

A decorative border made of colorful LEGO bricks in red, yellow, green, and blue, arranged in a stepped pattern around the edges of the page.

Abandoned house

Turning Abandoned Spaces into Sustainable Places

Keywords:

brownfield, regeneration, transformation, sustainability, reuse, urban planning, community

Target group:

primary school pupils (ages 6-11)

Objectives:

This activity introduces pupils to the concept of brownfields — abandoned, unused, or polluted areas that once had industrial or other purposes. Instead of leaving these places to decay, communities can reimagine them as green parks, schools, community centres, or eco-friendly homes. Pupils will learn about the causes and consequences of brownfields and then design and build their own model of a transformed space that is creative, inclusive, and environmentally sustainable. By the end of the activity, they will understand the importance of land reuse and community-focused planning.

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.

Materials and Resources Needed:



- LEGO bricks of various types
- Paper, markers, crayons, and coloured pencils, scissors and glue, recycled materials such as plastic bottles, bottle caps, or packaging
- Photos of real brownfields and successful redevelopment projects

Note: Encourage pupils to repurpose available materials creatively. If LEGO bricks are not available, pupils may use basic craft supplies to bring their ideas to life through drawings and handmade models.

Introduction:

Ask pupils: “Have you ever seen an empty building, an old factory, or a blocked-off lot with weeds?” Explain that these are often called brownfields — places that were used for work or storage but are now abandoned, sometimes polluted, and unsafe. Brownfields can feel sad, scary, or just forgotten — but they also offer amazing opportunities.

Show examples of brownfields that were transformed into something positive — parks, schools, libraries, wildflower meadows, or new homes. Pupils will now become urban designers who give a second life to a forgotten space.

Procedure:



Preparation

Introduce pupils to a specific scenario: “There is an old abandoned house at the edge of town. The windows are broken, the garden is overgrown, and no one has used it for many years. But the house still stands, and the small area around it has great potential. What could we do with this place?”

Show photos of similar real places. Discuss: What problems does this abandoned place create for the neighbourhood? Why do such places sometimes stay unused for a long time?

Then give pupils the design challenge:

Your group has been asked to redesign the abandoned house and its yard. You may not destroy the whole house — you must reuse part of the building and make the area around it into a meaningful place for the community or for nature.



Construction

Each group builds a complete model of the renewed site, including both the building and the surrounding area, as a single, meaningful, and connected space. The model should reflect how the site has been transformed into a place that serves people and nature.

Encourage groups to:

- Think of daily life in the space: Who comes? When? What do they do?
- Include LEGO figures, drawings, or natural materials to represent people, plants, and features
- Label key elements to make the vision understandable to visitors

Details

As groups construct their models, encourage them to think about the change:

- What from the original building was kept, and why?
- How is the place now more useful, greener, safer, or more welcoming?
- How do people interact here — and what feelings does it give?

They can add signs, lighting, decorations, benches, or shelters for animals.

Encourage diversity of users: is this a place for children, teenagers, older people, or a mix? Are there corners for quiet time, or shared meals?

Stories

Invite each group to imagine a person arriving at the renewed place for the first time. Answer questions like: “Who are they? Why did they come?” or “What do they feel or notice?” Stories can include people planting something, meeting someone, repairing a broken item, or just sitting under a tree that was once surrounded by trash.

Presentation

- Each group presents their model to the class, explaining the history of the brownfield, their idea for transformation, and what the space is used for now. They should reflect on how the change helped people, nature, or the climate.
- Encourage classmates to ask questions, share their thoughts, and suggest names for the newly transformed place.

Tips:

- Remind pupils that sometimes the best spaces are those that were once broken.
- Use prompts like: “What would make someone want to stay here?” or “How does your design respect the past while creating a better future?”



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.

Extension Activities:

- Explore real brownfields in the local area (safely, if possible). Invite an architect, urban planner, or environmental activist to speak.
- Pupils can write letters proposing ideas for neglected places in their town or draw “vision posters” to inspire community change.

Curriculum Connections:

This activity integrates:

Science (*sustainability, biodiversity, water and energy in urban spaces*)

Social Studies (*responsibility, community involvement, empathy*)

Art (*design, creativity, construction*)

Language (*storytelling, discussion, presentation skills*)

SDG Connections:

- **SDG 11:** Sustainable Cities and Communities – Pupils transform abandoned spaces into inclusive, green, and community-oriented places.
- **SDG 12:** Responsible Consumption and Production – Pupils learn to reuse buildings and materials instead of creating new waste.
- **SDG 13:** Climate Action – Pupils reflect on how land reuse reduces emissions and helps cities adapt to climate change.
- **SDG 15:** Life on Land – Pupils design spaces that support urban biodiversity and human-nature coexistence.