E-waste survey (inventory and behaviour)

Lesson Plan 1

INTRODUCTION

The lesson plan introduces students to the concept of E-waste. Through hand-on data collection students will become aware about people's behaviour towards E-waste; through secondary research students will become aware about the different laws and regulations pertaining to E-waste.

Objectives:

Students will be able to

- undertake surveys to gather data pertaining to waste management and disposal practices followed by individuals from a small sample of 15-20 households.
- understand the behaviour of the respondents towards E-waste.
- undertake an internet search to investigate E-waste management laws applicable in their country.
- analyse and interpret the information collected and report their findings in the form of an articles.

YRE steps: Investigate, Research Solution, Report, Disseminate

Curriculum Linkage: Science/ Environmental Studies/Social Science

Time required/ Duration:

- **Classroom session 1:** 45 minutes for the teacher to do a background introduction on e-waste, - including its sources and associated problems.
- **Group Assignment 1:** One week for students to undertake the survey with different respondents, each group could interview 5 respondents.
- **Classroom session 2:** 90 minutes for internet search to investigate rules and educational programmes that exist with regards to e-waste, minimum one country should be selected by a group.
- **Home Assignment:** Two days for individual students to pen their thoughts in the form of a newspaper article.
- **Classroom session 3:** 45 minutes for 4-5 students to read their articles followed by a wrap up of the lesson plan.

Resources Required:

- Resource 1 (Questionnaire : E-waste survey)
- Internet
- Student stationery
- Laptop/ computers

Young Reporters for the environment

15-18 Years

4 QUALITY EDUCATION

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

Activity

Classroom session 1

- Introduce the term and concept of E-waste - its sources, some statistics and why E-waste is an emerging issue of concern.
- Divide the class into groups of 3-4 students.
- Guide each group to undertake a survey using the Resource 1 (E-waste survey).

Group Assignment 1

- Ask students to undertake a survey. Each group should survey about 5 respondents. Resource 1 will be useful for the survey.

Classroom session 2

- 90 minutes for internet search to investigate rules and educational programmes that exist related to E-waste, minimum one country should be selected by a group.
- Guide students to tabulate the information in the E-waste laws table, Resource 2 (E-waste law awareness).
- Guide the groups to plan individual as well as group actions that they plan or can undertake to address the problem of E-waste.

Home Assignment 2

- Guide students to document various information gathered both as a result of the findings of the E-waste survey as well as the internet search on laws pertaining to E-waste and their individual actions planned and pen these down in the form of a newspaper article to create awareness about proper disposal of the same.

 - For article: Refer Lesson Plan 1 from chapter "Learning to be an Environmental Journalist"

Evaluation:

Evaluate the student articles and ascertain whether students have been able to capture various aspects pertaining to E-waste. Some of these aspects could include

- An understanding of the magnitude of the e-waste problem (sources, present mechanism in terms of laws and systems in place to tackle these wastes).
- A need to create awareness, so people could be engaged in efficient management of E-waste.

E-waste Survey

Questionnaire for Inventorization of Electronics/Electrical items and understanding behaviour

Name of respondent (Title, Full Name):

_____

Contact Address: _____

_____

Phone no.:_____

Email ID:_____

1.   **Do you have Electronic or Electrical appliances in your home which are:**
        [Tick any one √]

a) Broken/damaged	Yes	No
b) Not working but repairable	Yes	No
c) Working but not used	Yes	No
d) In working condition	Yes	No

2. **If yes, list the appliances you found in the house along with its condition (as above) & quantity**
   (a, b, c and d indicate whether the device is damaged/ not working/working but not used/ working condition respectively

Name	Condition (√) and Quantity (No.)								Name	Condition (√) and Quantity (No.)							
	(a)	No.	(b)	No.	(c)	No.	(d)	No.		(a)	No.	(b)	No.	(c)	No.	(d)	No.
Computer									DVD/VCD Player								
Laptop									CD/DVDs/ Cassettes								
Mobile Phone									Microwave								
Tablet									Telephone								
Video game									Printer								
TV									Others								
Digital camera																	
Pencil batteries																	
Toys																	
Mobile charger																	
Electric sockets/ plug																	
Tubelight/ CFL bulbs																	
Refrigerator																	

3. **In the last six months if you have bought new electronic/electrical appliances, what have you done with the old ones? [Tick one or more √]**

   - Threw in dustbin   - Kept in cupboard   - Gave to waste collector

   - Donated it   - Sold it   - Sold it in exchange scheme

   - Gave it family members/friends   - Others

4. **In case you have kept broken/ damaged/non working/ non usable appliances at home, why have you done so? [Tick one or more √]**

   - Don't want to sell/donate it   - Not getting good price for it

   - Don't know what to do with it   - I am planning to get it repaired

   - Gifted/Sentimental value/attachment   - It doesn't bother me

   - Others

5. **Does your waste collector ask for a non working computer/mobile phone to be given off in exchange of money?**

   Yes   No

6. **Have you ever heard of E-waste before?**

   Yes   No

7. **From where did you get this information?**

   Newspaper   TV   Internet   Others

8. **Do you know what happens to E-waste in your country? If yes, explain.**

   _____

   _____

E-waste laws - awareness

Country	Existing Laws pertaining to E-waste	Existing awareness programmes pertaining to E-waste

Individual Actions (Indicate a list of actions that you would take to create awareness and re-route the generation of E-waste at a personal level)

_____

_____

_____