

Keywords:

Sustainability, Urban Planning, Environmental Awareness, Teamwork, Creativity

Target group:

primary school pupils (ages 6-11)

Objective:

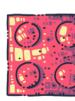
This activity aims to educate participants about the vital role of urban trees and green spaces in creating healthier, more sustainable cities. Through hands-on collaboration, it encourages teamwork and creativity as learners design solutions that integrate nature into urban environments. The experience fosters environmental awareness by highlighting real-world sustainability challenges while developing problem-solving skills. By working together to reimagine greener cities, participants cultivate a shared sense of responsibility toward their community and environment, empowering them to become active stewards of urban ecosystems.

General Guideline on Time Allocation:

The duration needed to carry out this activity may vary depending on the specific group of children. Teachers are encouraged to adapt the implementation according to the needs, interests, and dynamics of the group.

In the preparatory phase, teachers may use a variety of activities to introduce and contextualize the chosen topic. These can include discussions, videos, drawings, storytelling, or even a field trip, depending on the age and background knowledge of the children.

The main construction phase, during which children plan and build their urban element using LEGO bricks, should typically not exceed 45 to 60 minutes. However, this phase often stimulates further curiosity and questions among the children, potentially leading to extended engagement or follow-up activities. For more detailed instructions and pedagogical support on how to implement activities of INNO-kids project, please download the Teacher's Methodological Guide.







- LEGO bricks: Green pieces (trees, plants); Blue pieces (water features);
 Assorted colors (buildings, infrastructure)
- LEGO baseplates (for boulevard construction)
- Pre-made Disaster Cards (e.g., "Pollution," "Traffic," "Urban Heat")
- Additional LEGO pieces for solutions (recycling bins, bike lanes, solar panels)

Introduction:

Children will use LEGO bricks to create their section of a city boulevard, emphasizing sustainability. They'll face environmental challenges represented by Disaster Cards, prompting creative solutions.



Procedure:

Preparation

Explain the task: build a city boulevard section with LEGO bricks, focusing on sustainability.

Construction

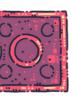
Kids have 20 minutes to build their boulevard section freely, incorporating elements like buildings, trees, and vehicles.

Details

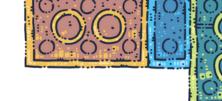
- Each child draws a Disaster Card, representing an environmental challenge (e.g., pollution, traffic).
- Problem-Solving:
 - Kids must find sustainable solutions to their assigned disaster without altering their original design.
 - Solutions could include adding recycling bins, planting trees, or creating bike lanes.

Building Solutions

 Children use additional LEGO bricks to implement their solutions, enhancing their boulevard design sustainably.







Discussion:

- Facilitate a discussion on urban sustainability, focusing on the importance of eco-friendly city planning.
- Encourage sharing of creative solutions and their impact on the environment and community.

Tips:

• Add "Secret Sustainability Stars" – hide 3-5 rare LEGO pieces (e.g., gold bricks, transparent tiles) in the brick bins. Tell kids: "Find a star piece to unlock a bonus eco-power for your boulevard!" When used, they must explain how it helps (ex.: "This clear tile is a solar panel!").

Additional Considerations:

Differentiation:

Provide additional support or simplified instructions for pupils who may require extra assistance. For advanced pupils, offer extension tasks such as researching further sustainable practices or designing more complex models.

Assessment:

Assess pupils based on their participation and engagement during discussions and hands-on activities. Evaluate the creativity, effort, collaboration, depth of understanding demonstrated in their models, critical thinking, ability to provide constructive feedback and presentation skills.

Curriculum Connections:

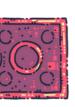
This activity integrates:

Environmental Education (ecological benefits of urban trees and green spaces, climate regulation, urban living)

Science and Technology (basic ecological and environmental science concepts; nature-based solutions)

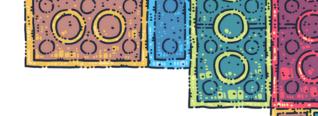
Citizenship and Social Development (awareness of collective responsibility; empathy and civic engagement)

Social Skills (teamwork, negotiation, and collaborative problem-solving)











- **SDG 11:** Sustainable Cities and Communities Pupils learn about the vital role of urban trees and green spaces in creating healthier, more sustainable cities, fostering a shared sense of responsibility toward their community and environment.
- **SDG 15:** Life on Land Pupils explore how integrating nature into urban environments through green spaces contributes to conserving and restoring terrestrial ecosystems and promoting biodiversity.



To find out more about the subject, see the following link

https://legolibrarian.com/2017/03/11/lego-challenge-disaster-island/



