

# My Water Footprint



## Subjects

Earth Science

## Topics

Sustainability Water Consumption

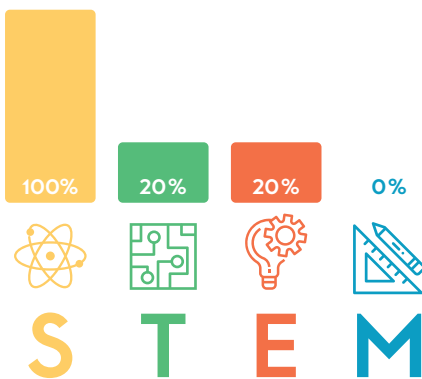
## Key Words

Water Usage Sanitation

## Connection to SDG



## STEM Chart



## Time for Activity

## Completion within a week

Campaigning could take longer. It is possible to connect the research-project to other topics and activities to make it bigger (like the topic of embodied water, other related resources, local implications etc.)

## Key Objectives

- 1 To raise awareness of water usage in our household and within the family and what are the main contributors to this. The goal is to reduce water usage in the participants' daily life, integrate one's own behaviour and living standards into a bigger picture, starting from small and going big. They can initiate campaigns to spread the word among their immediate peers. On a playful note, challenges can be organized to see who proves best at using and reusing.

## Guiding Questions

- 1 What do we need water for?
- 2 Where do we use water?
- 3 Where does the water come from?
- 4 How much use do you think you actually use in one day?
- 5 How much do you estimate water is used in your vicinity?
- 6 How do we use water – do we take full advantage of it or does it go right into the drain?
- 7 How could we take better advantage of the water we use and how can we reduce our water consumption?
- 8 Why should we care?

## Research Guiding Questions

- 1 How do could you approach this research? What resources, instruments etc. do you have at hand?
- 2 What do you expect – considering your water consumption, considering the outcome of your actions?
- 3 What do you observe?
- 4 What works? What does not work? How could you adapt your strategy?
- 5 Do you observe any changes?



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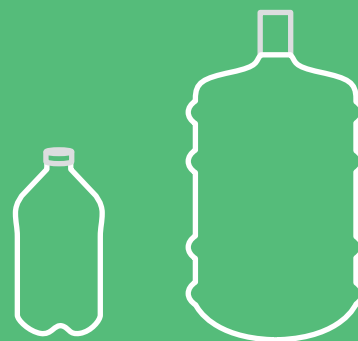
- 6 What do you consider surprising? What did you learn? What changes will you maintain?
- 7 What would you like to tell other people? (Tell your story)
- 8 What should be changed on a bigger level (your community etc.) to support reduction of water use – who could you address to do so?

## Materials

Before the start of the project, facilitators are asked to adapt the guiding questions to their group and to set up a time frame. Furthermore, they should provide contact information of local authorities and decision makers to be provided to the participants. Finally, the communication channels should be clarified: What media channels should be used to document and report and for feedback, what media platforms should be used for campaigning? (This should be according to local school policy/restrictions regarding media use and photos/videos of participants; mind age restrictions for the use of social media platforms).

There is not much needed for the project: You should find some way to measure your water consumption – this could be done using different types of containers – a measure cup (litres) or a scale etc. During the project you might come up with ideas to change your water consumption habits that might require different material. If you can access your family's water metre, this could help but is not necessary. For documentation and communication purposes you would need internet connection, some device to take notes and maybe take photos or make a short video.

- 1 Construction of a measuring device to check on daily consumption (large water containers commonly found in supermarkets and local stores can be adapted and well serve that purpose)



6-litre bottle

20-litre bottle

- 2 Tagging and recording based on observation and data entry of water leaking, loss or eventual lower water pressure, among others.
- 3 Inventory of water and used devices:
  - a Actual uses of water in the household: identification of plausible strategies towards planning of water-saving schemes.
  - b Consumption and measurement: to be carried out in the participant's domestic environment within a specific time frame. This is to be implemented by means of standardized values.



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- c** Quantification and Comparison regarding the output of water flow.
- d** Listing of observed water measurement in view of reducing water consumption and redirection of this resource. This is to pave the way toward reduction of water footprint within the family household and by extension the community, where the participants carry out this project.

## Tasks

This project is mainly a self-conducted small-scale research which can be integrated into a bigger campaigning action. It is planned to work in a distance learning setting. The facilitator takes the role of an advisor and provides feedback while leaving much of the planning to the participants.

The participants receive a catalogue of guiding questions and a time frame. Feedback should be provided for each step. They should think of how to approach the “research” according to their specific situation (living condition, access to measurement devices) and plan their research accordingly:

- 1** **Goals:** find out how much water is factually used, consumed or wasted – and reduce the amount of water. Furthermore, spread the word and reach out to peers, the community and decision makers.
- 2** Laying down common procedures and dates to be observed for the procedure to be executed, with regard to particular intervening circumstances akin to each individual household.

- 3** Regarding the dissemination and popularization of the information gathered: flyers, short video tutorials with water-saving tips. This instance can be planned on a small scale with high probability to be made, given the present circumstances in the household.

Participants should be motivated to contact local authorities, decision makers and stakeholders to communicate their insights and advocate for changes on water use in their communities. Facilitators therefore should provide contact details of the local authorities since this makes it easier to participants to take this step. It seems important, for participants to feel their actions and learning is not only for school, but plays a role in the community development.

## Fostering Discussions

Discussion among the participants could be enriching. This highly depends on the technical equipment and on the time frame. If possible, a (online) meeting and discussion with local decision makers could be motivating for the participants’ engagement.

## Possible Extensions

Inclusion of water-saving tips and/or further consultation of water consumption-related sites