

Title: We wash our hands like a robot.

Educational level: Early Childhood Education (3, 4 and 5 y.o.).

Curricular areas: Interdisciplinar.

Timing: 3 session of 45 minutes each (any term)



Summary

This activity is designed for preschool students to develop one of the pillars of computational thinking: sequencing. Through reflection and group work, children will identify and decompose routine tasks into sequential steps. This approach promotes skills such as logic, problem-solving, creativity, and collaborative work from an early age. Additionally, it will be carried out using ARASAAC pictograms, aiming for Universal Design for Learning.



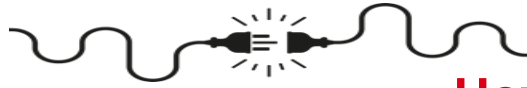
Aims



- Develop computational thinking in students by decomposing and sequencing everyday tasks, fostering skills such as logic and problem-solving from an early age.
- Promote collaborative work and creativity through group reflection, helping children understand and abstract routine processes into sequential steps.

Key competencies to develop: Mathematical and creative competences and competence in Science, Technology, and Engineering.





How do we do it?

Session 1:

1. Introduction and reflection:

The teacher will begin by encouraging students to reflect on how they perform certain daily tasks. Through this reflection, students will realize that they usually carry out these tasks by following specific steps in a particular order, even if they do so unconsciously.

For example, when washing their hands, what steps do they follow and in what order?

2. Identification of the steps:

The teacher will write down on the board the steps that the students indicate. The teacher may also choose a student to write or draw the steps. The steps for washing hands could be as follows:

1. I wet my hands with water.
2. I grab the soap.
3. I lather my hands.
4. I rinse my hands with plenty of water.
5. I dry my hands with a towel.

Session 2:

3. Discussion and correction

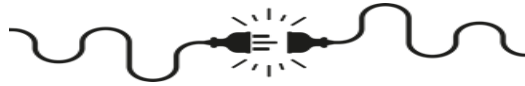
Once the sequence of steps is noted, the group will discuss whether it is correct, whether they would add or remove any steps, or if they would change the order. This fosters critical thinking and collaboration among the students.

4. Physical Execution of the Sequence

After reaching a consensus, the children can physically enact the sequence of steps, simulating being robots that follow a set of instructions or codes. This way, they can check whether the sequence is correct or if it needs adjustments.



Unplugged Activity



5. Abstract Execution of the Sequence

Using a worksheet made with ARASAAC-style pictograms, students will individually color, cut out, and paste the sequence in the correct order.

Additionally, we will have the same worksheet laminated, and with the help of Velcro, students can perform the sequence as many times as necessary. This material can be placed in different areas of the classroom, such as logical-mathematics, puzzles, or a specific hygiene corner, etc.

6. Final Reflection

The teacher and students will verbalize what they have accomplished with the activity. It will be emphasized how they have decomposed a larger task (washing hands) into small, simple steps that, when followed in the correct order, allow them to complete the task without issues.

Suggestions

To adapt the activity to different ages and skill levels, simply adjust the number of steps in the sequence.

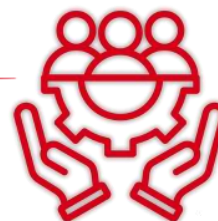
Other sequences related to hygiene and personal care, such as brushing teeth, or from other areas like rules for borrowing a book from the library or using glue sticks, can also be practiced.

It is useful to incorporate ARASAAC pictograms, as they are the standard for working with students with special educational needs (ACNEAE) and support Universal Design for Learning (UDL).





- **Human:** Teacher.
- **Material:** Worksheet, ARADSAAC pictograms.

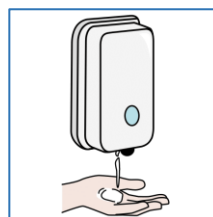
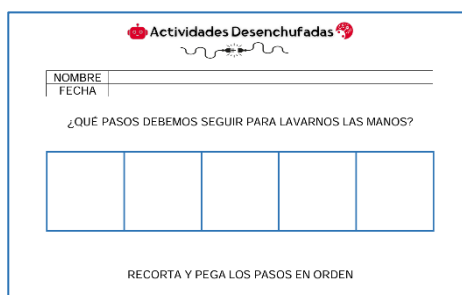
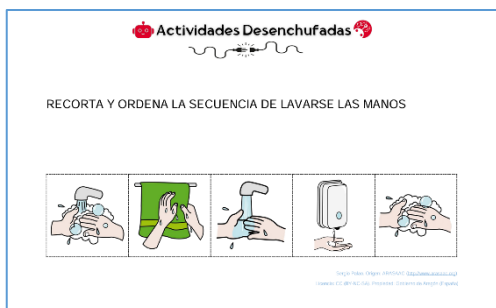


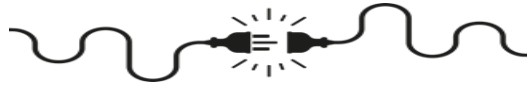
Spaces: Classroom.

Type of activity: Unplugged activity. Big and small groups.



- [Individual worksheet.](#)
- [ARASAAC pictograms.](#)



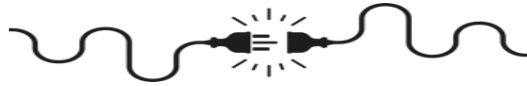


What have we learned?

Texto:

Assessment Criteria			
Identify the logical steps in a sequence			
Actively participate in collaborative work			
Correct and adjust the sequence when necessary			
Complete the sequence correctly on the worksheet			





Computational Thinking

Algorithms (steps and rules): is a step-by-step process that solves a problem or completes a task.

Decomposition (breaking down into smaller parts): breaking down problems into smaller and more manageable parts, which are easier to understand and solve.



More information

QR codes to the activity resources:



Sequence worksheet



ARASAAC website