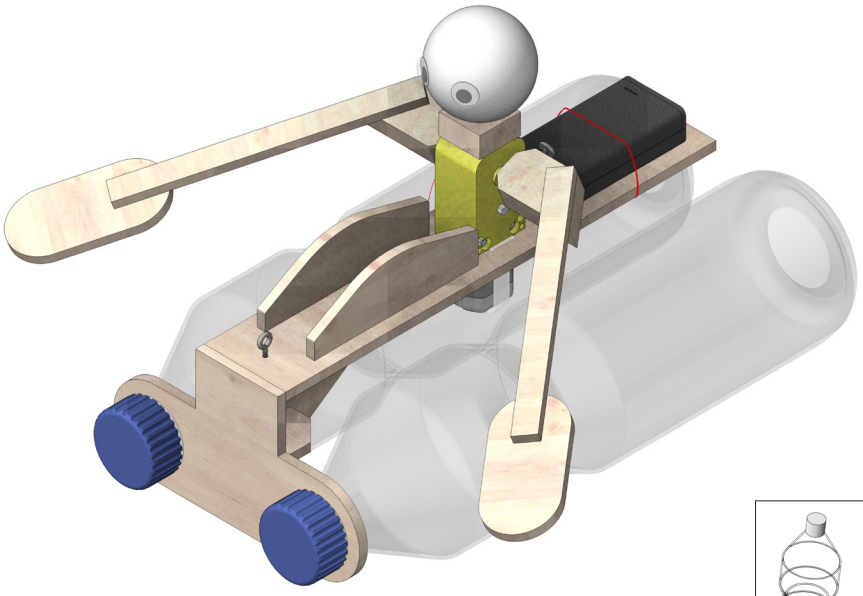
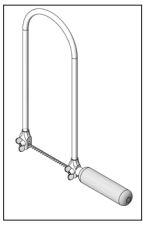
122.072

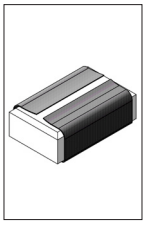
Recycling Rowing Boat



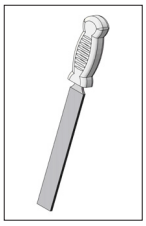
Tools Required:



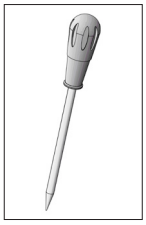
Fretsaw or Scroll Saw



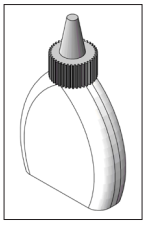
Sandpaper



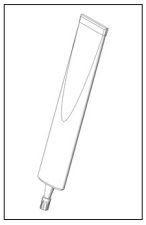
Engineer's File



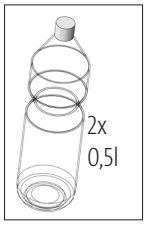
Pricking Awl



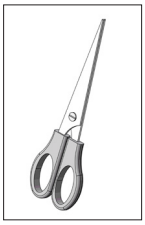
Wood Glue (waterproof)



All Purpose Glue Superglue

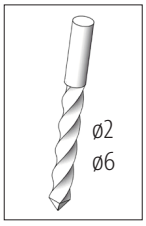


PE Bottle



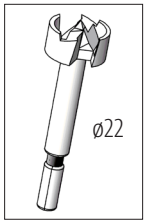
Scissors

Adhesive Tape



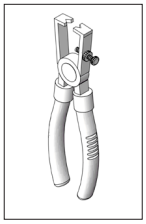
Drill

Philips Screwdriver



Forstner Drill

Soldering Iron



Wire Stripper

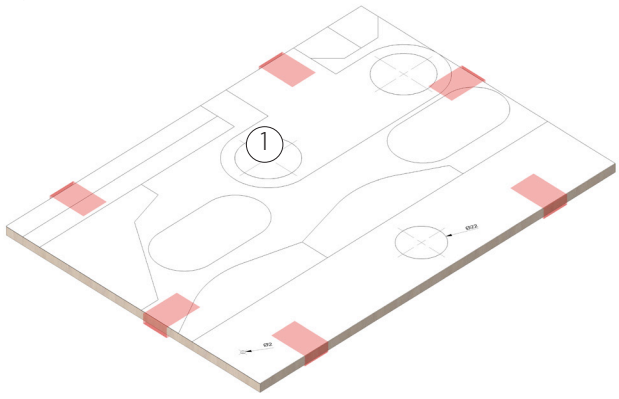
Please note:

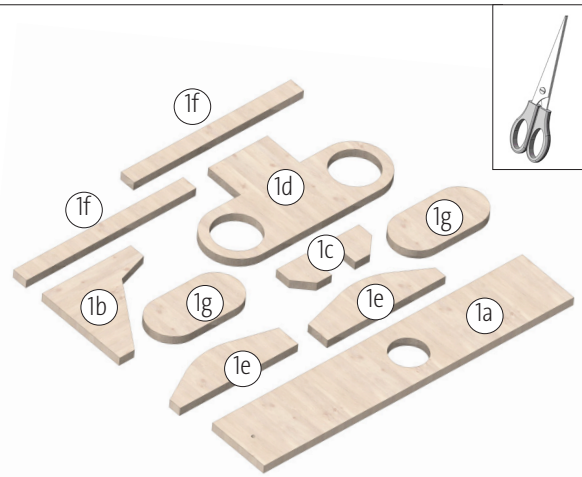
Finished projects of OPITEC handicraft kits are not play toy articles in the same sense as general commercially available ones, but rather are intended as teaching and learning material supporting educational objectives. The content of this construction kit may only be built and used by children and adolescents under the guidance and supervision of qualified adults. Not suitable for children under 36 months. Risk of suffocation!

Parts List	Quantity	Size (mm)	Description	Part No.
Birch Plywood	1	210x150x4	Base Plate	1
Wooden Strip	1	100x20x10	Paddle/Mounting Head	2
Gear Motor	1		Drive	3
Table Tennis Ball	1	ø40	Head	4
Wiggly Eyes	2	ø10	Eyes	5
Battery Holder with Switch	1	2xAA	Power Source	6
Tapping Screw	2		Paddle Attachment	7
Eyebolt	1		Locking Screw	8
Rubber Ring	1	ø40	Mounting Battery Holder	9

OPITEC

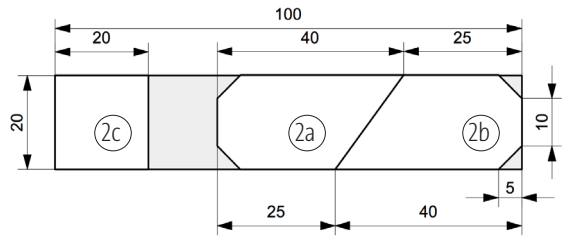
1

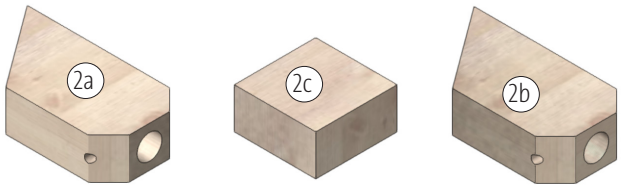


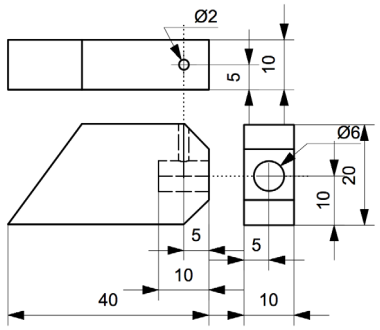


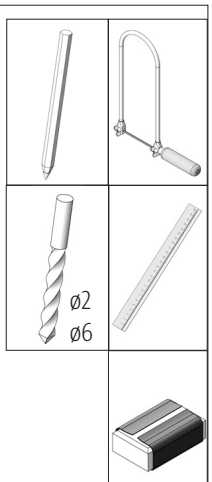
Cut out the template (page 5) and fix it with adhesive tape on the plywood panel (1). Saw out the individual parts and clean all saw cuts with sandpaper.

2



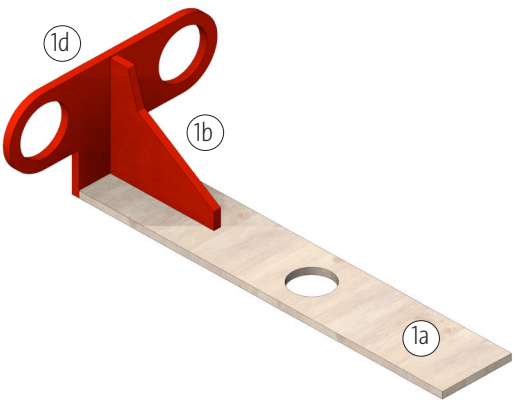


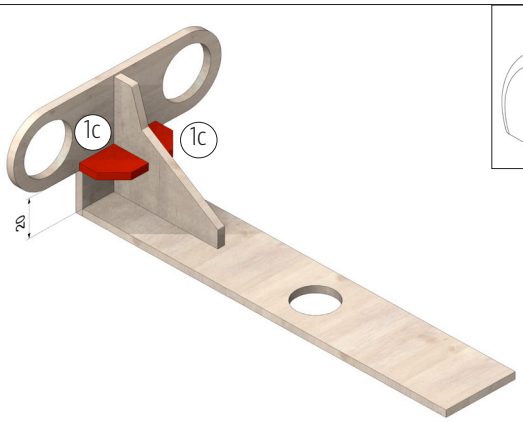


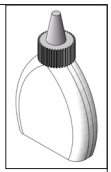


Transfer the dimensions for the paddle arm parts (2a, 2b) and the head mounting (2c) to the wooden strip (2). Then cut to length and clean the saw cuts. For parts 2a and 2b drill the two blind holes ø6 and the screw holes ø2 according to the dimensions.

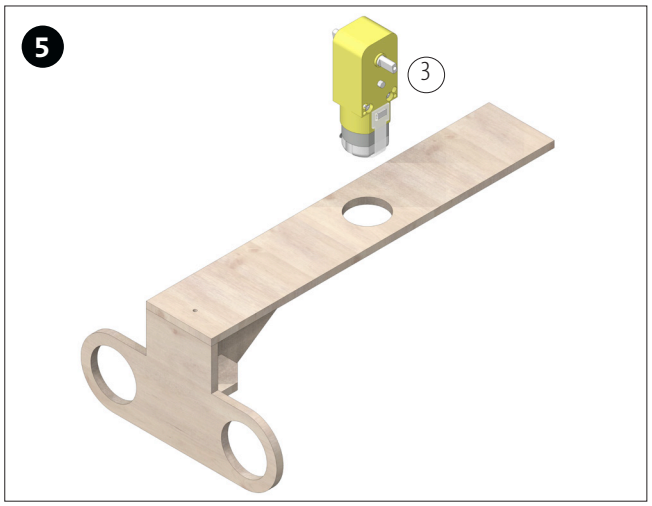
3



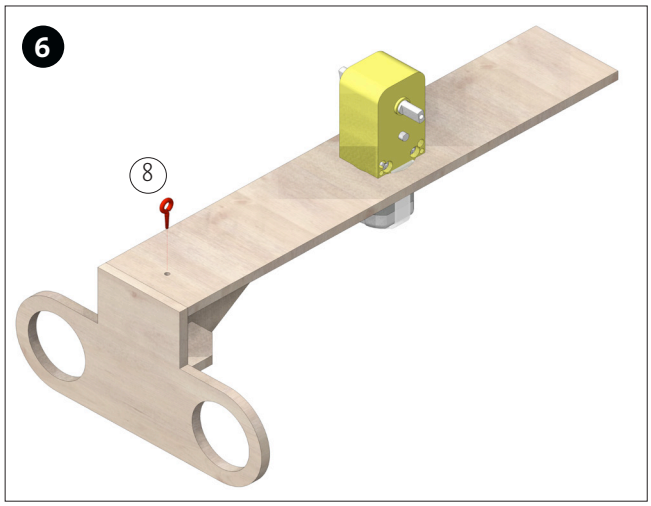




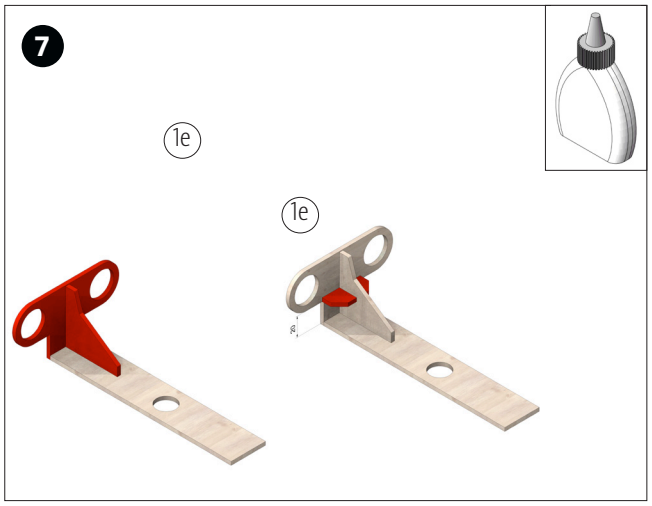
Glue the wooden part (1b) as shown on the underside of the wooden part (1a), centred on the front edge. Then glue the front part (1d) from the front as shown. Glue the two parts (1c) to part 1b and 1d from both sides at a distance of 20 mm from the lower edge as reinforcement. Allow the glue to dry firmly.



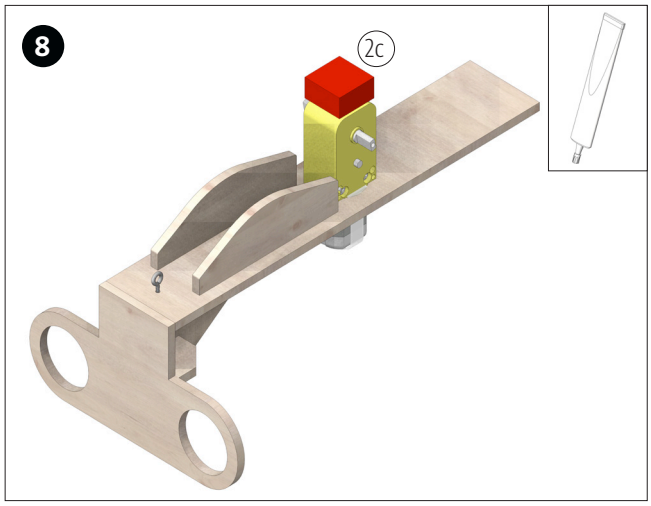
Place the geared motor (3) in the hole as shown so that it rests with the body on the base plate.
Note: cable connections are on the right in the direction of travel!



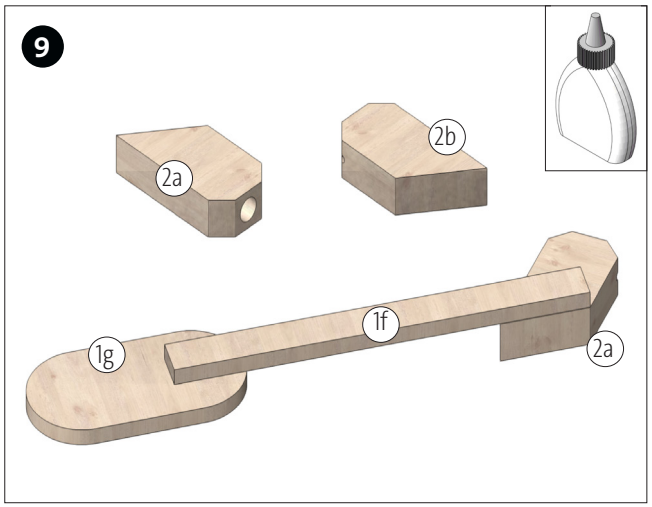
Screw the ring notch (8) into the hole provided as shown.



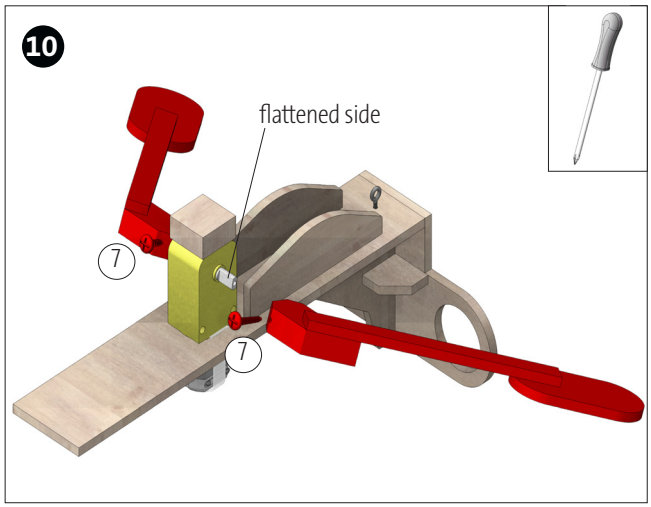
Glue the two wooden parts (1e) as shown on the upper side in front of the gear motor. Let the glue dry firmly.



Glue the head mounting bracket (2c) onto the geared motor as shown.

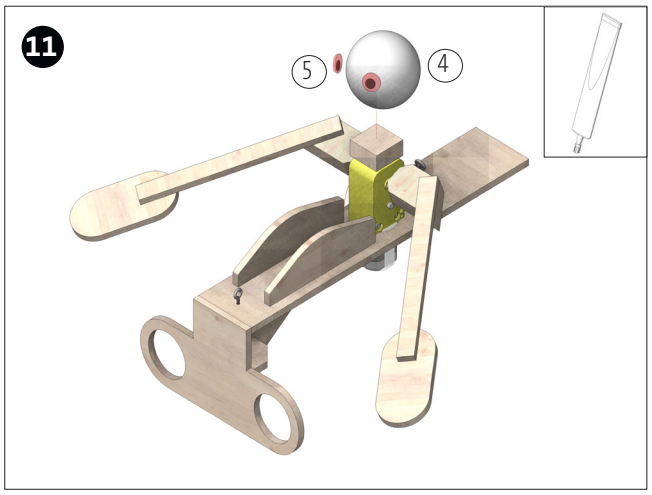


Glue part (1f) as shown flush with the sloping edge of part (2a). Then glue the middle part (1g) onto part (1g) with an indentation of approx. 8-10 mm. Glue rudder 2 mirror-inverted to paddle 1.



Place the two paddles from both sides on the axles of the gearbox as shown. Fasten them with one screw (7) each through the 2mm hole.
Note: screw must meet the flattened side of the drive axle.

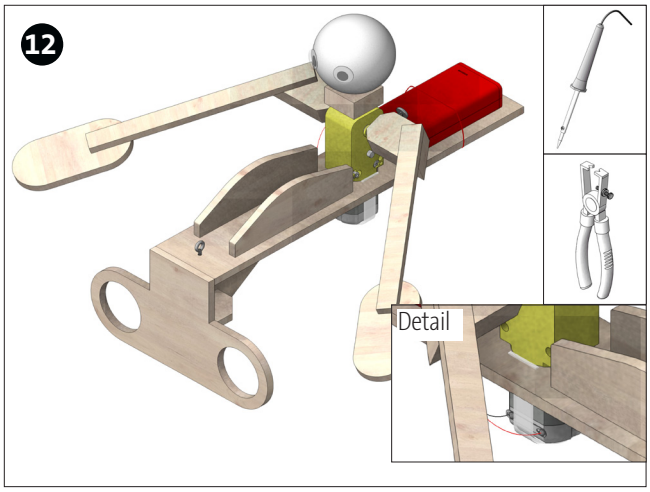
11



Glue the table tennis ball (4) centred on the head mounting. Then glue the two wiggly eyes (5) onto the head.

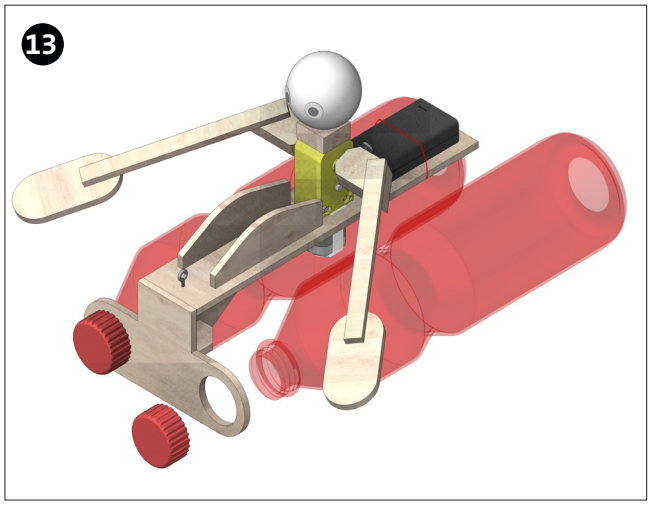
Please Note:
Paint the wooden parts so that they are better protected from water.

12



Feed the cables of the battery holder down through the hole in the base plate (1a). Solder the connection as shown in detail. After checking and inserting two 1.5V AA batteries, attach the battery holder to the base plate with the supplied rubber band.

13

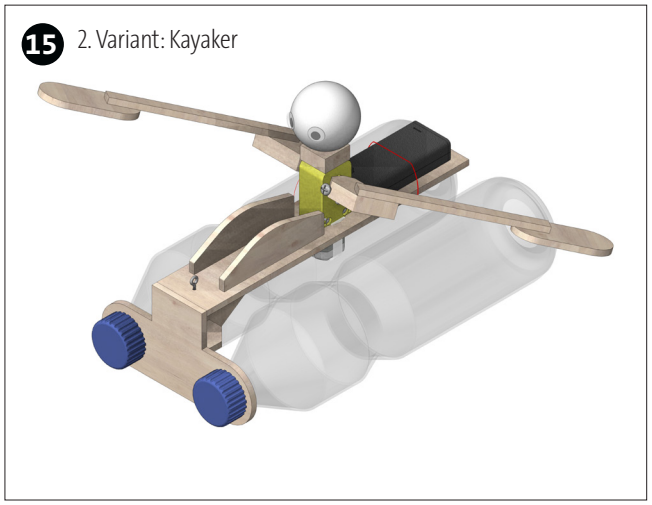


Attach two PET bottles (0.5 litres) as shown. The bottle is fixed by screwing on the lid. Done!

14

If the bottle neck is too long and thus no fixation in the holder is possible, cut off a part of the bottle neck.

15 2. Variant: Kayaker



The paddles can also be mounted offset, making it a kayak.

Template Base Plate
M 1:1