# **Teachers' toolbox**



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### Introduction

You have booked a slot to visit the On Water exhibition with your students.

In this part, you will find educational materials to prepare your school visit. These include numerous fact- and worksheets that allow you to:

- 1. prepare the fieldtrip beforehand with your class,
- 2. let your students explore the exhibition autonomously and
- 3. follow-up and further delve into some of the issues raised after your visit.

The different materials can be used independently of one another. It is the teachers' decision which ones to use and they are free to adapt the materials as they see fit. While some worksheets are more appropriate for either younger or older visitors respectively, most are adaptable for every age group.

It is recommended that the worksheets are downloaded onto computer tablets or smartphones. Should teachers nevertheless wish to print selected materials, it is recommended they use the more sustainable black and white copies. Pre-printed worksheets of the colouring pages are available on request on the website <a href="https://www.onwater.lu">www.onwater.lu</a>.

Throughout the class-project, we urge teachers to encourage their pupils to be creative and to produce their own photos, paintings, drawings, essays, poems, short videos, or even songs inspired by the On Water exhibition. Every teacher can easily upload their pupils' creations on www.onwater.lu.

### Materials that will be of use to prepare the visit in class

In the first section, you will find different documents and videos to dig into the exhibition On Water. They make great tools to use in class.

One possible starter is to let pupils do a brainstorm on water. The worksheet *Brainstorming* helps to collect first impressions about which concepts the pupils associate with the word water. This worksheet also guides the pupils through different viewpoints. If necessary, the teacher can include more questions that suit his or her class. In some cases, it might be sufficient to only use the first page of the worksheet, especially if the objective is to simply raise awareness about the topic of the exhibition.

The worksheet **Photographers** presents the curriculum vitae of Yann Arthus-Bertrand and Philippe Bourseiller and invites pupils to look up online relevant information on the artists (their past and current jobs, their hobbies and passions ...) and to subsequently present their findings to their peers.

The worksheet **Sustainable development goals** (SDG) introduces the <u>17 SDGs</u> adopted by the UN. The 17 clickable icons will encourage pupils to explore each one of the SDGs at their own pace on the internet. With regard to the On Water exhibition, the pupils could explain which SDGs they think would most probably be represented in the exhibition.





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# **Quizzes and colouring activities**

The different quizzes can either be distributed during the trip to and from the exhibition or be given to the pupils to do in their free time.

Different levels of water-themed **Sudokus** and **Word puzzles**, as well as a **Mandala** and **Coloring pictures** are the materials available in this section.

# **During the exhibition**

Different worksheets are available to be used during the exhibition.

The worksheet *Exploring* asks pupils to select both their favourite and least favourite photograph. Their selection arguments can be based on either the photograph's compositional features or the content they represent. The pupils will have the opportunity to describe what they see and how that makes them feel, as well as hypothesize about which information or message is conveyed through the image. After the initial description of physical features and thoughts and feelings evoked, the focus can be put on precise visual elements and compositional features, like, for instance, colours and colour-range, shapes and lines, symmetry and balance. This formal analysis can lead to a very personal interpretation of the meaning and/or the message of the image. To further explore the subject, please refer to the *studentartguide*. Keeping in mind that the pupils might need additional information to completely understand a picture, feel free to encourage them to express their thoughts and feelings freely.

The worksheet *Exploring the SDGs during the exhibition* - ideally to be used as a follow-up to the worksheet *Sustainable development goals* - allows the pupils to explore some of the SDGs in an artistic context. Additionally or alternatively, the teacher might ask the pupils to identify a couple of pictures that relate to one of the following SDGs: *No poverty* (SDG1), *Sustainable cities and communities* (SDG11), *Responsible production and consumption* (SDG12), *Climate action* (SDG13), *Life below water* (SDG14), *Life on land* (SDG15), *Peace, justice, strong institutions* (SDG16). While this worksheet can be adapted to the requirements of any age group, it might suit older students more.

The worksheet *Scavenger hunt* contains multiple smaller scavenger hunts that can either be completed simultaneously or one at a time. The first hunt has the pupils read the captions to identify the authors of the pictures. The second hunt invites pupils to have a closer look at the exhibited pictures to help them recognize that some of the pictures contain water in the three physical states. The third hunt requires students to look at all the pictures in detail. For the fourth hunt, they will need to read the captions again and to identify the location of given countries, pupils might have to use an atlas or Google Earth/Maps or similar apps on their mobile devices. If teachers would like to further delve into the geographical dimensions of the exhibition, they might find the worksheet *Worldmap* come in handy.





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The worksheet *Reflections* allows for two alternative approaches. The first one refers to the 13 statements that are displayed throughout the exhibition. Pupils are encouraged to read through them and to discuss the one that speaks to them most. Subsequently, they should identify those pictures in the exhibition that most accurately translate their favourite statement.

The alternative approach is to reflect on one (or more) picture series. What do they have in common in terms of compositional features? What messages do they carry and how are these messages connected to each other? Does anyone of the 13 statements reflect the story the pupil developed?

# After the visit – follow-up activities

For educational purposes, photos of the exhibition with the corresponding captions can be accessed online once you have logged on to <a href="https://www.onwater.lu">www.onwater.lu</a> with your teacher credentials. Furthermore, a downloadable PDF catalogue of the exhibition is available. With the help of these tools, the pupils can refresh their memories of some of the pictures and, in turn, reignite their own thoughts and ideas.

Back in the classroom, and depending on the interests the teacher and the students developed during their visit, there are numerous possible follow-up activities. As a start, it can be useful to summarize and discuss the notes taken during the visit. Students could compare their favourite and least favourite pictures. What do these pictures have in common? Is it the artist's style, the topic, the location...?

In case the class worked with the Sustainable developement goals, comparing the thoughts the pupils developed during the exhibition and how they relate to them can be an interesting exercise. The pictures show life and water all around the globe. The teacher could invite the pupils to compare their own lifestyle with the depicted situations on a social, cultural, or economical level. One way to introduce this activity is to show pupils the picture of the women carrying water across long distances and then ask students how many steps they have to take to get a glass of water.

The pupils could then learn more about their own consumption by thinking about how much water they use in daily life, real water and virtual water. How are sewage waters treated in Luxembourg? What can each one of them do to reduce their water footprint? Which ideas and actions will the students come up with? These are just a few hints amongst many others. The website of the *Luxembourg water authority* can be a useful resource in that resepect.

The pupils could also use this opportunity to learn more about life and lifestyles in other countries, for example by locating them on a map and looking up relevant information. What interesting finds will your class make?





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Among the tools available on the exhibition-website, you will also find the special edition of the essay ON WATER by Yann Arthus-Bertrand. Please note that it is also available in a split-up format in worksheet *Split-up essay ON WATER – Special Edition*: (1) *Life with Water*; (2) *Water and the consumer*; (3) *Water: not all is fresh*; (4) *Water catastrophe*; (5) *Water for hope*; (6) *Return to the water of life*. This split-up presentation allows teachers to adapt a variety of activities to different age groups. For example, it is possible to choose to study only one of the chapters in detail, either in the context of group work or individual work. Or else, it is possible to have different groups explore individual chapters and then discuss their results with the whole class afterwards. Another option would be to let the students research the topic they are interested in the most in more depth.

Other follow-up activities would be to make water-based experiments. How can I produce my own drinking water in the midst of the desert? How can I build my own water-filter? How can I reproduce the hydrological cycle in a jar? Links to these and many more experiments are listed on the website <a href="https://www.onwater.lu">www.onwater.lu</a>.

After you have logged onto <a href="www.onwater.lu">www.onwater.lu</a> you will find some interesting reviews of fiction and non-fiction books about water both for children and adolescents as well as for adults. The intention is to offer a broad literary overview of the subject, therefore we have included picture books for young children but also illustrated books by the exhibited photographers as well as dystopias and political books on water.

Why not go on a fieldtrip and visit <u>SEBES</u> or <u>SEO</u> or a municipal sewage plant? Why not do some water sports at the <u>Base nautique in Lultzhausen</u> or go on a hike along the <u>Wassersenneswee</u> to reflect on water and life? Why not visit the <u>Wassererlebnisszentrum Kalborner Mühle: Zentrum für aquatische Umweltbildung</u> or participate in one of the informal activities of Luxembourg's three Nature Reserves.

Just across the border, you will find the <u>Geysir</u> in the Eifelregion or the <u>Grottes de Han</u> in Belgium, sites that translate into some of the pictures of the On Water exhibition.

The website <u>Bildung fir Nohalteg Entwecklung</u> shows additional workshops on sustainable development offered to schools by Luxembourgish NGOs.

Why not dive into contemporary art and explore Marco Godinho's *Written by water* art exhibition at the 58th International Art Exhibition – La Biennale di Venezia (11.5 – 24.11.2019)? You will find some interesting hints on the *Casino Luxembourg's* website.

This is a non-exhaustive list of how to follow – up on the exhibition. Whatever path you will choose to take with your class, please remember that the website <a href="www.onwater.lu">www.onwater.lu</a> offers a public platform where teachers can upload their pupils' productions inspired by the exhibition. Every artistic or personal expression format is welcome, be it poems, essays, photographs, paintings, drawings, songs, videos, etc... This will become the exhibition inspired by the exhibition. Do not be surprised to see Yann Arthus-Bertrand or Philippe Bourseiller comment on your students' work!



