

# "From seed to meal" - creating a green garden

**1****Overall aims:**

- observing how soil pH can affect plant growth and development
- developing the responsibility for plants
- learning about the factors needed for plant development
- enriching the knowledge on growing selected plants
- developing healthy eating habits
- use of cultivated vegetables in food preparation - preventing food waste and storing food.

**2****Vocabulary - keywords**

Soil, soil ph, green garden, healthy eating habits

**3****Sustainable abilities developed**

- Strategic competency
- Anticipatory competency
- System thinking

**4****Pillars of sustainability included**

- socio-cultural
- ecological
- economical

**5****STEAM domains**

S, E, A, T

**6****Teaching methodologies/activity outline****Introduction** - listening to M. Kownacka's story "A garden on the window"**Didactic game:** "What is needed in the garden?"

The teacher hid various gardening (planting and sowing) utensils in the room. Children try to find these items and bring them to the table. After finding the items, the children and the teacher discuss the names of the items and what they are for. They also retrieve from m the conditions plants need to grow.



**Setting up a garden in a classroom corner** - preparing pots with soil that is close to neutral, slightly acidic and alkaline. Planting onions, tomatoes and oats to each of them. Marking the pots. Establishing an observation diary - drawing the successive stages of the work performed during the gardening and during the phases of plant development.

**Follow-up after harvesting:** When the cultivation is complete, you can organize a plant display and showcase of the observation diaries. The diary may include a recipe for a dish of cultivated vegetables that children create at home with their parents.

**The "Flower" game with the use of relaxing music.**

Imagine that you are a flower that grows upwards, but when it is too hot it starts to wilt and bend down to the ground. Night comes, the flower gains strength, and in the morning it blooms again, growing towards the sun.

## 7 Expected learning outcomes

**The child will be able to:**

- explain how soil pH can affect plant growth and development
- give examples of plants and their soil pH requirements
- list the factors needed for plant development
- conduct simple plant breeding
- observe the growth of plants and present it in the form of a drawing
- know how to use the cultivated vegetables in a healthy diet.

## 8 Assessment

Summary interview:

- What have I learned?
- What do I already know?
- What can I do?

## 9 Equipment and materials to be used in learning unit (tools, ingredients etc)

- The text of the short story by M. Kownacka, "A garden on the window", gardening tools and accessories, pots, neutral, slightly acidic and alkaline soil, onions and seeds



<b>10</b>	<p><b>Kind of setting - lab, kitchen, outdoor etc.</b></p> <p>classroom, preschool garden</p>
<b>11</b>	<p><b>References - source:</b></p> <p><a href="https://gminaoswiecim.pl/mfiles/2898/28/0/z/Wiosenne_wierszyki.pdf">https://gminaoswiecim.pl/mfiles/2898/28/0/z/Wiosenne_wierszyki.pdf</a></p> <p><a href="https://www.youtube.com/watch?v=E7BGg3aHu08">https://www.youtube.com/watch?v=E7BGg3aHu08</a></p> <p>"Chrumas's team: Chrumas and friends set up gardens" - the film shows how to easily set up a garden and what is necessary to carry out these activities</p>

### Annex 1. M. Kownacka's short story "A little garden on the window"

Winter has already bothered everyone. Everyone yearns for warmth and greenery. The children said to themselves: - We plant the first greens in the box. Tomorrow we will sow tomatoes and cress seeds, plant chives and parsley. (...) The next morning, the children put watercress seeds into a jar and poured it with warm water. They sowed tomatoes into boxes and pots lined with shells and filled with earth and covered them with glass - so that the earth would not dry out. (...) The duty officers watered the soil diligently in boxes and pots. First, watercress began to sprout. (...) The chives, onions and parsley turned green quickly, and the tomatoes started to emerge after eight days. (...)

