KIDS BUILD THEIR KNOWLEDGE AND SKILLS ABOUT THE WORLD THROUGH STEAM

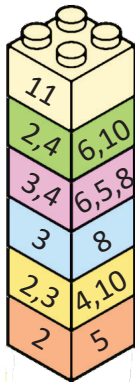
Topic: **An Organic Garden**

Resources: For each team: a large green plate; brown bricks; four different types of vegetable/fruit; seed brick; watering can; sun brick; cloud brick; tractor; two trailers.

- For the whole group: two large empty boxes for collecting fruit and vegetables.

C-2

Funded by the European Union

Activities:

1. The teacher distributes the resources to the teams and explains the topic of the lesson - growing plants in a natural environment for food.
2. The teacher, involving the children, explains the conditions necessary for plant development - cultivated soil, water, heat and light. The children must show which of the construction elements they have they will use to recreate these conditions.
3. The teacher discusses with the children how to simulate the cultivation of the soil: the children drive tractor across the green plate to simulate ploughing the land. They represent the ploughed soil with the brown bricks, which are arranged in a line as seedbed.
4. The teacher asks: "What must we sow in the soil for a plant to sprout?" (The children answer. Then they 'plant' seeds in the beds by 'sowing' with the seed block, after which they water them with the watering can)
5. The teacher explains that the first stage of a plant's development is its appearance above the soil, like a small green leaf. The children recreate this stage using green leaf elements, which they place in the beds.
6. The teacher asks the children to imagine the passage of time.
7. The teacher explains that the children should recreate the next stages in the development of plants, step by step. They will alternate periods of sun and rain and simulate the growth of the plants. The children do this.
8. The teacher asks each team, in whose gardens there are now vegetables or fruit ready for harvest, to attach a trailer to the tractor. They will begin transporting their produce to the 'warehouse' to store them. (The warehouses are two large boxes - one for fruit, the other for vegetables.)
9. When the vegetables and fruit from all the gardens are stored in the boxes, the teacher starts a discussion. The children from each team say what vegetables or fruit they grew, which ones 'ripened' faster and which needed more time. The teacher's questions will include: "What would happen to the plants in your garden if you didn't water them or if it didn't rain?"; "What would happen to them if the weather was always cloudy and rainy with no sunshine?"
10. The teacher congratulates all the teams on successfully growing their plants. They took good care of them and provided them with the necessary conditions for healthy growth.