Park

Nature's Playground - Our Community Bio-Park

Keywords:

park, biodiversity, sustainability, community, design, nature

Target group:

primary school pupils (ages 6-11)

Objectives:

This activity introduces pupils to the concept of biodiversity and sustainable land use through the design of a community bio-park. Pupils will explore how natural spaces can support both people and ecosystems, learning to identify the key features of a park that fosters biodiversity, such as diverse habitats, native species, and environmentally friendly infrastructure. Through collaboration, creative problem-solving, and model creation, pupils will develop a deeper understanding of the balance between human enjoyment and environmental responsibility. By the end of the activity, pupils will be able to explain why biodiversity is important, and design a park that protects and supports local 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.

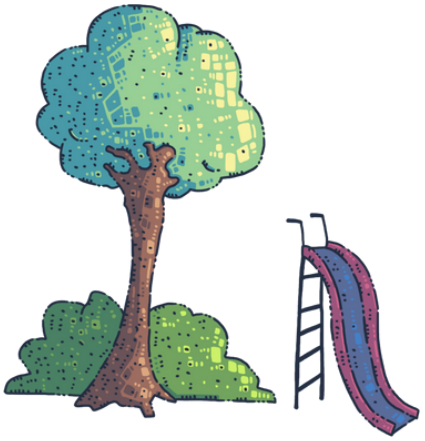
Materials and Resources Needed:

- Large sheets of paper (for sketching the layout of the park)
- Markers, crayons, and coloured pencils (for drawing and labelling park features)
- Scissors and glue (for assembling 2D or 3D design elements)
- Recycled materials such as cardboard, plastic bottles, bottle caps, or boxes (for building trees, benches, signs, and other park features)
- Pictures of different types of parks, nature reserves, and ecosystems (to inspire park design and support biodiversity discussions)
- Books or printed resources about local plants and animals (to guide habitat planning and species selection)
- LEGO bricks or other building blocks (optional – for creating a 3D model of the bio-park)

Note: Encourage pupils to combine natural and recycled materials creatively when designing their park. If building blocks are not available, paper-based and handmade models can fully support the learning experience.

Introduction:

Start the activity by discussing the role of parks and green spaces in communities. Ask pupils to share their own experiences — what they enjoy doing in local parks and what they notice about nature when they visit these spaces. Use this as a springboard to introduce the concept of biodiversity — the variety of life found in a particular area — and why it is important for people, animals, and the health of our planet. Show pictures of different ecosystems, such as forests, meadows, wetlands, or gardens, and discuss what types of plants and animals might live there.



Procedure:

Preparation:

Divide pupils into small groups of three to four members. Begin by brainstorming ideas about what makes a park special — not only for people, but also for plants and animals. Discuss the types of habitats that can exist within a park, such as ponds, wildflower meadows, forested areas, or open grassy spaces. Introduce the concept of sustainable land use, focusing on how parks can be designed in a way that protects the environment while still being welcoming for visitors.

Construction:
Provide each group with paper, art supplies, and recycled materials. Challenge them to design and construct a model of their ideal community bio-park. Their designs should include a variety of habitats, such as:

- Forest areas for shade and animal shelter
- Wildflower meadows to support pollinators
- Ponds or wetland zones for aquatic life
- Green open spaces for rest and recreation

In addition, encourage pupils to incorporate sustainable features like:

- Composting areas or waste separation bins
- Nature trails with signs about local species
- Water-saving systems or rain gardens
- Natural materials used for paths and seating areas
- Quiet zones for wildlife observation

Details:
As pupils work on their designs, circulate among the groups to ask guiding questions such as: How does your park protect biodiversity? What can people do here that doesn't disturb animals or plants? How do you handle waste or water use in your park? Encourage pupils to include small details in their model — like birdwatching spots, butterfly gardens, shaded rest areas, or bridges over wetlands — that show how nature and people can coexist.

Stories:
Encourage pupils to create short stories set in the park they designed. The stories can follow a visitor exploring different parts of the bio-park, a family enjoying a picnic, or even an animal living in one of the park's habitats. Pupils might describe a day in the life of a hedgehog finding shelter, a butterfly discovering new wildflowers, or a child spotting birds from a wooden observation tower. Storytelling helps pupils reflect on the interactions between humans and nature and strengthens their understanding of the park's sustainable features.

Presentation:
Invite each group to present their community bio-park model. Pupils should describe the key design features of their park, focusing on how these support biodiversity, sustainability, and enjoyable use by the public. Encourage them to explain their choices—for example, why they included certain habitats, how they managed water or waste, and what types of animals or plants their park protects. After each presentation, open the floor for questions, compliments, or suggestions from classmates.

Tips:

- Make the activity relatable by connecting it to pupils' own experiences in parks and natural spaces.
- Provide a wide range of materials and visuals to inspire creative thinking.
- Remind pupils to consider all park users, including wildlife, children, older people, and people with disabilities, when designing their space.

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:
Plan a visit to a local park, nature trail, or botanical garden where pupils can observe biodiversity and eco-friendly park features firsthand. Invite a guest speaker from a local environmental organisation or city planning department to share insights about park design.

Curriculum Connections:

This activity integrates:
Science *(ecosystems, biodiversity, impact of human activities on natural areas)*
Social Studies *(community planning, sustainable development, public spaces, civic engagement)*
Language *(oral communication, storytelling, and listening skills)*
Arts *(creativity, spatial reasoning, and model construction)*

SDG Connections:

- **SDG 11:** Sustainable Cities and Communities – Pupils design public spaces that support well-being and ecological balance in urban settings.
- **SDG 13:** Climate Action – The activity encourages low-impact land use and explores how green spaces help mitigate climate-related effects.
- **SDG 15:** Life on Land – Pupils gain an appreciation for biodiversity and learn how to protect natural habitats within built environments.

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