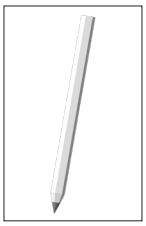
123.687

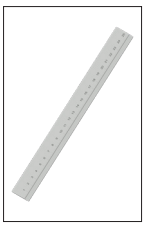
Solar Cascade

Required Tools:


Round File


Scissors


Pencil


Ruler


Philips Screwdriver


Slot Screwdriver


Hammer

Required Accessories:
Art. 124258 - Solar cell cast 2V/380 mA

Note

The Opitec Range of projects is not intended as play toys for young children. They are teaching aids for young people learning the skills of craft, design and technology. These projects should only be undertaken and operated with the guidance of a fully qualified adult. The finished projects are not suitable to give to children under 3 years old. Some parts can be swallowed. Danger of suffocation!

Parts List	Quantity	Size (mm)	Description	Part-No.
Block of wood with hollow	1	120x120x40	base frame	1
Welding wire	1	ø3x250	mounting bar	2
Immersion pump	1		pump	3
PVC Hose	1	ø8,8x300	connecting hose	4
Plastic half sphere	1	140	water container	5
Plastic Medallion	3	70	cascade bowl	6
S Hooks	3	25	hose attachment	7
Luster terminal strip	1		attachment rod	8
Phillips Panhead Screw	1	ø2,9x19	mounting luster terminal strip	9
Distance washer	10		mounting cascade bowls	10

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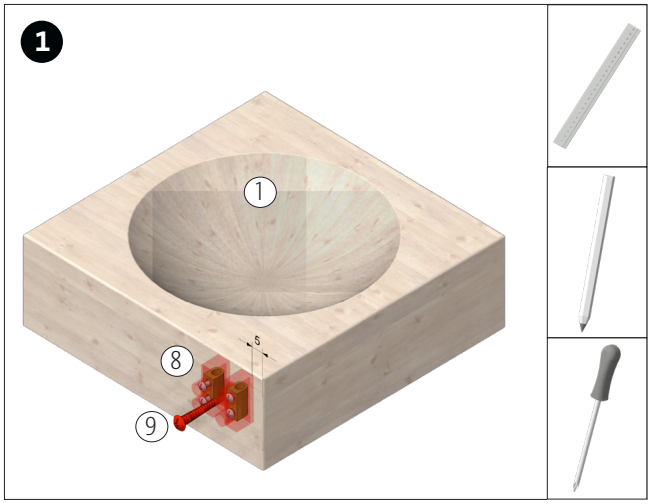
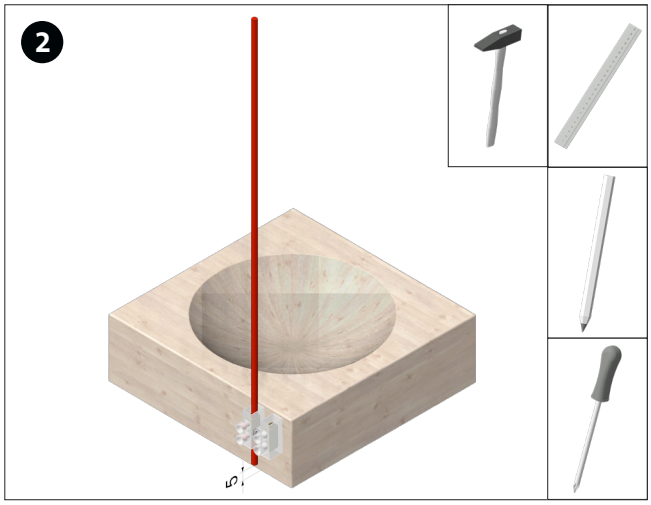
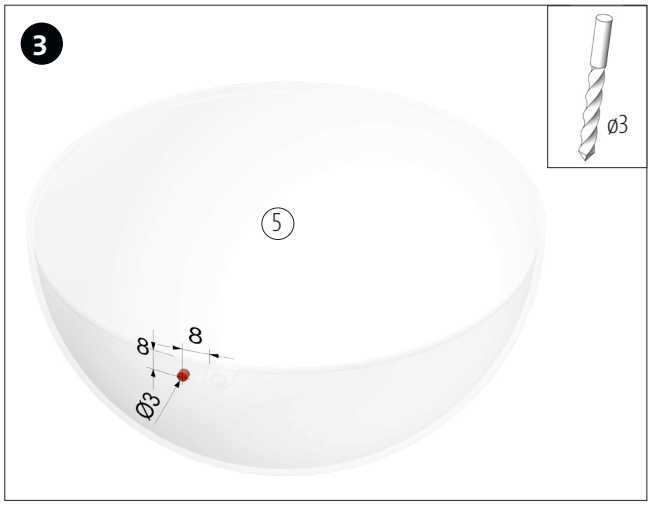


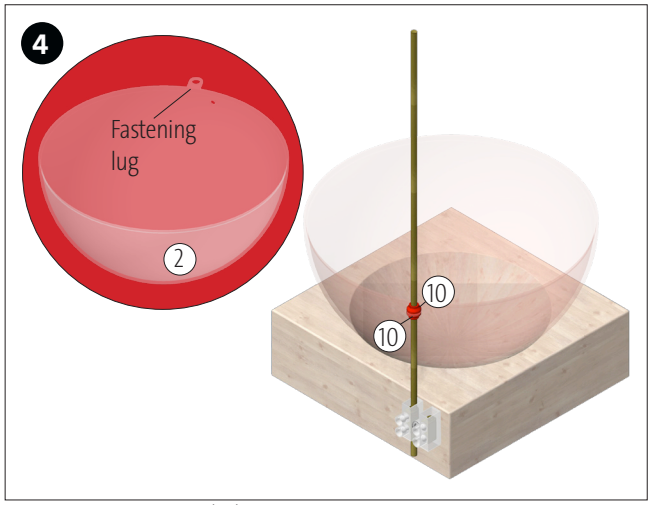
Measure 5 mm on one side of the block of wood (1) as shown and fasten the luster terminal strip (8) with the screw (9) flush with the top edge.



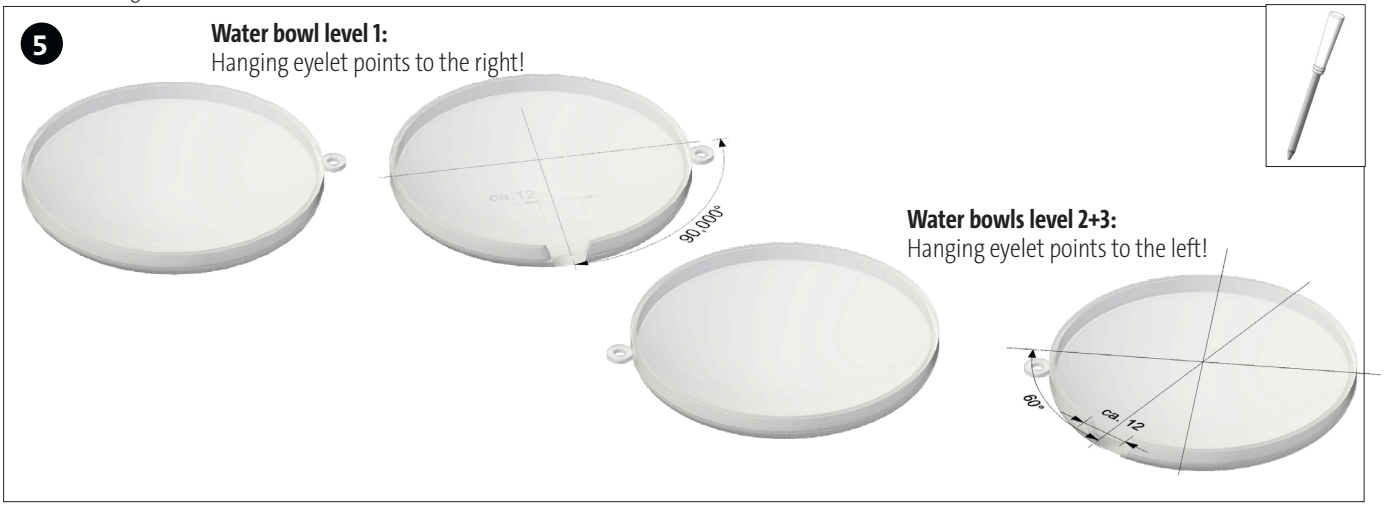
Loosen the luster terminal screws. Insert the welding rod (2) into the luster terminal (8) as shown, carefully tap through with a hammer and secure with the fastening screws.



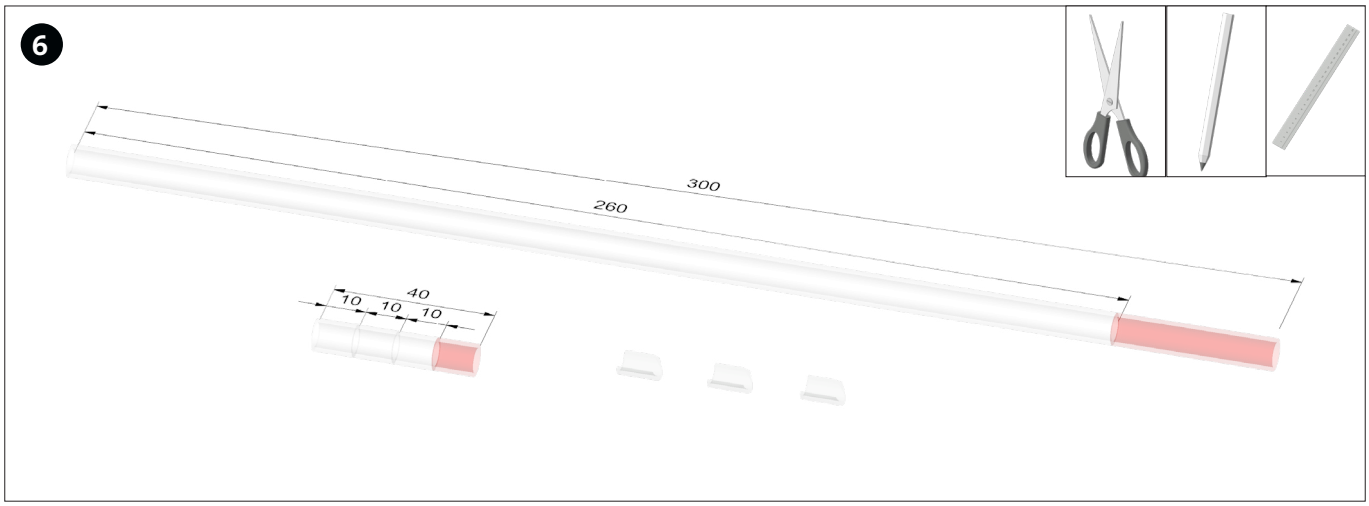
Drill a 3 mm hole in the water container (5) at the position shown to guide the pump cable through. Drill carefully at low speed to avoid breaking the material! **Note:** Drilling is not absolutely necessary, as the cable can also simply be laid over the edge.



Put a distance washer (10) on the welding wire with the narrow side down. Then attach the plastic half sphere (5) and clamp it from above with another distance washer (10).

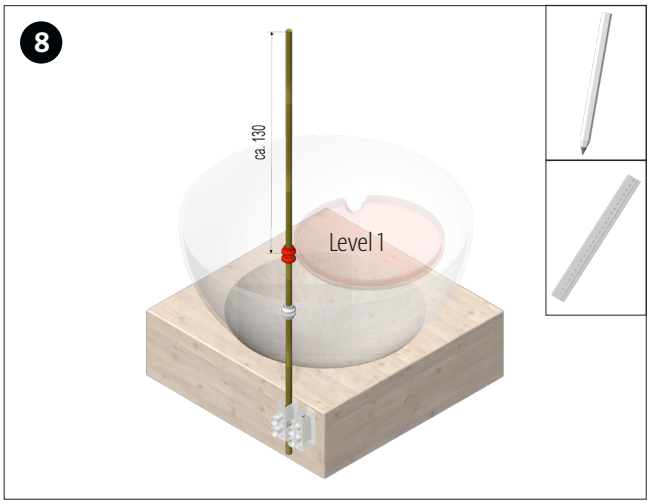


Process the cascade bowls (6) as follows:
Level 1: File a recess (approx. 10 mm deep) in the cascade bowl at the position shown with a round file. Hanging eyelet points to the right!
Level 2+3: File like level 1, paying attention to the direction of the hanging! Hanging eyelet points to the left!

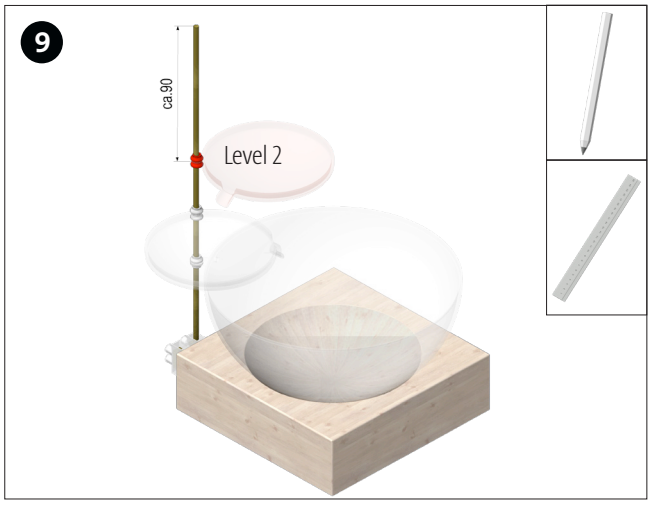


Cut 260 mm from the PVC hose (4). Cut 3 pieces with a length of 10 mm from the remaining piece of tubing. Round off one end of these pieces with scissors as shown.

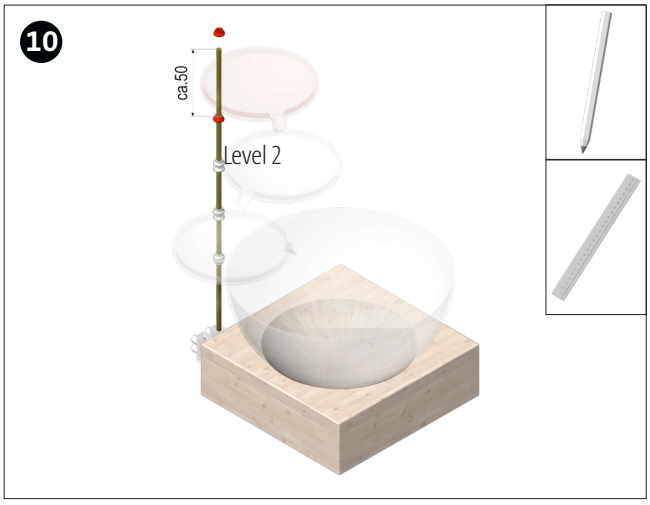
Glue the pieces of PVC tubing to the bowl drain with hot glue as shown. Reinforce with a bead of glue from below.



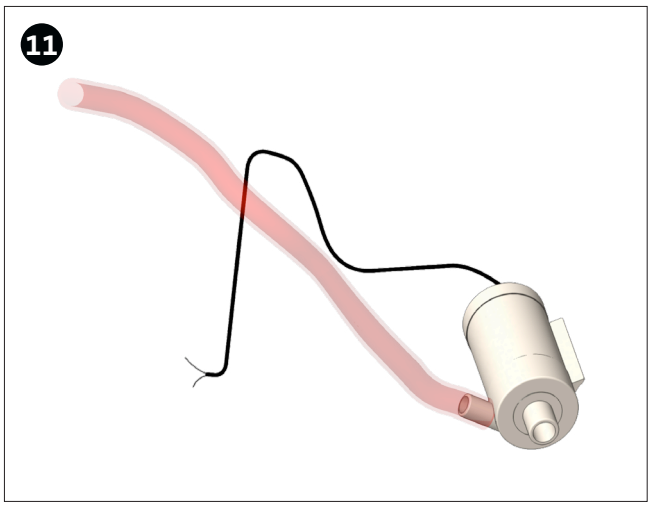
Measure 130 mm on the welding wire (2). Place a distance washer (10) with the narrow side up. Then put on the bowl for level 1 and clamp it with a second distance washer (10).



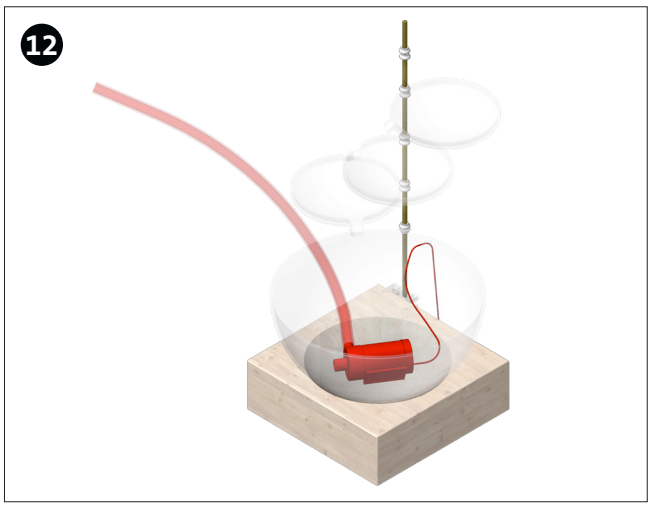
Measure 90 mm on the welding wire (2). Place a distance washer (10) with the narrow side up. Then put on the bowl for level 2 and clamp it with a second distance washer (10).



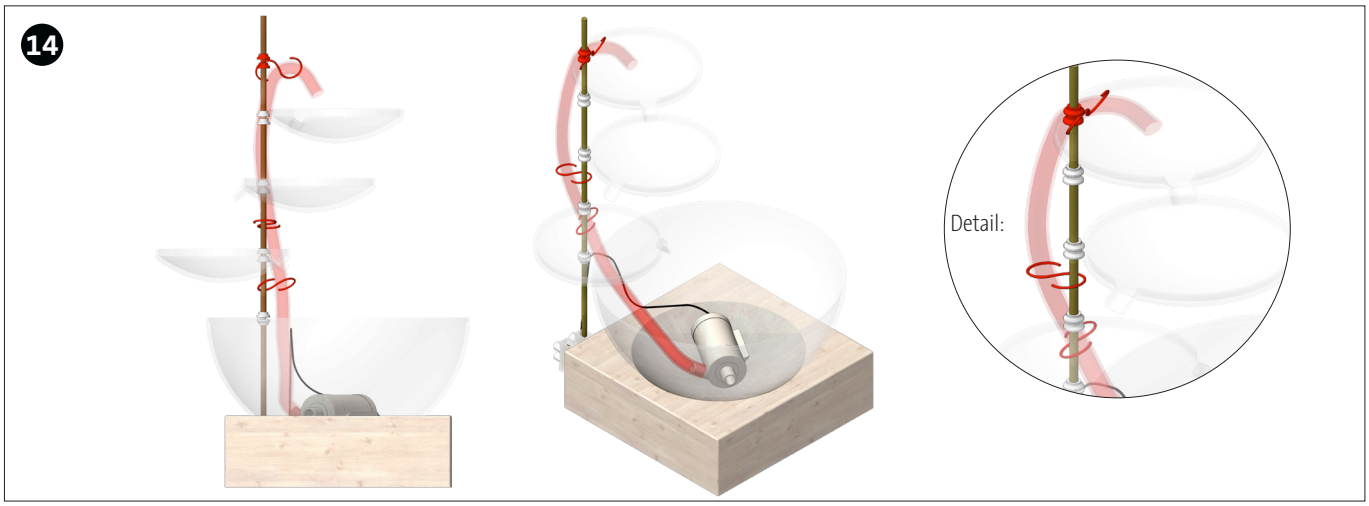
Measure 50 mm on the welding wire (2). Place a distance washer (10) with the narrow side up. Then put on the bowl for level 3 and clamp it with a second distance washer (10).



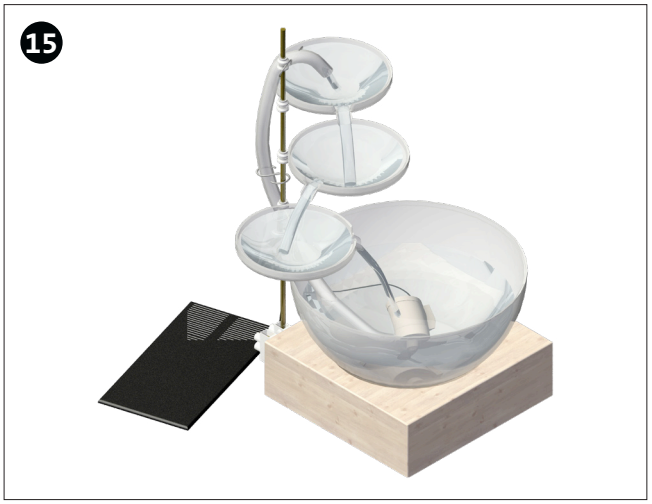
Push the PVC hose (4 - 260 mm long) onto the immersion pump (3) as shown.



Place the immersion pump in the water container as shown and guide the cable through the hole or lay it over the edge of the container.



Now guide the hose up the brass rod (2) and clamp it with the S-hooks as shown. Bend the hose over the top bowl and fix the top S-hook between two distance washer (10). Make sure that the hose is not kinked. The end of the hose must be fixed in such a way that the water jet hits the upper shell.



Connect the solar cell and place the fountain in a sunny spot.
Note: The pump power can be regulated by covering some areas of the solar cell.