

# Does water have a history? – Teacher’s Guide

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*Water has always been around, for as long as life on earth if not longer. This workshop will not try to tell the whole history of every single droplet of water on our planet; it will focus instead on the relationship between humans and water. Was water always seen as a ‘resource’? How did past generations make sense of ice, rain, snow, and vapour? What was water used for, and what was it feared for? To answer some of these questions this workshop will focus on European cities, and on the water found in urban rivers, canals, fountains, and sewers.*

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## **Workshop objectives**

At the end of this virtual workshop, pupils will be able to:

- reflect on the relationship between humans and water;
- understand the principle of communicating vessels and some of its applications.

Though primarily a history workshop, it can therefore be connected to the science, geography and/or PSHE curriculum as well.

## **Intended audience and length**

This virtual workshop has been designed for KS2 pupils. It might also be suitable for KS1 and KS3, with correspondingly more or less adult supervision and input.

The recorded video is 15 minutes in length, but it is intended to be paused at several points so pupils can engage with the activities, as well as discuss questions with each other (see instructions below). The main activity may take up to 40 minutes, depending on size of groups. As a whole, the workshop will therefore probably last about one hour.

## **Materials**

To take part in this virtual workshop, each pupil will need:

- Paper (or Activity 1 Template);
- Post-it (or similar);
- Pen/pencil.

To take part in the main activity, pupils will work in pairs/groups. Each pair/group will need:

- Two containers (e.g. plastic / paper cups);
- Scissors/cutters to cut holes in containers (this can be done by adults in advance);
- Straws (or a length of pipe/hose, of about 15-20cm);
- Tape (preferably strong, e.g. duct tape);
- Water.

## Instructions

- Video: 00:00 – 00:27  
Brief introduction.
- Video: 00:27 – 02:11  
Activity 1: pupils are asked to look at three pictures of water in different contexts. For each picture, they should write on their piece of paper / Activity 1 Template one, two or three words that describe their feelings in reaction to the picture.  
*It may be helpful to pause the video after each picture has been introduced (so at 00:44, 01:09 and 01:34) to give pupils enough time to write down their words.*  
  
*Should anyone be curious, the pictures are:*
  1. *The surface of a lake;*
  2. *The Arno flood of 1966 in Florence;*
  3. *The Fountain of Monkeys (Fontana delle Scimmie) in the Boboli Gardens, Florence.*
- Discussion  
Pupils are asked to discuss their answers from Activity 1 in pairs. Pause the video at 02:11 to allow them to do so.
- Video: 02:11 – 08:22  
Brief discussion of past attitudes to water. Presentation of my PhD research. Story of Bernardo Buontalenti and how he survived the flood. Introduction to question: how do fountains work?
- Discussion  
Pupils are asked to discuss their answers to the question ‘How do fountains work?’ in pairs. Pause the video at 08:22 to allow them to do so.
- Video: 08:22 – 10:32  
Explanation of the principle of communicating vessels.
- Discussion  
Pupils are asked to discuss how they might use the principle of communicating vessels to make water shoot upwards in pairs. Pause the video at 10:32 to allow them to do so.
- Video: 10:32 – 13:39  
Application of the principle of communicating vessels to fountains. Explanation of Activity 2.
- Activity 2: in pairs or groups, pupils are asked to have a go at making their own fountain. They’ll need the materials listed above, as well as a water-safe place to carry out the activity (a wet area or an outdoor space). For more details, refer to the Activity 2 materials. Pause the video at 13:39 to allow them to do so.
- Video: 13:39 – 14:48 (END)  
Conclusion. What have you learned today?  
*Pupils are asked to write what they’ve learned on a post-it, to stick in their books / take home. It may be helpful to pause the video at 14:31 to allow them to do so.*  
Thank you!