

Glass separation and recycling



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ENVI-MOBILE: Integration of mobile learning
into environmental education fostering local
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Activity No. 1

Part of the lesson: EVOCATION

The aim of the activity: Evocation of the theme of „glass as a waste and its further use“.

STEP 1.

Brief description of the activity:

Teacher reads the text (Annex 1) and helps children to realise what they know about the topic. Divide children into 4 groups and provide a different assignment to each group. Time: 5 minutes

Instruction (what you need to tell the students):

I'll read a text. Listen to it carefully. (after reading a text) Think about what you heard. What was correct and what was not? In your groups work on the following tasks:

- Group 1: write how you would behave and how you would solve the situation, and what does it look like in your surroundings.
- Group 2: what does the glass mean for you
- Group 3: how it is possible to re-use the glass
- Group 4: where glass is used and what is made of glass

Write down these topics. Then work in the groups and discuss them.

STEP 2.

Brief description of the activity:

Using the rotating flips ´method enables children to add their own ideas to the papers of the other groups. Papers are passed around until they won´t return to their original owners. After a while each group chooses the most important information that was written down.

Instruction (what you need to tell the students):

Pass your paper to the group on your left side and you take the one from the group on your right side (papers are simply shifted among the groups). Write down on these papers your own ideas related to the topic. After 2 minutes pass the paper to the group next to you.

(after about 6 minutes) When you get back your original paper, choose the information you consider most important and write 2 – 3 notes down on a blackboard.

Tools for the activity (everything you need to take to the classroom): Paper, pen, pencil, flip papers/A1 format for each group, markers, blackboard, text for the groups or Annex 1 for each group

Estimated time (max. 40 min.): 13 minutes

Activity No. 2

Part of the lesson:
APPRECIATION

The aim of the activity: To understand the meaning of glass, its recovery and the importance of possibilities of glass reuse for maintaining the healthy and clean environment, as well as the meaning of saving the energy and raw materials.

STEP 1.

Brief description of the activity:

Folding method of learning, based on the proper understanding of the text and its subsequent presentation to the rest of the group. Children remain in their core groups. Each of members is marked by A, B, C, or D letter. Later on they create so called “expert groups” marked A, B, C, D, collecting members with identical letters from each core group (if there are more than 4 members in one group – there can be also two experts with the same letter in the same core group – in such a case they work together on the assignment).

Teacher asks children to create expert groups consisting of only one identical letter (it means there will be 4 groups with different number of members, minimum of 4, one from each core group). Each of these groups is provided a text with the information related to the theme (in Annex 4 there are ideas for the internet sources to be used), from which the group has to choose the key information based on the following criteria:

A – glass and its formation

B - separation of glass

C – recycling of glass

D – the meaning of glass, its use and impact on the environment

Children analyse, discuss in the group and summarize new information in order to present them in their core groups. If needed, they write down the notes on a paper. Time needed: 5 minutes

Instruction (what you need to tell the students):

Read the text in your expert groups A – D. While reading, mark important information, analyse the text, use graphics or drawings in your notes if needed, discuss and systematize new information.

STEP 2.

Brief description of the activity:

After finishing the work in expert groups, children go back to their core group again. In the core group they present the information and knowledge they got and in this way they assemble different parts of their findings. They discuss the possibilities of glass separation, recycling and re – use and the impact on the environment. They write their findings down on a group paper (A1 format).

Instruction (what you need to tell the students):

Analyse the information you’ve got, in the groups think about the text you read and evaluate what you learnt. On the flip paper prepare an information poster about glass, including information from all 4 areas (A – D).

Tools for the activity (everything you need to take to the classroom): A1 paper for each group, markers of different colours, Annex 2 for expert groups/texts related to the topics: glass, glass separation, glass recycling, pencil, paper and pen for each child

Estimated time (max. 40 min.): 20 minutes

Notes: Before the lesson teacher prepares the information sources for Step 1. Ideas for where to find information are listed in Annex 2.

Activity No. 3

Part of the lesson: REFLECTION

The aim of the activity: To consolidate the knowledge, supporting the ability to express the ideas and present findings in the area of the impact of glass production on the environment.

STEP 1.

Brief description of the activity:

After getting the information about the theme of glass – separation - recycling – use and impact on the environment, children evaluate their knowledge by developing an information poster (A1 format). Each group presents their poster, provides arguments and possible solutions. Children discuss and evaluate actively.

Instruction (what you need to tell the students):

Present your posters.

Reply to the questions and discuss:

- Is glass separated in your village/town/surroundings and if so, how?
- What way of separation would you propose and how would you implement it, if you are not satisfied with current situation?
- Is recycling a must? Explain your opinion.
- How would you suggest to increase the public awareness of the protection of the environment?
- What packaging material do you prefer and why? Try to suggest other, new ways of packaging or improve the old ones.

Tools for the activity (everything you need to take to the classroom): A1 posters from the previous activity

Estimated time (max. 40 min.): 7 minutes

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Annex 1

Usual walk to the shop was different today. As soon as I got outside, I noticed the broken glass bottles next to the entrance doors. Accident or vandalism? The answer was clear. I played a watch dog and on the way I watched the people's behaviour toward the environment. Inconspicuously I watched the containers with glass – from one the mirror sticks up, into the next one young girl is putting the ceramic jug. I sadly nodded with my head. . . .

Annex 2

Information sources:

<http://www.gpi.org/recycling/why-recycle-glass>

<http://www.gpi.org/learn-about-glass>

<http://www.recycling-guide.org.uk/science-glass.html>

<https://saferenvironment.wordpress.com/2009/06/04/waste-glass-recycling-%E2%80%93-an-effective-way-to-save-energy-and-environment>

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