Giving the second life to the waste. A watering can from a recycled bottle

1	**Overall aims:** ● Raising awareness about the possibilities of reusing/ recycling of things and the wise use of what nature offers ● Developing fine motor skills ● Developing awareness of the beauty of the surrounding nature
2	**Vocabulary - keywords** reclaim, renew, design, reuse, recycle, rainwater, water, watering can
3	**Sustainable abilities developed** ● System thinking competency ● Anticipatory competency ● Strategic competency ● Collaboration competency ● Critical thinking competency ● Integrated problem solving competency
4	**Pillars of sustainability included** ● ecological ● social ● economical
5	**STEAM domains** S, T, E

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6 Teaching methodologies/activity outline

1. **Conversation about garbage:**
   - How much garbage do humans produce?
   - How can we reuse items again?
   - Have you ever reused / recycled things in a new and interesting way? If so, what did you do?
   - Explaining to children that a plastic bottle decomposes for a very long time (for 400-1000 years) which is why it is important to segregate garbage or, if possible, reuse plastic waste.

2. **Watching educational movie:** "Respect water, save nature, part 1" (from the beginning to 2:20) about rainwater. Overview of the information contained in the video (what is a rainwater? What is it used for?)

3. **Creating a watering can from recycled bottle**
   - Each child has a half-litre plastic bottle in front of them.
   - At the bottom of the bottle, children make 3 holes under the supervision of the teacher.
   - Children fill the bottle with water independently and test how it works ● The teacher explains that in order for the watering can to work, it is necessary to: fill the bottle with water (the other person helps by plugging the holes so that the water does not spill out), close it. When it is closed, make sure that water does not spill out of it. Then you should gradually unscrew the bottle and notice that the water pours out more and more.
   - Children can decorate the finished watering can with waterproof materials **4.**

Going out to the garden to water strawberries seedlings planted the previous day.

7 Expected learning outcomes

The child will be able to:

- Explain how much garbage humans produce and how long it takes to decompose
- Make a watering can from a reused plastic bottle
- Explain in his own words how a watering can made of a plastic bottle works ● Explain how a watering can helps regenerate nature's natural system

8 Assessment

Children rate of what they liked the most using a feeling thermometer

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9	**Equipment and materials to be used in learning unit (tools, ingredients etc)** a plastic bottle with a screw cap for each child; nail or screw; rainwater; plants in the nursery garden; educational movie about rainwater usage; computer with internet access; artistic, waterproofed materials for decorating the watering can
10	**Kind of setting - lab, kitchen, outdoor etc.** Classroom and preschool garden
11	**References - source:** • educational movie - instruction for making a watering can from recycled plastic bottle - https://www.youtube.com/watch?v=gj8-9goOLVU (from 0:23 to 0:44) • educational movie about rainwater - https://www.youtube.com/watch?v=9eGl_6Q3zSs (from the beginning till 2:20)
12	**Autorzy** • Paulina Chudyba, Marta Graca
13	**Mentor** dr Katarzyna Szewczuk

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