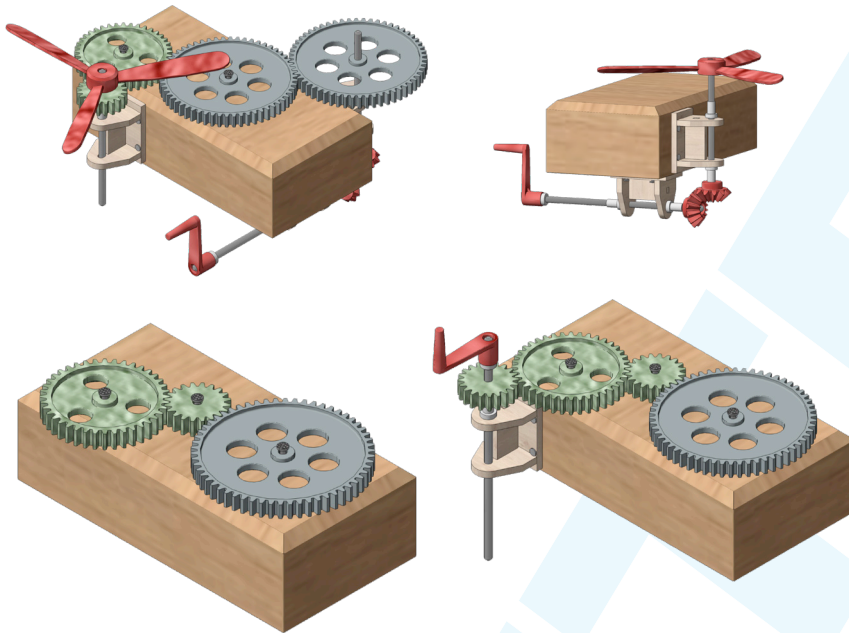


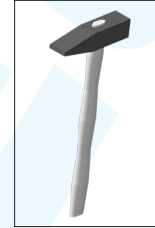
126.364

Grandpa Charly's tinker bag

Application examples:



Tools required:



Hammer



Pliers (for easier removal of the nails)

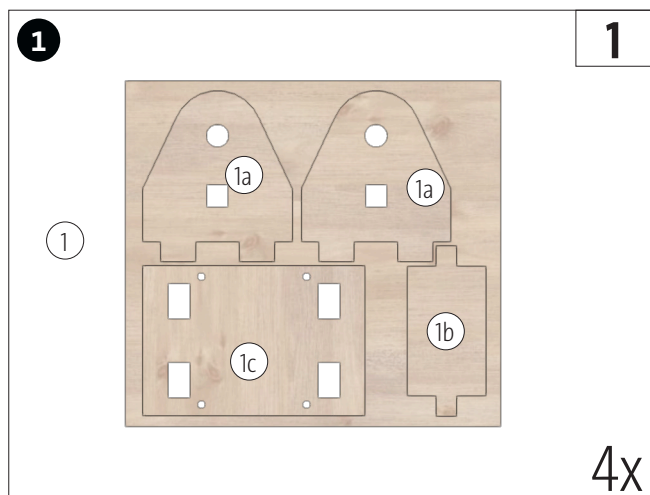


Wood glue or superglue (for preparation)

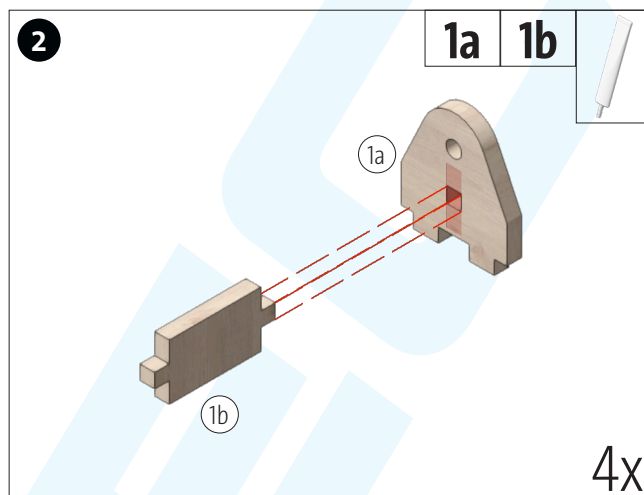
NOTICE:

Once completed, the OPITEC work kits are not articles with the character of toys of a generally commercially available type, but teaching and learning aids to support educational work. This kit may only be built and operated by children and young people under the guidance and supervision of a competent adult. Not suitable for children under 36 months. Choking hazard!

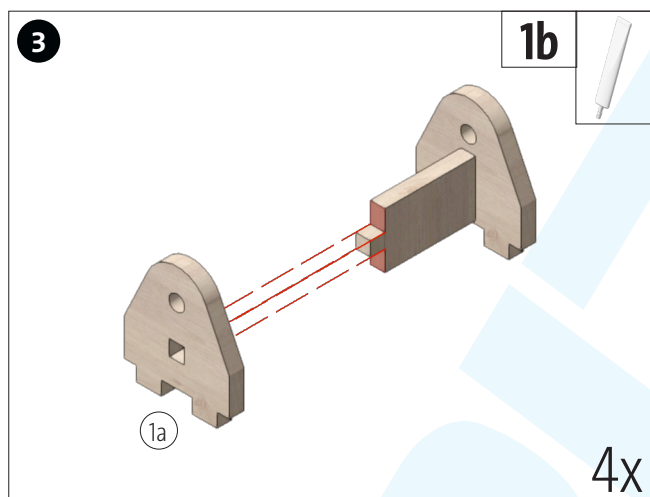
Parts list	Quantity	Dimensions (mm)	Description	Part no.
Bearing block	4	30 x 20 x 25	Bearing block	1
Metal axle	3	Ø3 x 70	Axle 70mm	2
Metal axle	3	Ø3 x 95	Axle 95mm	3
Nails	4	Ø2 x 40	Nail 40mm	4
Nails	20	Ø1 x 15	Nail 15mm	5
Cork block	1	120 x 60 x 35	Cork block	6
Gear wheel 58 teeth (grey)	1	Ø60	Gear wheel 58 teeth	7
Gear wheel 40 teeth (green with holes)	3	Ø 42	Gear wheel 40 teeth	8
Gearwheel 20 teeth (green)	3	Ø 22	Gearwheel 20 teeth	9
Bevel gear 12 teeth (red)	2	Ø 20	Bevel gear 12 teeth	10
Crank handle	1	30	Crank handle	11
Propeller	1	Ø115	Propeller	12
Reduction piece	10	Ø4 x Ø3	Reducer	13



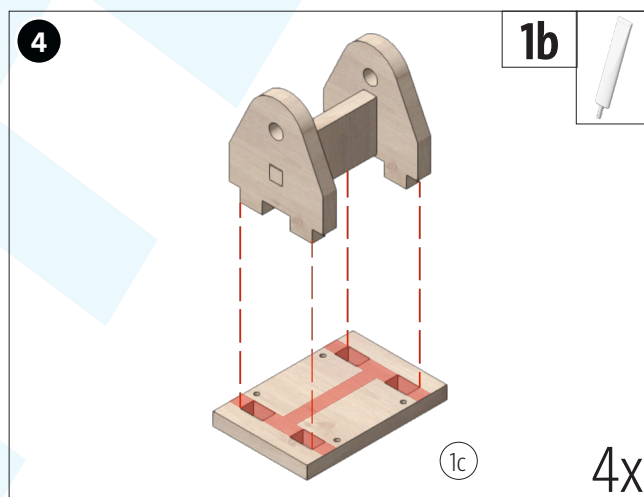
Preparation: Carefully remove the individual wooden parts of the bearing block from the frame. Carry out steps 2-6 in quick succession!



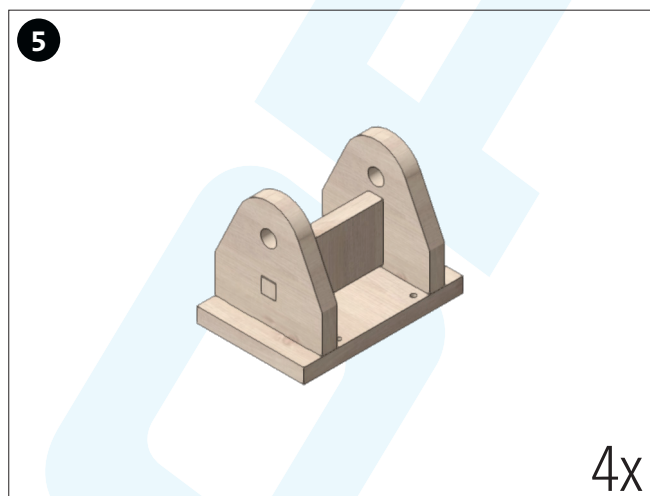
Glue part (1b) vertically into part (1a).



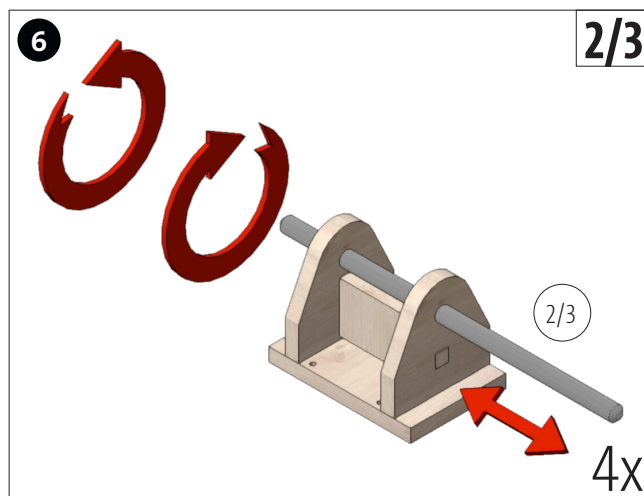
Glue the second part (1a) vertically onto the other side of part (1b).



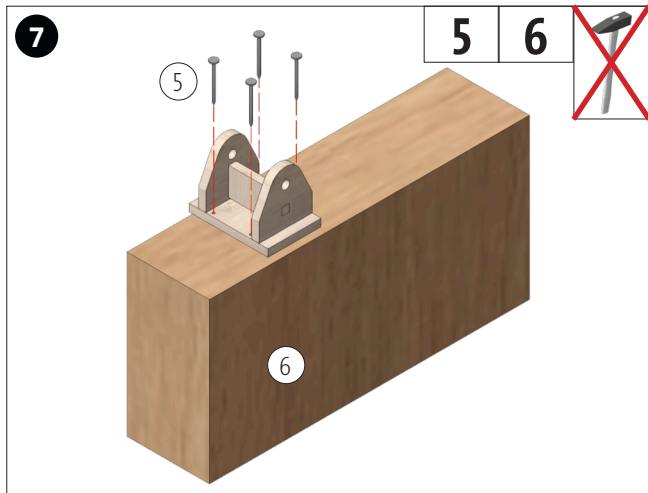
Glue part (1c) onto the pre-assembled parts.



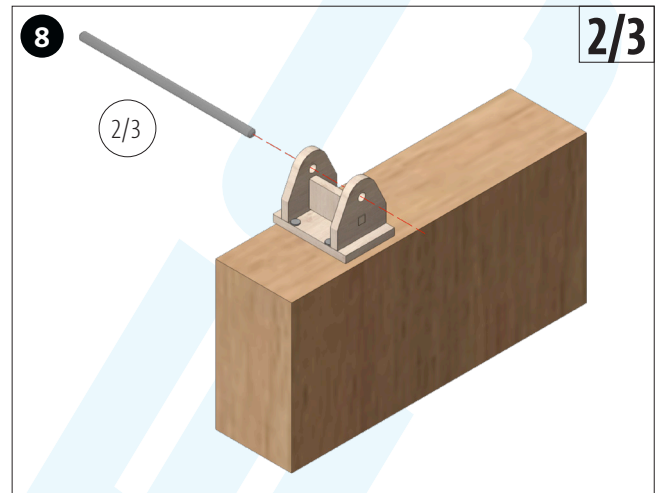
Almost ready:



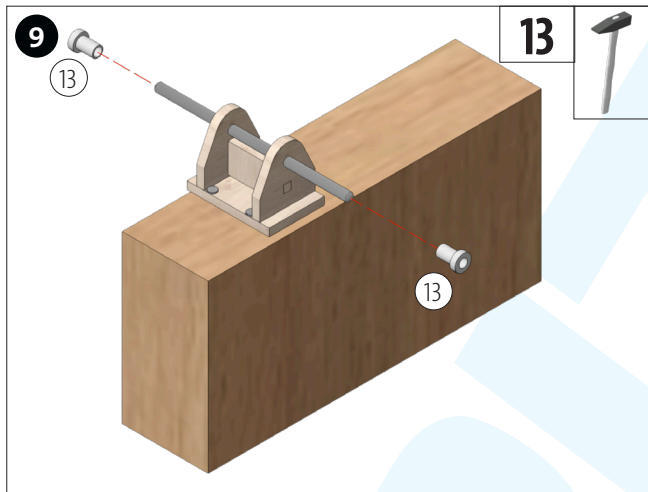
Insert a metal axle (2) or (3) through the two holes; it must be very easy to turn and move! Finished.



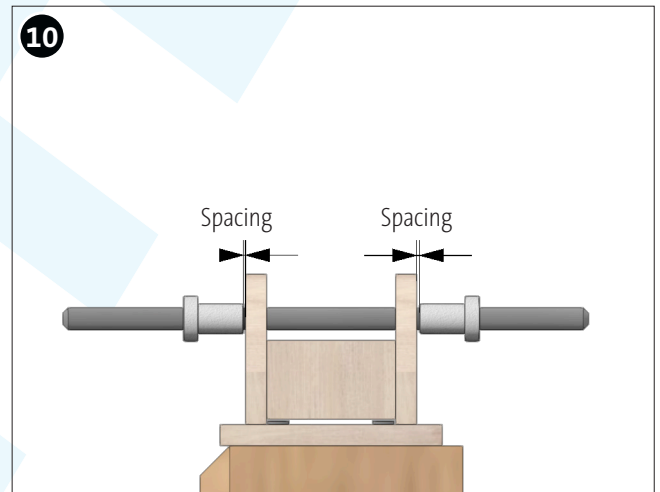
Application example bearing block: The bearing block is attached to the cork block (6) with 4 small nails (5). Tip: Press the nails through the holes at a slight angle to make the block hold better.



Slide axle (2) or (3) through the holes...



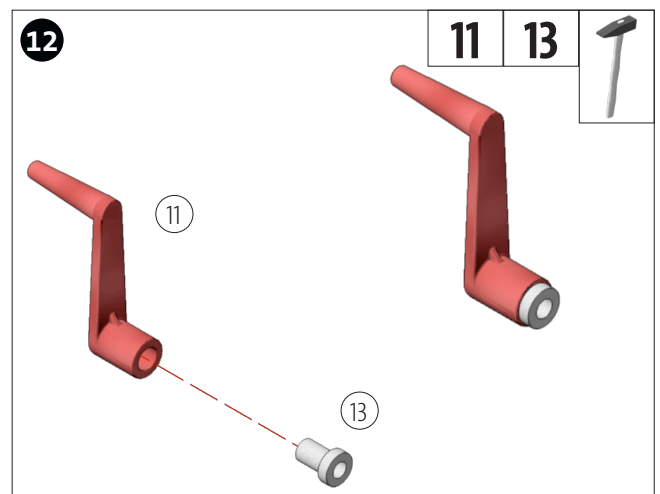
...and secure against slipping out from both sides with a reducer (13).



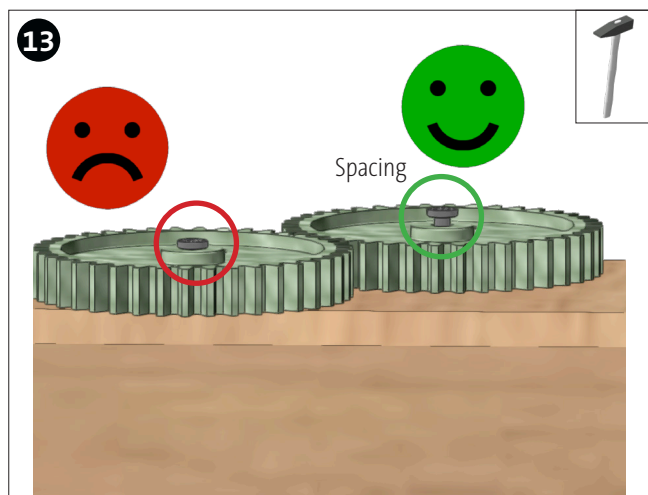
Do not push the reducers all the way onto the bearing block, otherwise the axle will jam!



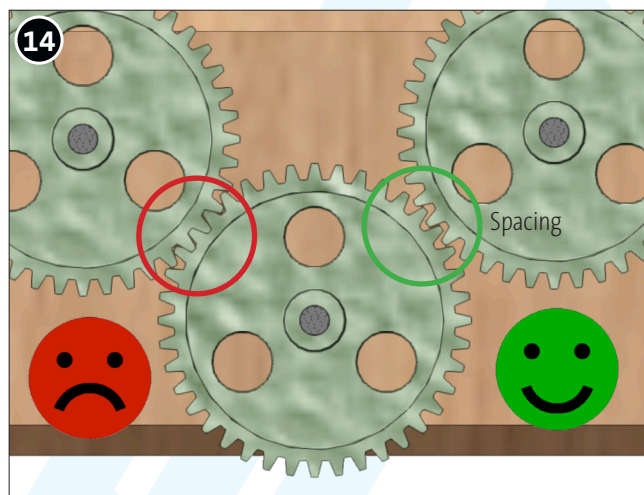
Done! Further parts can now be attached to the axle.



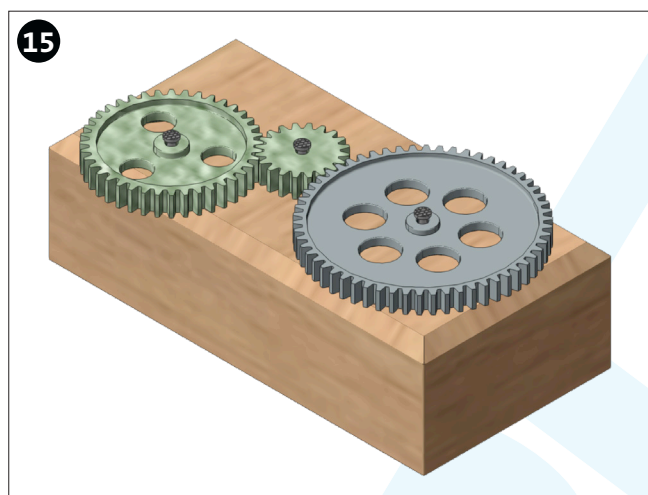
Prepare the crank handle: Press the reducer (13) on this side into the hand crank (13).



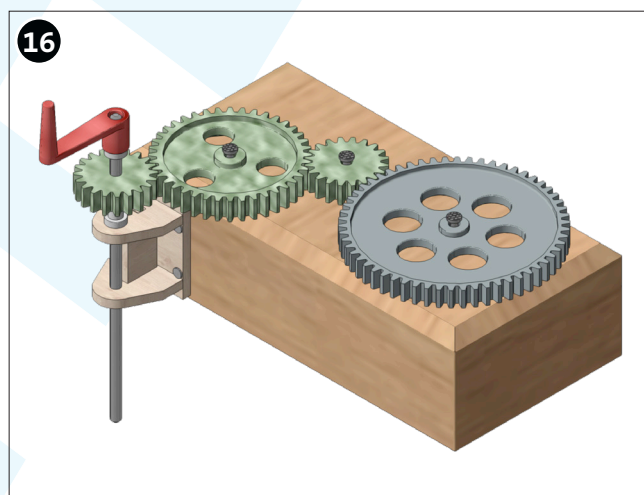
The gear wheels are attached to the cork block with nails (4). Attach the nails as vertically as possible. Be careful not to push the nails in too far!



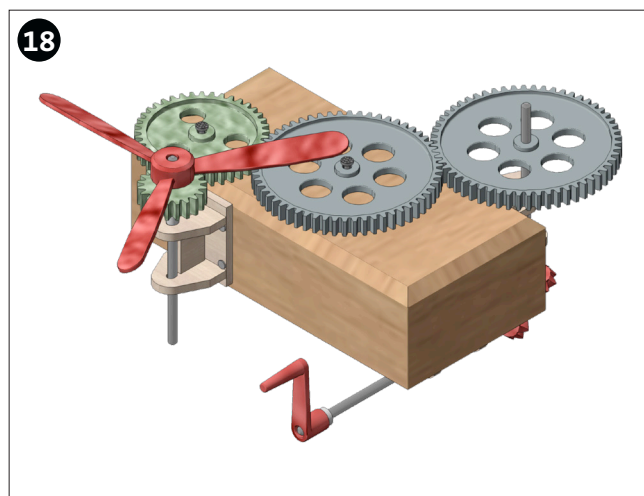
When attaching the gear wheels, please also ensure that they are not mounted too close together.



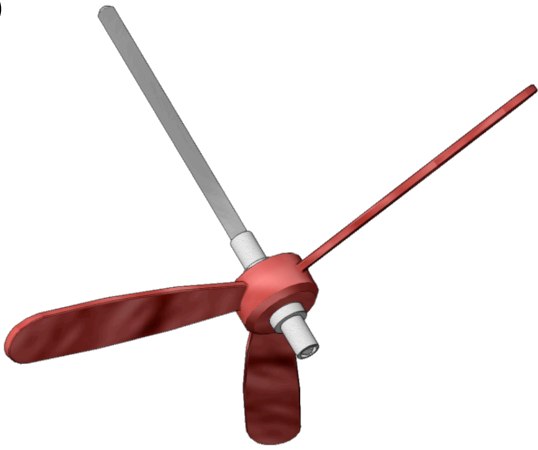
Application examples.



Application examples with bevel gears



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If the propeller is too loose, it can either be clamped in place with two further reducers (13) or some adhesive film can be wrapped around the axle.