

Bee Garden

Creating a Pollinator Haven

Keywords:

pollination, bees, habitat, biodiversity, ecosystem, sustainability

Target group:

primary school pupils
(ages 6-11)

Objectives:

This activity introduces pupils to the essential role of bees in pollination and biodiversity. Through hands-on construction of a LEGO bee garden, pupils explore how pollinators support ecosystems and food production. The activity also encourages creative thinking, teamwork, and awareness of the impact human actions have on nature.

By the end of the activity, pupils will understand the importance of pollinators, be able to identify bee-friendly plants and habitats, and design their own model garden that supports biodiversity and 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 sizes and colours (for building flowers, plants, bees, and garden structures)
- Images of different gardens, flowers and a beehives with their internal structure (for inspiration)
- Access to research materials (optional – printed resources or internet-enabled devices)
- Paper, markers, crayons, and coloured pencils, scissors and glue, recycled materials such as cardboard, plastic bottles, bottle caps, or packaging

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 discussion about bees: What do bees do? Why are they important? Explain that bees are pollinators—they help plants grow, reproduce, and produce fruits and vegetables we eat. Introduce the idea of a bee garden: a place with flowers and plants chosen to attract and support bees. Emphasise that helping pollinators helps the entire ecosystem. Show photos or videos of bees at work.

Procedure:

Preparation

Explain that each group will design a LEGO bee garden to attract and support bees. Begin with a short brainstorming session using visual materials. Ask: What kinds of flowers do bees like? Where can bees find water or shelter? Introduce the concept of native plants and how they support local pollinators.



Construction

Divide pupils into groups. Provide LEGO bricks and other materials and let each group build their garden based on their plans. Encourage them to include:

- Colourful flowers of different shapes
- Green spaces with trees or shrubs
- Water sources such as mini ponds or dew collectors
- Bees, butterflies, or other pollinators



Details

As pupils build, encourage them to think about what makes their garden welcoming for bees: Is it colourful? Does it have places to rest or hide? Are the flowers grouped in patches? Support them in labelling plant types or writing simple descriptions of their garden features.

Stories

Invite pupils to create a story or scenario set in their bee garden. The main character might be a curious bee discovering a new patch of flowers, a child planting seeds with a grandparent, or a community working together to help pollinators. Stories can include challenges (e.g. lack of flowers, pesticides) and how their garden helps solve them.

Presentation

Ask each group to present their bee garden to the class. Pupils should describe the features they included, why they chose certain plants, and how their design supports bees and biodiversity. Encourage other pupils to ask questions and give compliments. Display the gardens together to create a colourful classroom pollinator exhibition.

Tips:

- Encourage pupils to think like both designers and bees — what would make the garden attractive, safe, and full of resources?
- Use real photos or short videos of blooming gardens and pollinator-friendly spaces to inspire imagination.
- Guide pupils with questions such as “Where would a bee land first?” or “What makes this garden helpful all year round?”
- Remind pupils that bees are small, but their role in nature is huge — and that even a tiny garden can make a big difference.

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:

- Connect the LEGO garden to a real school gardening project, organise a visit to a botanical garden, or start a “bee-friendly badge” programme where pupils identify plants that support pollinators.
- Pupils can also create posters or videos encouraging their community to plant flowers for bees.

Curriculum Connections:

This activity integrates:

Science (*ecosystems, life cycles, plant-pollinator relationships, and biodiversity*)

Geography (*habitats, local plants, and how humans shape the environment*)

Art (*design, creativity, construction*)

Language (*storytelling, discussion, presentation skills*)

SDG Connections:

- **SDG 4:** Quality Education – Learning through hands-on, inclusive, and engaging activities.
- **SDG 11:** Sustainable Cities and Communities – Pupils contribute to greener, healthier communities.
- **SDG 15:** Life on Land – Pupils protect and restore biodiversity through pollinator support.