

Swimming Pool

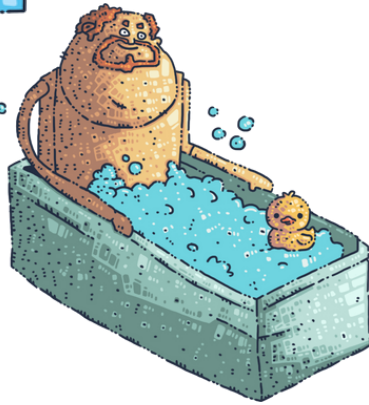
Inclusive and Eco-Friendly Community Space

Keywords:

swimming pool, sustainability, water, accessibility, inclusion, energy, relaxation, circular design

Target group:

primary school pupils (ages 6-11)



Objectives:

This activity challenges pupils to reimagine what a covered swimming pool can be. Rather than just a place to swim, the new design must be a sustainable, inclusive, and welcoming community space. Pupils will create a model of a swimming pool complex that includes functional swimming zones, changing rooms, social and relaxation areas, and surrounding outdoor space.

They will be encouraged to think about accessibility, energy and water efficiency, waste reduction, and how the environment can support health, wellbeing, and community connections. By the end of the activity, pupils will understand how architecture and thoughtful design contribute to both environmental and social sustainability.

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
- Labels and signs: "Swimming Pool", "Changing Room", "Bike Parking", "Green Roof", "Tea and Lemonade Bar"
- Photos of sustainable swimming pools and eco-friendly buildings

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:

Begin with a simple question: "What should a swimming pool look like in the future?" Many pupils will mention water and fun — but help them go deeper. Explain that they will design a covered swimming pool that is friendly to both people and the planet.


Ask pupils:

- Who should be able to use a swimming pool?
- How can it be more than just a place to swim?
- How can we use less energy?
- How can we make it feel calm, clean, and welcoming?

Present a real-life scenario: An old swimming pool in the town has closed. The community needs a new place for swimming, relaxing, and connecting. Pupils are the designers of a brand-new swimming complex that will be used by children, families, athletes, elders, and people with disabilities.

Procedure:

Preparation



Groups brainstorm what the site should include. Each group will create a full model of the swimming pool complex, including the building and surrounding area. They plan:

- Main pool zones (recreational, sports, children's, or therapy pool)
- Changing rooms and showers – with accessible options
- Relaxation area – benches, greenery, and quiet places
- Eco-friendly refreshment kiosk – serving tea, homemade lemonade, and snacks, with no plastic use
- Reception and entrance area
- Bike parking, green roof, solar panels, energy-saving lights, use of natural and recycled materials



Construction

Each group builds a complete model of the swimming pool complex, using LEGO, recycled, and natural materials. During construction, pupils:

- Make sure that each space is connected and accessible — are pathways clear? Can all visitors move comfortably through the building and outdoor area?
- Adjust their ideas when necessary — some parts may be harder to build than imagined, or they may discover better placement for features like bike parking or the refreshment area
- Think about flow and orientation — how do visitors enter, move through, and exit the space? Is the building inviting and welcoming?

Details

Once the basic structure of the swimming pool complex is complete, pupils shift their attention to the fine details that make the space feel real, thoughtful, and welcoming.

Encourage pupils to walk through their model — mentally or with a small figure — and reflect:

- What does a visitor see, hear, or feel in each zone?
- Are there signs that help people navigate with ease?
- Are there places to rest, or corners to dry off and chat?

Support the inclusion of elements like wheelchair ramps, multilingual signage, refill stations, and natural light design. Details like plants in the relaxation area, ceramic cups in the refreshment bar, or solar panel placements all help bring the design to life.

Stories

Invite each group to create a short story of someone visiting the new pool. Maybe a child learns to swim, an elder meets a friend, or a family enjoys a time together.

Presentation

Each group presents their swimming pool complex to the class. They walk the audience through each zone, explain the sustainable features, and reflect on how their design supports health, community, and the environment.

Tips:

Encourage pupils to think like users, not just builders. Use guiding questions such as “Would you enjoy coming here every week?”, “Is this place comfortable for someone with a stroller or wheelchair? or “How does your design save energy and water?”



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:

- Visit a local pool and evaluate it based on sustainability and inclusion
- Explore water-saving and energy-efficient technologies in public buildings

Curriculum

Connections:

This activity integrates:

Science (*sustainability, energy use*)

Social Studies (*inclusion, public space, community care*)

Art (*design, creativity, construction*)

Language (*storytelling, discussion, presentation skills*)

Physical Education (*wellbeing, movement, safety*)

SDG Connections:

- **SDG 3:** Good Health and Well-being – Pupils design a place that supports physical and mental health for all.
- **SDG 6:** Clean Water and Sanitation – Pupils reflect on water reuse and conservation in the design of the pool.
- **SDG 11:** Sustainable Cities and Communities – Pupils create a public space that is inclusive, accessible, and community-focused.
- **SDG 12:** Responsible Consumption and Production – Pupils prioritise materials and operations that reduce waste and avoid plastics.
- **SDG 13:** Climate Action – Pupils include green roofs, solar panels, and energy-saving strategies in their design.



Co-funded by
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