

4TH, 5TH AND 6TH YEAR PRIMARY SCHOOL

Who is polluting the water?

Environmental awareness activities.
Sanitation

Canaleduca



Introduction

More and more people are becoming aware of the **solid waste** that pollutes our water, particularly the problem that, for some time now, has been causing what we call **emerging waste**.

What is this waste? This group includes wet wipes, cotton buds, leftover food, medicines, fats and oils.

To raise awareness and to work on how to dispose of this waste properly, at Canal Gestión we have created the character of Matilda, an inquisitive and likeable girl who, at only 5 years of age, is able to instil greater environmental awareness in both adults and children.

At Canal Educa we have designed this activity —in which both your students and Matilda play leading roles— so that you can work on how to **manage this waste correctly**, especially the waste generated in children’s daily lives.

What does it involve?

We have designed a **hands-on, experimental activity** for you to do in the classroom that encourages the students to think and stimulates their curiosity, while encouraging their active involvement as part of the solution.

What information will you find?

- Type of activity
- Brief description of the activity
- Objective
- Contents developed
- Duration of the activity
- Materials required
- Instructions for the activity
- Suggestions or ideas
- Printable material and links for downloading

Who is polluting the water? Name: _____ Class: _____

Monitoring the experiment

BEHAVIOUR IN WATER OF _____

Does it completely dissolve? _____

Does it break down into smaller pieces? _____

Does it stain the water? _____


Do you think that it will have dissolved in 30 minutes? _____

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Introduction



Do you want more?

If you want to see Matilda in action, and learn her secrets in the fight against wet wipes first-hand, take a look at this fun [video](#). 

Share it with your students!

You also have access to educational posters that you can put up in your school or distribute amongst your peers at www.sumatealretodelagua.com or by clicking [here](#).

4TH, 5TH AND 6TH YEAR PRIMARY SCHOOL

Who is polluting the water?

Activity worksheet



60 minutes



What are you going to do?

Matilda, the curious girl in charge of putting an end to wet wipe blockages once and for all, will invite your students to find out how this waste behaves in the water and the problems that they are causing.

To do this, the students will become quality technicians in a laboratory and, in groups, will conduct experiments to analyse the different properties of each type of waste and to see how they react in contact with water.

Objectives

- Understand what happens to common everyday waste in water.
- Understand the problems caused by this waste if not properly managed.
- Develop analytical skills.
- Acquire responsible water use habits.

Contents

- Types of solid waste.
- Proper management of solid waste.

Materials you will need

- Images of the stages of the integrated water cycle.
- Photos or Images: Problems.
- Printout: Monitoring the experiment.
- 20 1-litre plastic bottles (to simulate the pipes)
- Pollutants: toilet paper, sugar, wet wipes, cotton, cloth, plaster, cotton bud, chewing gum, tissue and leftover food (lettuce, rice, etc.)
- Washing-up bowl or bucket.
- Printout: Poster.

How to do the activity

- 1 Introduce Matilda and the problems caused by inadequate management of solid waste in homes and schools.
- 2 Next, ask your students various questions to gauge their knowledge on the subject: Where does our tap water come from? What do we call the water that you can drink? What facilities do we need to have clean water? And drinking water?
- 3 Project the images of the different facilities of the integrated water cycle. Ask them to order them correctly.
 - Images of the integrated water cycle.
- 4 Teach or project one by one the images of the different *Problems* caused by different types of waste. Your students have to decide at what stage of the integrated water cycle each of the problems occurs: in the drains, pipes, sewers, treatment plant, etc.
 - Images of *Problems*.

- 5 Now for your students to become quality technicians in a laboratory. Form 4 or 5 groups. Give each group 2 types of waste, 2 half bottles and 2 *Monitoring the experiment* printouts.
 - *Monitoring the experiment* printouts.
- 6 Each group should put one waste sample in each half bottle and analyse its behaviour using the monitoring sheets. Then you can compare the results.
- 7 Finally, they have to join all the plastic bottles to form a longer “pipe”. In it they should introduce the different types of waste (toilet paper, wipes, oil, cloth, cotton, cotton buds, food scraps, etc.). and a little water

Now place the pipe, closed at both ends, over the bowl or bucket and tilt it slightly. Take the lid off at the top end and, while you pour water into it, take the lid off at the bottom end. What happens? What type



of waste makes it more difficult for the water to pass through the pipe? What is the solution so that this waste does not reach the pipes in the first place?

- 8 To conclude, the students should make a poster showing which types of waste can be flushed down the toilet and which must be thrown in the bin to prevent pollution. They can hang it in the school bathroom for the rest of their classmates to read it. ([We have provided a sample poster](#)).

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