

# GREEN-EDU Learning Activity

Title: Me and My Environment

Author(s):

## Summary

The environment is the atmosphere in which people maintain relationship with other living and inanimate beings throughout their lives. Knowing the environment in which people live makes their daily life easier.

Our home is where we meet our basic needs such as nutrition and shelter. One of the environments where we spend our time throughout the day is our school. Here we meet our training needs. We spend time at the playgrounds on weekends in the remaining time from lessons.

As a result of our activities throughout the day, we generate many waste materials. For example, the rind of the fruit we eat and the box of the milk we drink are waste materials. We should not throw waste materials into the environment we live in randomly. Otherwise, we will cause environmental pollution. Recycling of garbage into new products reduces the amount of waste. Recycling also means saving energy and Money. Recycling ensures economical use of world resources. Many materials such as aluminum, glass, paper and plastic are recyclable.

### Lesson plan summary

|   |   |
|---|---|
| <b>Subject</b>  | <i>Green Engineering and Robotics</i>                                       |
| <b>Topic</b>  | <i>Proposes solutions by researching to protect the natural environment</i> |
| <b>Age of students</b>                                      | <i>Primary 8-10</i>   |
| <b>Preparation time</b>                                     | <i>30 Minutes</i>   |
| <b>Teaching time</b>  | <i>40 Minutes</i>   |
| <b>Online teaching material (links for online material)</b> | <a href="https://scratch.mit.edu/">https://scratch.mit.edu/</a>             |

Offline teaching  
material

Scratch  
TABLET

## Aim of the lesson

By the end of this lesson students will:

- 1) students recognize the environment they live in and identify the environmental problems that exist in their environment
- 2) understand the importance of recycling for the world.
- 3) learn to create games by coding through the Scratch program
- 4) produce and model STEM steps against an environmental pollution they detect around them.


## Trends

STE(A)M Learning / Collaborative Learning / Problem-based learning

## Activities

Describe here in detail all the activities during the lesson and the time they require. Remember, that your lesson plan needs to revolve around the topic of Green education and Robotics.

| Name of activity | Procedure   | Time   |
|------------------|---|--------|
| Engage-1         | <p>Teacher greets the students and says a day with lots of activities awaits them. S/he attracts the students' attention by having the animation "Human and Global Damages" watched. Teacher asks the students questions about the animation they watched.</p> <p><a href="https://www.youtube.com/watch?v=4Nbbra8eYB0">https://www.youtube.com/watch?v=4Nbbra8eYB0</a></p>   | 5 min  |
| Explore-1        | <p>After giving prior information, "WHICH YOU THINK?" activity papers are distributed to students. A discussion environment is created by taking thoughts and ideas about the activity papers from the students. Then the discussion is concluded with the class. Students are asked how to fight the pollution in the photos they see and answers are received.</p> <div data-bbox="424 983 1257 1794" style="text-align: center;"> <p>The pollution shown in the photo is just air pollution.</p> <p>In the photograph, there are air, water and soil pollution as environmental pollution.</p> <p>Misuse of the lands, water, coal, mines, lime, stone and sand quarries are an environmental problem.</p> <p>I think there are only air pollution and soil pollution as environmental problems in photography.</p> <p>In your opinion, Whoever said it is true, and Why?</p> </div> <p>"Which you think" activity questions:</p> <ol style="list-style-type: none"> <li>1. I agree with Candy, because:</li> <li>2. I agree with Hello kitty, because:</li> <li>3. I agree with Bambam and Çakıl, because:</li> <li>4. I agree with Bugs Bunny, because:</li> </ol> | 10 min |

|                           |   |               |
|---------------------------|---|---------------|
| <p><b>Explain-1</b></p>   | <p>In this section, students are asked to design an environmental pollution game from scratch. While designing the game;</p> <ul style="list-style-type: none"> <li>-There must be a score variable in the game</li> <li>-There must be pollution and waste in the game</li> <li>-The game must include minimum 3, maximum 7 wastes.</li> </ul> <p>Students design a game in accordance with the given limitations. They can get help from the teacher in the process.</p>  | <p>10 min</p> |
| <p><b>Elaborate-1</b></p> | <p>Students are asked to explain the game they have prepared. In general, students should have obtained a coding scheme as follows. There may be additions on it. While the students are explaining the game they prepared, the teacher gives feedback. Ideas are exchanged what can be done to improve the scheme.</p>  <p>NOTE: If students want the characters to perform similar movements, they should rewrite the coding scheme for each character they have determined.</p> <p>The subject can be deepened by sharing the information below with the students.</p> <p>It is important that the environment we live in is tidy and clean. Living things need soil, air and water to survive. Cars, factories and trashes emit various gases into the air. Inhaling these gases negatively affects the health of living things. Air and water pollution cause soil to be polluted. If other wastes reach rivers, lakes and oceans, it affects the balance of them. Everything in the environment should be in balance. When this balance is broken, environmental problems arise. Pollution is the primary environmental problem. People pollute the environment. People should also solve the environmental pollution.</p> | <p>15 min</p> |

## Assessment

Complete the concept map with the given words.

|                                      |                        |                             |
|--------------------------------------|------------------------|-----------------------------|
| Natural environment<br>living beings | garden                 | excretion                   |
| Artificial environment               | building               | nourishment                 |
| Forest                               | playground             | moving                      |
| Sea                                  | growth and development | getting alerts and reacting |
| Lake                                 | reproduction           | respiratory                 |

