



## **Aqueduct**

Name of the object and creator	Aqueduct				
Recommended ages	9-10				
Thematic areas	Sciences	Technology	Engineering	Arts	Mathematics
combined (STEAM)	Ø	Ø	Ø	Ø	Ø
Materials needed	<ul> <li>Plastic bottles and cups</li> <li>Paper</li> <li>Cardboard boxes</li> <li>Glue</li> <li>Tempera paints</li> <li>Straws</li> <li>Tape</li> </ul>				
Outline of the steps	<ol> <li>Making an aqueduct</li> <li>Covering the model</li> <li>Use of the aqueduct and movement of water on it.</li> <li>Conclusions</li> </ol>				
References	Educating Casia: The Aqueduct				





## STEP BY STEP: How to build an aqueduct

## Step 1: Making an aqueduct

Estimated time: 30 min

- Waste materials are used for the base.
- Measure with protractor angle of 90 degrees to draw the top arch. Each following part is 1 cm lower than the previous one.



- The base of the layout is assembled.
- A mountain peak is made (water comes from it).
- "Pipes" are laid to drain the water.

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Step 2: Covering the model

The papier mache technique is used to cover the finished model. The glue is diluted with water. The model is covered with pieces of paper, which are glued with the diluted glue and alternate layers.

Estimated time: 30 min







Step 3: Use of the aqueduct and movement of water on it Estimated time: 10 min

Pour water into the top of the aqueduct. With the right inclination, it starts to flow out through the slot at the lower end.

Step 4: Conclusions

Estimated time: 10 min

As the water moves along the aqueduct, the children comment on when the water stops and what the causes might be in a real situation.



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