 4)</p>	
45 min	<p>Part-II</p> <p>Step 2: Ask the following questions to students and activate their previous knowledge.</p> <p>Q.1. What are the important living tissues in our mouth? (Refer to point no. 2 from the student book Pg 3.)</p> <p>Q.2. What is the most important part of the mouth which helps us to eat comfortably?</p> <p>Q.3. What kind of problems can happen to our teeth and mouth?</p> <p>List down the responses of the students.</p> <p>Step 3: Activity: Ask the students to work in groups and list down the inappropriate practices that can harm our teeth and mouth. (Refer to worksheet 1 from the student book. Pg 6)</p>	Video /Poster

1.2 Lesson plan: Concept teaching - Oral care

Time	Activities	Resources/ TLM
15 min	<p>Step 1: Initiate the discussion by applying the "known to unknown approach" of discussion and asking the following questions:</p> <p>Q.1 How does dental decay happen?</p> <p>Q.2 What should we do for dental and oral care? (Refer to student book <i>handout 1</i>)</p> <p>Q.3 How can wrong practices and careless actions damage our mouth and teeth? (Refer to student book topic 1.2 - oral care & student book Pg 4.)</p> <p>Write the students' responses on the blackboard.</p>	Blackboard/ Video/ Handout



	<p>Step 1.1: Screen the videos and debrief the students on the above-mentioned questions. (Refer to videos 1.3 (1), (2) & (3). https://www.youtube.com/watch?v=_ollv59bTL4</p>	
90 min	<p>Step 2: Screen the video on oral cancer and make the students aware of the need to avoid, tobacco, <i>gutkha</i> and cigarette. (Refer to video 1.3 (4). https://www.youtube.com/watch?v=ikGn6JP_o_ms)</p> <p>Step 2.1: Initiate a discussion after watching the video by asking the following questions:</p> <p>Q.1 What did we see in the video? What happens when we eat tobacco or <i>gutkha</i>, smoke cigarettes or drink alcohol?</p> <p>Q.2 What are the causes of oral cancer?</p> <p>Step 3: Activities:</p> <ol style="list-style-type: none"> 1. Ask the students to make a poster based on this video to make their family members and community aware of the ill-effects of tobacco, <i>gutkha</i> and cigarette and why they must avoid the consumption of these items. (Refer to worksheet 2 from student book.) 2. Guide the students to prepare a short skit on oral hygiene with special attention to tobacco, <i>gutkha</i>, cigarette and oral cancer. 3. Ask the students to make their community aware of oral cancer by performing a role-play on World Tobacco Day (31st May) and World Cancer Day (4th Feb). 	Video/ Poster/ Worksheet

Student's worksheets -

1. Harmful oral care practices
2. Poster on oral cancer awareness



Topic 2. Introduction to waste and product lifecycle

- 2.1 Introduction, types, sources of waste, effects of poor waste management**
- 2.2 Waste segregation and treatment**
- 2.3 Zero-waste and the 4 'R's**
- 2.4 Packaging and how to avoid wasteful packaging**

Expected outcomes

At Student level -

The students will be able to -

1. Adopt a zero-waste lifestyle.
2. Understand the concept of zero-waste in school and raise awareness at home and community about the same.
3. Understand the product to disposal cycle.
4. Acquire the necessary skills for segregation of recyclable materials.
5. Acquire skills for composting.
6. Become aware of the harmful effects of waste and acquire necessary skills for segregation of different types of waste.
7. Value the benefits of recycling and proper waste treatment.

At School level -

The school will be able to -

1. Motivate the community to avail of bins and segregate waste.
2. Create mass awareness among students, parents and community.
3. Conduct waste audit at school.
4. Start a zero-waste school initiative.
5. Create attitudinal changes in students towards waste management.



Lesson/Activity plan: Concept teaching - Introduction to waste and product lifecycle

Time	Activities	Resources/ TLM
10 min	Step 1: Brainstorming - 1. Ask the students - a. What is waste? b. What are the different kinds of waste we have seen? c. What are the different sources of waste? d. Do you know that waste has many harmful effects on the environment? If yes, what are they? e. What are the treatment methods (landfill, composting, recycling, etc.) for different types of wastes? 2. Engage students in a discussion with the above probing questions.	Blackboard
2 periods	Step 2: Concept teaching - (Refer to student book) Topic 2 - Introduction to waste and product lifecycle 2.1 Introduction, types, sources of waste, effects of poor waste management 2.2 Waste segregation and treatment 2.3 Zero-waste and the 4 'R's 2.4 Packaging and how to avoid wasteful packaging 1. Give reference to the brainstorming session and discussion. 2. Explain in detail. The focus should be more on interaction and less on lecture. Try to include some examples. 3. Encourage students to ask questions.	Verbal discussion + handouts + student book



Activity 1 - Visit to recycling centre/Waste treatment plant video

Activity time - 1 day trip or 45 minutes of video + debrief

TLM - Video

Steps for activity -

1. Take the students to a nearby recycling centre or screen a video of a recycling plant in Goa.
(<https://www.youtube.com/watch?v=KBM-UJgKyEO-Goa> Saligaon waste treatment plant)
2. Let them understand the process of recycling, its importance, the different categories of waste to be recycled, and how to segregate waste for recycling.
3. Ask the students to observe the whole process and ask questions for clear understanding.
4. Ask them to write a report on their understanding of the visit/video. **(Student book, record sheet: Activity 1)**

Activity 2 - Trash trail of your community

Activity time - 1 day field trip

TLM - NA

Steps for activity -

1. Take the students to a nearby community garbage collection site/dump yard.
2. Show them the condition of the garbage there. Also, make them aware of how their home waste and school waste reaches there and is collected for treatment.
3. Discuss the garbage collection method and how the waste gets segregated, treated or disposed of.
4. If possible, visit the nearby water body or landfill where garbage usually gets disposed of, to make the students understand the environmental effects of poor waste management.
5. Discuss with them why segregation of waste is required at source. What is the health impact on the sanitary workers or garbage collectors?



Activity 3 - Art and craft: T-Shirt bag making

Activity time - 1 period

TLM - Video/process chart (To be prepared by the teacher - Old T-shirt, scissors, needle, thread, decorative material)

Steps for activity -

1. Use or display the video “How to make a T-shirt bag” to students.
2. Discuss the usefulness of the activity and how this can help them learn the reusing of old fabric. They can also take this bag for shopping and thereby avoid plastic bags.
3. Ask the students to learn, note down the steps, and make a T-shirt bag at home from a used, old T-shirt. They need to show it to the class.
4. The teacher can also have some more options to give to the students, such as quilting, duster making, old cloth cushion covers, etc.

Activity 4 - Debate on “Responsibility of government for waste management”

Activity time - 1 period

TLM - NA

Steps for activity -

1. Ask the students to prepare a debate (for or against) on the topic at home.
2. Give them time to prepare.
3. Ask them to speak in class for five minutes.
4. Sum up the debate with closing statements on how waste is the responsibility of each individual, but we also need to make the government accountable for waste management of our city and country.



Activity 5 - Presentation on waste management

Activity time - 1 period for presentation

Material required - Colour paper/chart paper, colours, scissors, old newspaper and magazines

Steps for activity -

1. Ask the students to prepare a Powerpoint presentation, a book or collage on waste management. Ask them to include all the topics studied about the issue. The teacher can give preparation time of 1-2 days, make groups to prepare the presentation, and let the students present in the classroom.
2. Students can be asked to present to younger children.

Student's book worksheets -

1. Write a letter to Municipal Corporator/Sarpanch of your area
2. News analysis



Topic 3. Composting and kitchen gardening

Expected outcomes

At Student level -

The students will be able to -

1. Acquire skills for composting and kitchen gardening.
2. Acquire knowledge of waste treatment practices and can adopt and advocate for the same.
3. Identify the importance of composting, organic products, etc.

At School level -

The school will be able to -

1. Create a kitchen garden for itself and use the produce for consumption

Lesson/Activity plan: Concept teaching - Composting and kitchen gardening

Time	Activities	Resources/ TLM
10 min	Step 1: Brainstorming and recap - 1. Ask the students- a. What do you understand about the waste and the problems related to poor waste disposal? b. What are the different waste disposal methods? c. Have you ever heard the terms composting and kitchen gardening? d. Have you ever seen any composting unit or kitchen garden in your community? e. If yes, what are the different benefits of composting and growing food in your own garden?	Blackboard/ Verbal discussion



2 periods	Step 2: Concept Teaching - (Refer to student book) Topic 3 - Composting and kitchen gardening <ol style="list-style-type: none"> 1. Give reference to the brainstorming session and recap discussion. 2. Explain in detail the steps and benefits of composting and kitchen gardening. 3. You can use videos/charts for teaching. 4. Discuss some simple ways of composting at home. 5. Discuss with the students about the composting process and its benefits. (Video: Composting)	Verbal discussion + handouts + student book + video
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Activity 1 - Presentation on composting and kitchen gardening

Activity time - 1 day for preparation and 1 period for making presentation/other tools

TLM - Chart paper, colours, colour pens, decorative material

Steps for activity -

1. Ask the students to make a presentation on composting - what is composting, its types and benefits to soil and the environment, and kitchen gardening.
2. Students can select whether to prepare a chart, poster, leaflets, pamphlets or collage, etc. and present in the classroom.
3. The teacher can ask the students to show their presentation to younger students/classes.

Activity 2 - Visit to agriculture farm

Activity time - 1 day field trip

TLM - NA

Steps for activity -

1. Take the students to an agriculture farm and let them observe the basics of farming.



2. Interact with the farmer there and ask him about farming, manure used, soil fertility, and how composting can benefit the environment.
3. Let them observe the production and harvesting process.

Student's book worksheets -

1. Essay and learning
2. Compost bin
3. Success story



School-level activities/events

1. Compost pit/Vermicompost pit

Assign an area to make a vermicompost pit/compost pit. Call an expert for helping students to make this for the first time and guide them on its maintenance. The students will be assigned to take care of the compost pit. Ask the children to collect wet waste from left-over food and make a regular supply for the school compost pit.

2. Kitchen garden in school

The school needs to develop a kitchen garden where children can develop their skills of gardening and also use the manure developed from the compost pit.

3. Zero-waste clubs

Identify and select some volunteers who can create a zero-waste club (20-25 members) under the teacher's supervision. They will keep track of how to reduce waste during school events and submit weekly reports to the Headmaster on waste audits of different areas of the school. The club will also be responsible for educating younger children on waste reduction practices. Rotate the members of the club on a monthly basis.

4. Thanksgiving Day for helpers

Students and teachers can organise an event for sanitary workers of the village or the school to recognise their efforts in keeping the surroundings clean. The school can give recognition or a certificate to them in front of the parents.

5. Sapling plantation drive

Facilitate "One Child One Tree " campaign and encourage children to plant at least one sapling in the school premises/home/community area and maintain and nurture the same. Encourage students to take photographs every seven days and maintain a photo-book for the same.



6. Litter-free zone in school

Students need to identify an area in their school where they can set up a litter-free zone. It must be an area that students regularly visit, and thus the chances of littering are high. For example, it could be the playground, assembly area, canteen, etc. The activity is to make the area a "litter-free zone" within one month. Ask the students to label it, place dustbins, put posters and slogans, and decorate the area in their own way by working in groups. Showcase the pilot project and replicate this project in the entire school in different parts of the premises.

7. Photo magazine/Collage

Students will click photographs of the before-after situation of cleanliness of the litter-free zone and make a collage/ photo magazine to be displayed on the notice board.



Community-level activities/events

1. Waste segregation drive

This drive will involve the following activities:

1. Awareness campaign with posters, slogans, etc.
2. Street plays
3. Writing a letter to District Administration/Panchayat for setting up different dustbins at community places
4. Educating the community on waste segregation

2. Field visits

1. Agriculture farms
2. Marketplace, bus-stand, and hospital
3. Visit to a local industrial estate where a product is being manufactured

The school can take the students to visit the above areas to make them understand the following -

- i. How much waste is generated and where
- ii. To understand the efforts of farmers and manufacturers in the production process
- iii. Packaging of different products and the waste generated while packaging
- iv. Harmful effects on the environment due to industrial and other waste



