

Structure of the lesson / Scenario časa:

Lesson topic/title	RESOLVING LITTER AND WASTE
The age of the students	12 -14 years (3 rd cycle)
Time required	45-65 min (1-1,5 lesson(s))
Lesson date	School year 2023/24 - *(date is optional)
Introduction	The lesson plan aims to promote active learning on the topic of reducing environmental pollution
<p>Goals Learning outcomes</p>	<p><u>Content Objectives: Learners (Pupils)</u> <i>*Learners (Pupils) will be able to:</i> <i>*identify different types of pollution and why it is of concern</i></p> <p><u>Language for responding to resolving litter and waste</u> <i>*Sharing a problem: Pupils share the instances where pollution is visible – at home, community, or in school</i> <i>*Writing an essay and creating map: Pupils use authentic (learned) language to describe the types of waste and create the map of the “red spots” of pollution in the students’ area.</i></p>
MATERIALS/ SUPPLIES	<p><u>Materials:</u> Computers/tablets, PPT, news, digital tools (Power Point), examples of waste, reading material...</p> <p><u>Resources:</u> Clanci iz Dipre, B. i saradnici. 2007. Školska enciklopedija: Oxford. Knjiga-komerc: Beograd</p> <p>Articles from the brochure that was used in the competition IYOECO2019</p>

ASSESSMENT	Ongoing assessment: using classroom product for assessment: *Anticipation guide-participant complete before and after sections re-reading selection *Self-assessment check list
TEACHING STRATEGY	Active learning & listening; Brainstorming; Anticipation guide; Quickwrite; Roundtable.

TITLE of the lesson: **Resolving litter and waste**

Activities during the lesson



I EVOCATION

I-1. Brainstorming

PURPOSE: To explore relationship among concepts/terms about a topic the class is familiar in.

Pupils express themselves freely about offered topic “Resolving litter and waste”, articulate background knowledge and ask their own questions. All ideas are welcomed; none are rejected.



Types of waste

Importance

Methods of disposal and solving the problem of waste


Expected/possible students' responses/discussion:

- *paper, glass, metal, plastic, organic, fabrics, fabrics, other.....
- *Waste is a polluter of air, water and soil. It is health hazard and causes ambient pollution....
- *Landfills, land reclamation, incineration of waste, recycling...

II- UNDERSTANDING THE MEANING

II-1. Anticipation guide

PURPOSE: To help pupils think about a topic and prepare them for further study, to give pupils opportunities to express their opinions and make prediction about the main idea and concepts they will study.



1. Before reading the given text, write T or F as your predictions in the “you” column.



Pupils are given a piece of paper with a table of statements related to the topic and then write their predictions with T if they think the statement in the table is true, and F if it is not. They write the letters (T/F) in the "you" column.

YOU	TEXT	Statements
		Waste sorting/classifying cannot be done in more than one way.
		Most often, the type of material from which the discarded object is made is taken as a criterion for sorting waste.
		Also, the criteria for sorting waste can be the source of waste (a household, factory, hospital...)
		Based on where that waste comes from (household, hospital, factory...) we can see a potential danger.
		Apart from the type and source of waste, there are no other criteria for sorting waste



2. After reading, write T or F according to the article.



Pupils read the given text and then write T or F according to the article in the “text” column.

YOU	TEXT	Text
		With the development of civilization, waste becomes an increasingly important problem. Sorting of waste can be done in several ways. Most often, the type of material from which the discarded item is made (sheet metal, paper, glass, organic material...) is taken as a criterion, which is also suitable for sorting for recycling. Also, the source of the waste can be a criterion (if it is a household, a factory, a hospital...) because in this way the potential danger of the discarded material can be seen in order to dispose of it as safely as possible. This is particularly noticeable with nuclear waste. There are other criteria for sorting waste.

Pupils compare the accuracy of their statements.

III REFLECTION

III-1. Quickwrite







PURPOSE: To compare and share opinion with other students and to find out information from other students



Look at the samples of waste in front of you and indicate in percentages how much of each type of waste is discarded from your household per week.



Pupils look at the samples of waste brought and determine the percentage of that type of waste they throw away from their household per week.

Material							
	paper	metal	glass	plastic	fabrics	organic	other
%							

Pupils compare their answers, i.e. the percentages of trash they dispose of each week and discuss whose family makes the most garbage and which type.

III-2. ROUND TABLE

PURPOSE: Pupils generate as facts and ideas about a topic and review the ideas of others work together in groups to answer questions and / or provide opinions on question/topic and to reflect on and to expand on the ideas of others.

✍️TEACHER HANDS OUT THE TEXT TO THE GROUPS.

A) WASTE MANAGEMENT

Waste management is a series of activities which include: production, collecting, sorting, transport, treatment, and finally, disposal of waste. After having been collected, household waste is taken to a landfill where it is finally disposed of.

Disposal of waste may be controlled, on sanitary landfills, and in that case, it is justified in terms of environmental protection. On the other hand, it can be uncontrolled, at dumps, and then it implies environmental pollution. A landfill is a place where waste is disposed of in a way that does not damage the environment. It is a specially designed area, built and equipped for permanent, controlled, organized and safe waste disposal, in order not to harm the environment, nature and human health.

✍️TEACHER GIVES SOME QUESTIONS FOR GROUP.

- * What is meant by the term "waste management"?
- * What activities are involved in "waste management"?
- * After collecting where is the household waste taken place and why?
- * Where can the disposal of waste be controlled?
- *What is a landfill?

B) INFLUENCE OF SPECIFIC TYPES OF WASTE ON THE ENVIRONMENT

When a substance is biodegradable, it is considered to be degradable under the influence of microorganisms and it is not a threat to the environment.

Biodegradable substance is of organic origin, it comes from a living organism, either plant or animal. There are also man-made substances which are similar to plants or animals so they can be degraded naturally due to the presence of aerobic or anaerobic microorganisms.

Uncontrolled and improperly treated waste can have a major impact on the environment and on human health. If waste is disposed of in an uncontrolled manner in our neighborhood, hazardous substances can reach the ground water through land.

Moreover they can affect the quality of the water we drink.

 **TEACHER GIVES SOME QUESTIONS FOR GROUP.**

- *What is a substance biodegradable?
- *Is the a substance biodegradable a threat to the environment?
- *Are there man-made substance which are similar to plants or animals and can be degraded ?
- * Does the biodegradable substance have a harmful effect on the environment?
- * What can waste be used for?

C) RECYCLING

Recycling involves the reprocessing of waste into a raw material for production. Recycling is the separation of waste material and its reuse. It involves the reprocessing of used products into the new ones. It is very important to classify waste in the first place. Most of the waste material can be reused if it is separately collected. Recyclable waste is everything that can be reused, without being thrown away.

Without the implementation of recycling into everyday life, it is impossible to imagine any comprehensive waste management system.

The most commonly recycled wastes are paper, glass, plastic, metal. By paper recycling we save many forests, rivers, lakes and many other living beings that depend on these ecosystems in some way.

 **TEACHER GIVES SOME QUESTIONS FOR GROUP.**

- * What does recycling mean?
- * What is recycling waste?
- * Why is very important to classify waste?
- * Which waste is most often recycled?
- * What do we save by recycling paper?

D) ENVIRONMENTAL POLLUTANTS


If substances that reach the environment or the ecosystem compromise the functioning of the system by causing qualitative and quantitative changes with negative consequences, this process is considered as environmental pollution. Environmental pollution occurs in the presence of qualitative and quantitative changes with negative consequences when the amount of pollutant or impact exceeds the environmental capacity.

Environmental pollutants can be divided into natural and man-made.

Natural pollutants are natural phenomena such as: volcanic eruptions, sand storms, earthquakes, forest fires, typhoons, floods. Artificial pollutants are created by human activity directly or indirectly. Polluting substances cause environmental pollution that can be: chemical, physical, biological, radioactive

 **TEACHER GIVES SOME QUESTIONS FOR GROUP.**

- * What do we mean by the term environmental pollution?
- * How can we divide environmental pollutants?
- * What are natural pollutants?
- * Who creates artificial pollution of the environment?
- * What can pollution of the environment be?

 **GROUPS ROTATE AROUND THE QUESTIONS, EACH TIME READING AND RECEIVING PREVIOUS ANSWERS AND ADDING THEIR OWN.**

III-3. HOMEWORK

- Find out and create a map of illegal garbage dumps in your neighborhood.
- Write a short essay about artificial pollutants

III-4 OUTGOING ASSESSMENT

PURPOSE: Quick summative assess at the end of the lesson

CHECK LIST LEARNERS:

Quick write: Pupils write what we mean by recycling and why waste sorting is important?

