



Shadow art with (marine) litter



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Duration	90 min
Target group	students 9+, families
Connection to curriculum	<i>This activity can be linked to subjects of environment, and arts, physics (light and shadow and connections)</i>
Particulars	<i>Can be adjusted to take place indoors or outdoors. This activity should follow after a clean-up of a beach, park, river bank, etc.</i>



Outline

Using a pile of different sorts of waste from the recycling bin or collected during a clean-up event, the participants experiment with flashlights and surfaces to create a “Shadow Art Piece” that tells a story. Their creations may be inspired by the litter items, or can relate to environmental topics, or other topics that are meaningful to the participants.

* The activity should follow after a clean-up of a beach/park/river bank, etc., during which, a variety of waste items will be collected together with natural material like weeds, branches, feathers, etc.

Connection with sustainability

The activity is proposed to be linked to a clean-up (e.g. on a beach, a wetland, or river bank), which in itself can be a shocking experience for those taking part, in terms of the number of items collected. For example, even seemingly clean beaches have impressive amounts of small sized litter items (e.g. cigarette butts and microplastics). More bulky waste accumulates on unattended beaches over winter time.

The activity is also an opportunity to talk about artists all around the world who work with waste as raw material. In case a clean-up does not fit your plans, participants can be asked to bring items from their recycling bin (the volume and number of items disposed daily is equally impressive). Ask the students to wash the waste before bringing it to school.



Health and safety

Hazard	Controls
<i>Cuts due to broken glass or sharp items or metallic surfaces</i>	<i>Discuss this with the students before the clean-up; point out hazardous materials and use gloves while collecting the litter. Avoid using such items in the activity</i>
<i>Dirty or hazardous litter like cigarette butts</i>	<i>Use gloves to collect such litter. For dirty plastics, rinse to remove sand and weed. Avoid using items that are too dirty.</i>
<i>Box cutters</i>	<i>Use a cutting mat and supervise if needed.</i>

Essential materials

Item	Comment	Total (for xx persons/pairs/groups)
<i>A variety of 3D waste items from the clean-up</i>	<i>During the clean-up ask participants to keep 3 waste items that impressed them, wash them, and have them available for the Shadow Art.</i>	<i>At least 3 items per participant</i>
<i>A variety of 3D natural items from the clean-up</i>	<i>Feathers, branches, leaves</i>	<i>At least 3 items per participant</i>
<i>Materials from the recycling bin</i>	<i>Ensure you have a bulk of material (opaque, translucent, glossy, coloured) that give interesting results in shadow art like: fruit nets, colorful plastic or glass bottles, bowls, baskets, membrane, etc.</i>	<i>Plenty</i>
<i>Household items</i>	<i>Optional, use items that create nice shadows or reflections like, forks, glasses, drainers etc.</i>	<i>A few</i>
<i>Small 3D toys (human figures, animals, cars, etc.)</i>	<i>Optional, these can add 'drama' to the art stories created</i>	<i>A few</i>
<i>Light sources</i>	<i>Use a flashlight or the mobile's flash. You can opt for some coloured light.</i>	<i>One per participant</i>
<i>Clothes pegs</i>	<i>Of various sizes, can be useful in making things stand, or holding the flashlight</i>	<i>Plenty</i>
<i>Big size cardboard boxes and cartons</i>	<i>Optional, for those wishing to frame their creations</i>	<i>A few</i>



<i>Fishing line or thread and/or string</i>	<i>Optional, can be useful for hanging things</i>	<i>A few</i>
<i>Scotch tape</i>		
<i>Glue</i>		
<i>Projection space</i>	<i>All groups need a space to project on, this can be the wall, inside a box or on a paper.</i>	<i>1 per group</i>

Essential tools

Item	Comment	Total (for xx persons/pairs/groups)
<i>Scissors</i>		<i>1 per group</i>
<i>Box cutters</i>		<i>1 per group</i>
<i>Cutting mat</i>		<i>1 per group</i>

Preparation

- Prepare the room: If possible, use three material tables spread around the room (a. essential tools, b. essential materials, b. other materials, from the clean-up or the recycling bin).
- It is important to ensure a dark space, and empty from clutter walls or surfaces, on which you can project.
- If needed rinse the marine litter you wish to incorporate in the shadow art activity.
- Alternatively, collect a variety of materials from the recycling bin.



Activity Plan

Introduction

- Present yourselves and briefly explain tinkering (what is tinkering, what could be its possible outcomes, how it links to sustainability).
- In case of participants unfamiliar with “shadow-art”, devote some time to demonstrate it through videos and photos of students’ or artists’ creations (see appendix).
- Explain the outline of the activity (what is the room set up; which surface to project on; where to find flashlights, materials & tools, how much time they have; how they will work in pairs or individually).
- Demonstrate a simple shadow on the wall; using your hands and a couple of materials that, behave differently with light (e.g. reflective, semi-transparent, colorful).
- Prompt the challenge: We will experiment with light, using litter collected from the beach or from the recycling bin and create meaningful Shadow Art works.
- Explain that their creations can be relevant to the environment or not (e.g. their works can represent a memory, their school, a park, their mood, a dream etc.), and that they can integrate one or more of the items they brought from the clean-up.

Managing the activity once it is in progress

- Encourage pairs to listen to one another as they create their stories and build their art-works.
- Walk around the room and be attentive to how pairs work. Support the students’ ideas and give alternatives if needed. If they get stuck, encourage them to walk around the room and see how the other pairs progress.
- Allow enough time (at least 40 minutes) for this step and indicate the time periodically.
- At the end of the activity the art works can be presented one by one, or, in case of “boxed” works, they can stack on top of each other and presented all together in a single collaborative work.

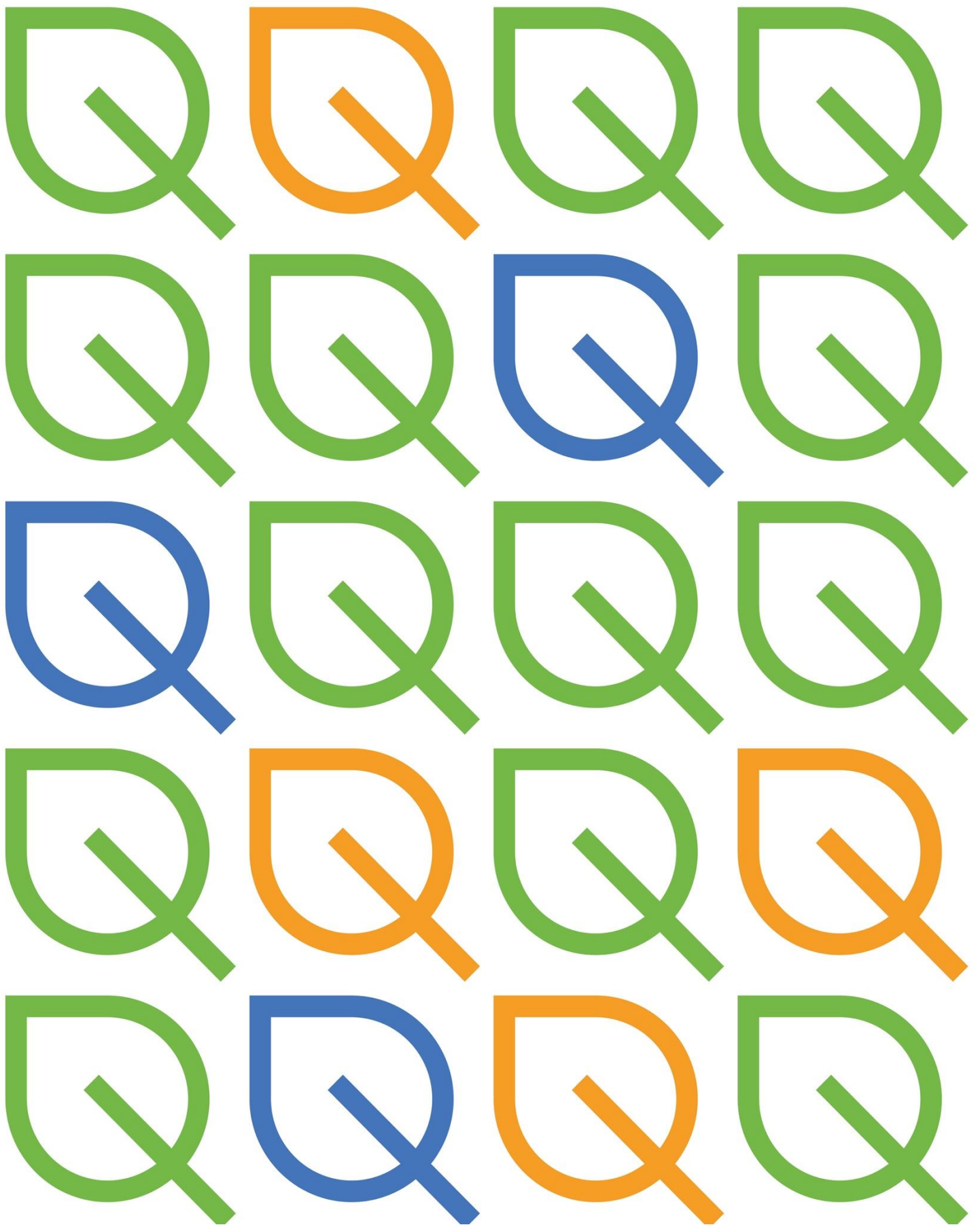
Conclusion

As each pair presents their work, ask them to recall how some objects may have led them to their creations, or if they had a story or idea in mind from the beginning and how they used objects to realize it. Ask them about the creation process, how they collaborated, how they built on each other’s views, if they diverted from their initial ideas for the art work and how.

Notice how many art works relate to the environment, and how the beach litter items were incorporated.

Finally, have a debrief discussion to collect their impressions, difficulties, satisfactions, and if they had any unexpected thoughts (Aha moments) during the entire tinkering experience.

Optionally, discuss with the class teacher how the elements of the [Learning Dimension Matrix](#) on Making and Tinkering were addressed.

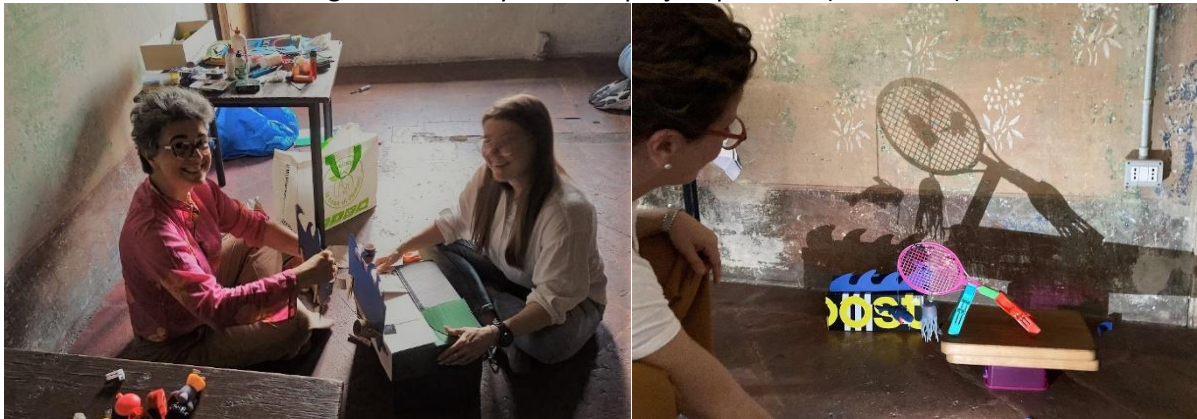


Appendix



Examples of possible outcomes

Photos from our first testing of the activity with the project partners (June 2023)



Photos from the second testing of the activity that took place at the Associate Partner 1st Primary School of Halandri (June 2023).



Photos from the third testing of the activity that took place at the Associate Partner 70th Primary School of Athens (October 2023).





Colophon

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This activity has been authored by Iro Alampeï (MIO-ECSDE / MEDIES)

Project Coordinator

Háskóli Íslands, Iceland



Partners

Bartolomeo associazione culturale, Italy

CRES Centro di Ricerche e Studi Europei - future business, Italy

NEMO Science Museum, Netherlands

MIO-ECSDE, Greece



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