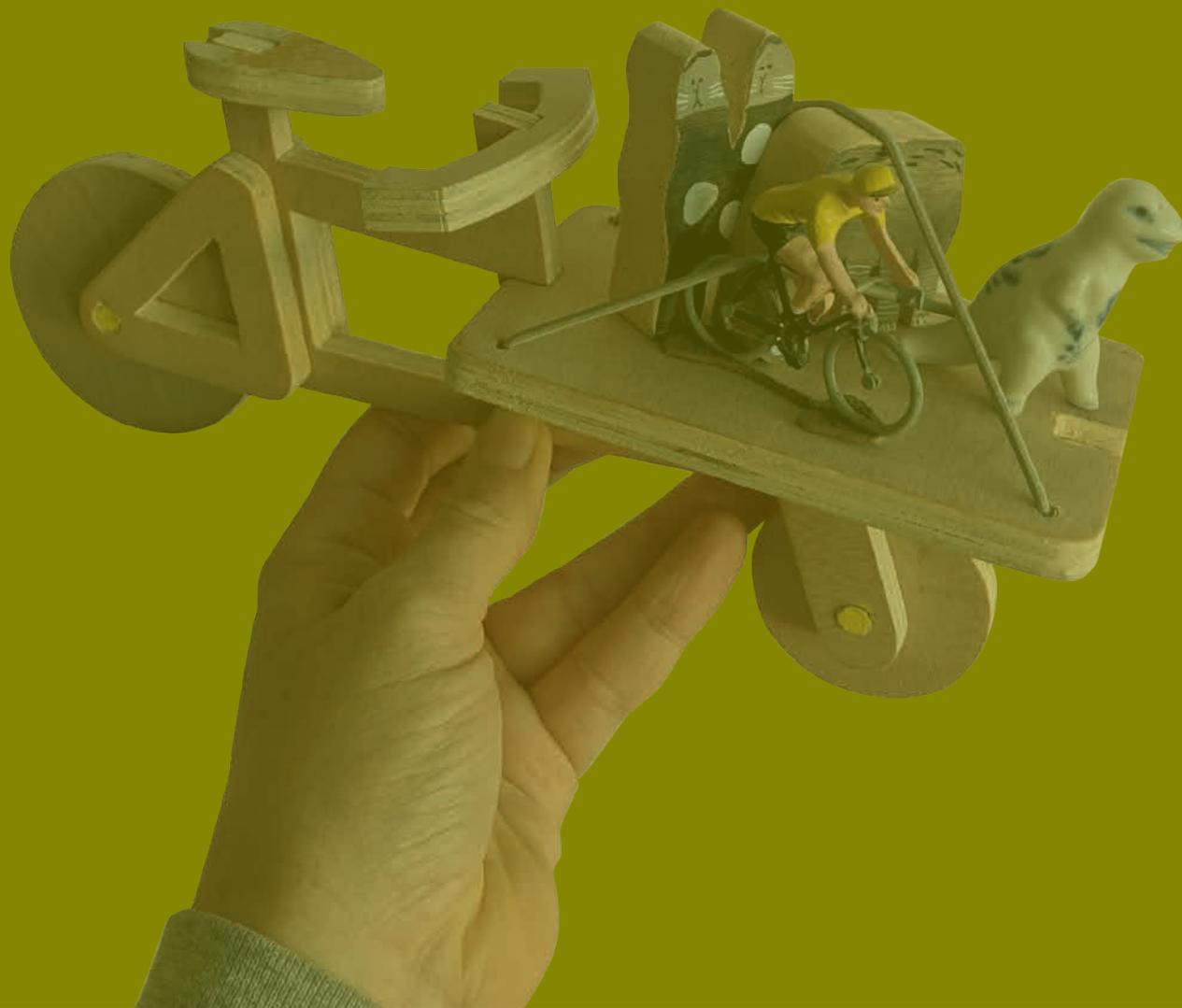


microcargos



microcargo

A toy cargo bike, easy to make at home with basic tools,
by Adeline O'Moreau.

This resource is available for free, for personal use and
comes from adelineomoreau.com/microcargo

If you are enjoying it, please consider donating to
Cycling UK, who do crucial work enabling people of all
ages, backgrounds and abilities to be able to cycle safely,
easily and enjoyably:

<https://www.justgiving.com/fundraising/toy-cargo-bike>

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Share your process and results using
#DIYmicrocargo



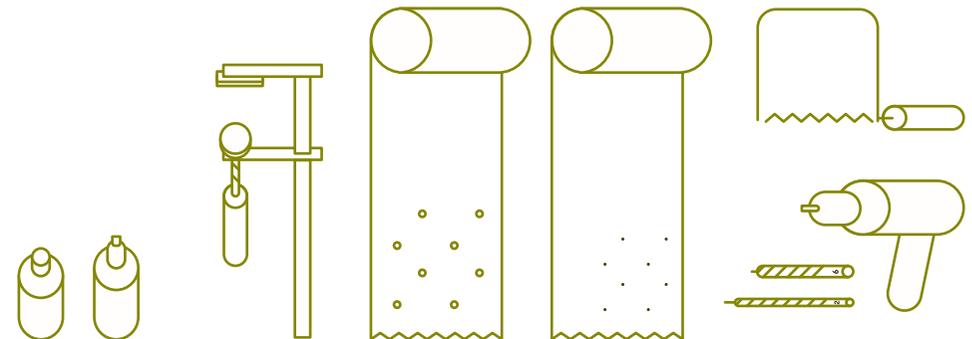
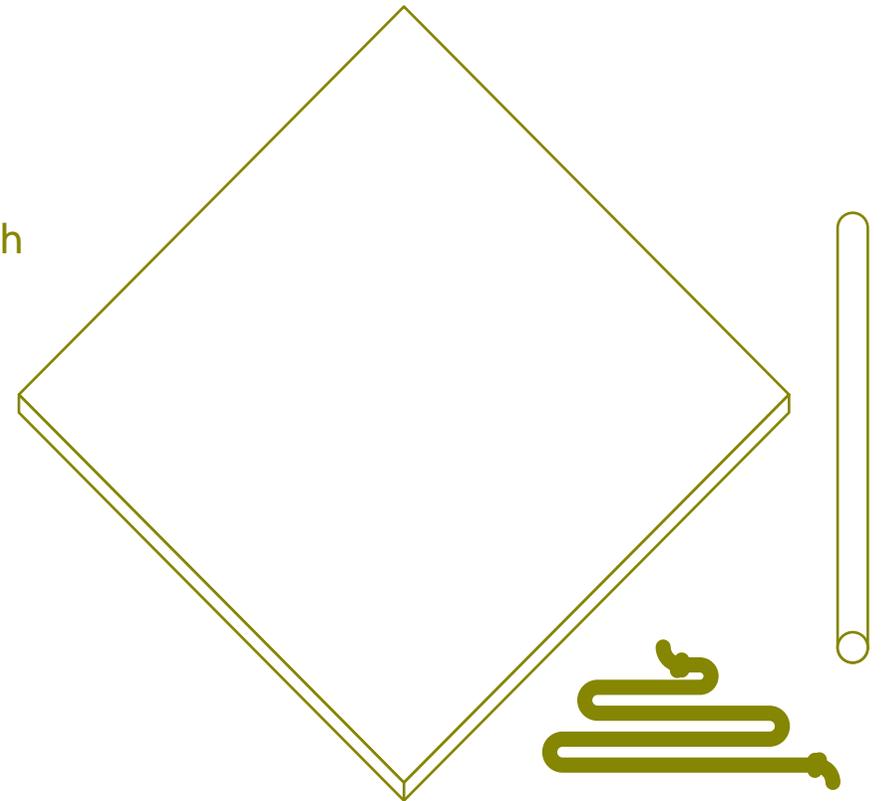
what you need

- 6mm dowel (round wooden stick), roughly 10cm length
- 6mm sheet material, roughly 30cm x 30cm
- 2mm round woven elastic

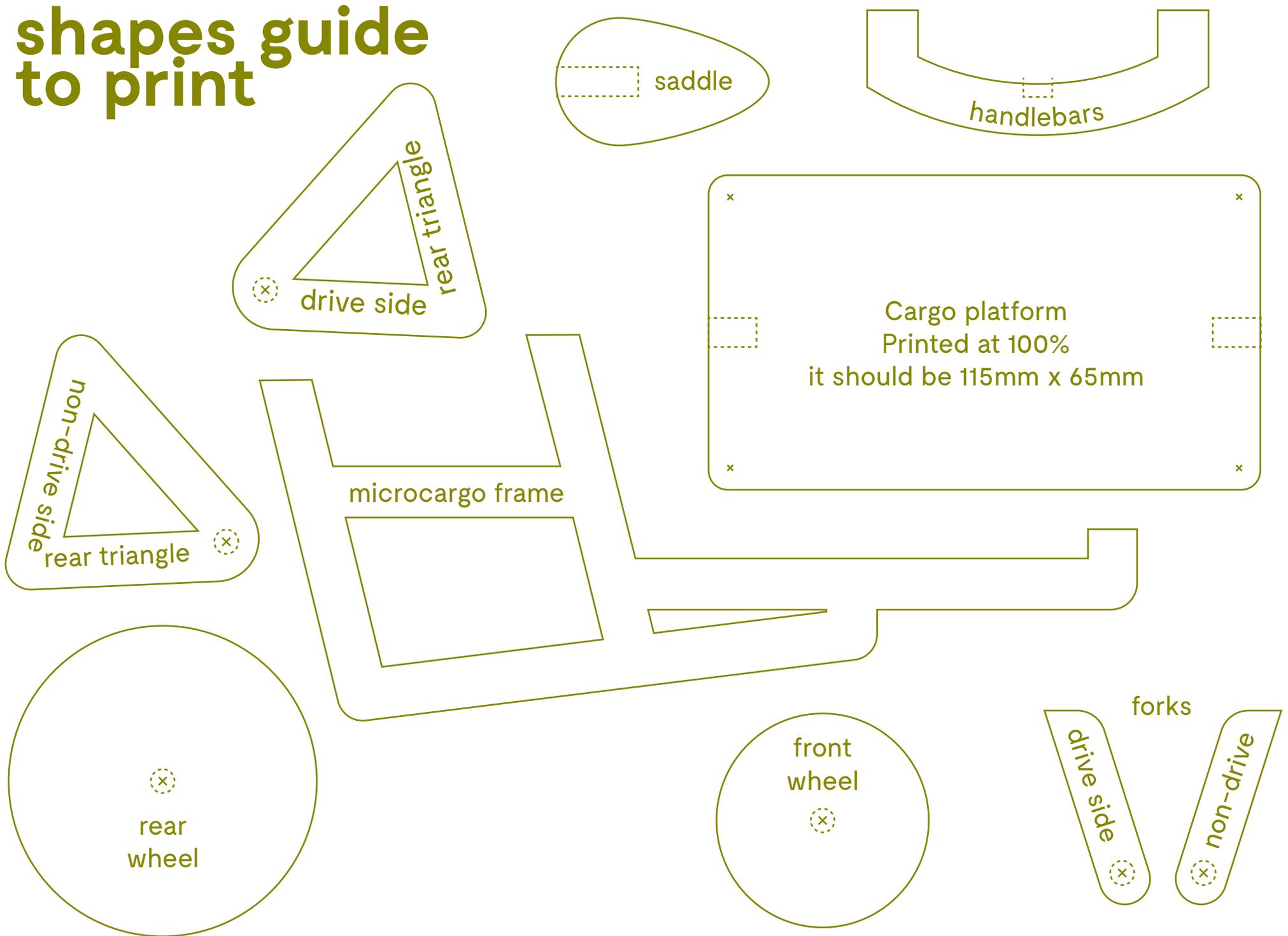
- Coping saw or scroll saw
- Sandpaper - coarse and fine
- Drill
- 6mm and 2mm wood drill-bits

- Clamps
- Wood glue
- Kid-proof wood finishing product

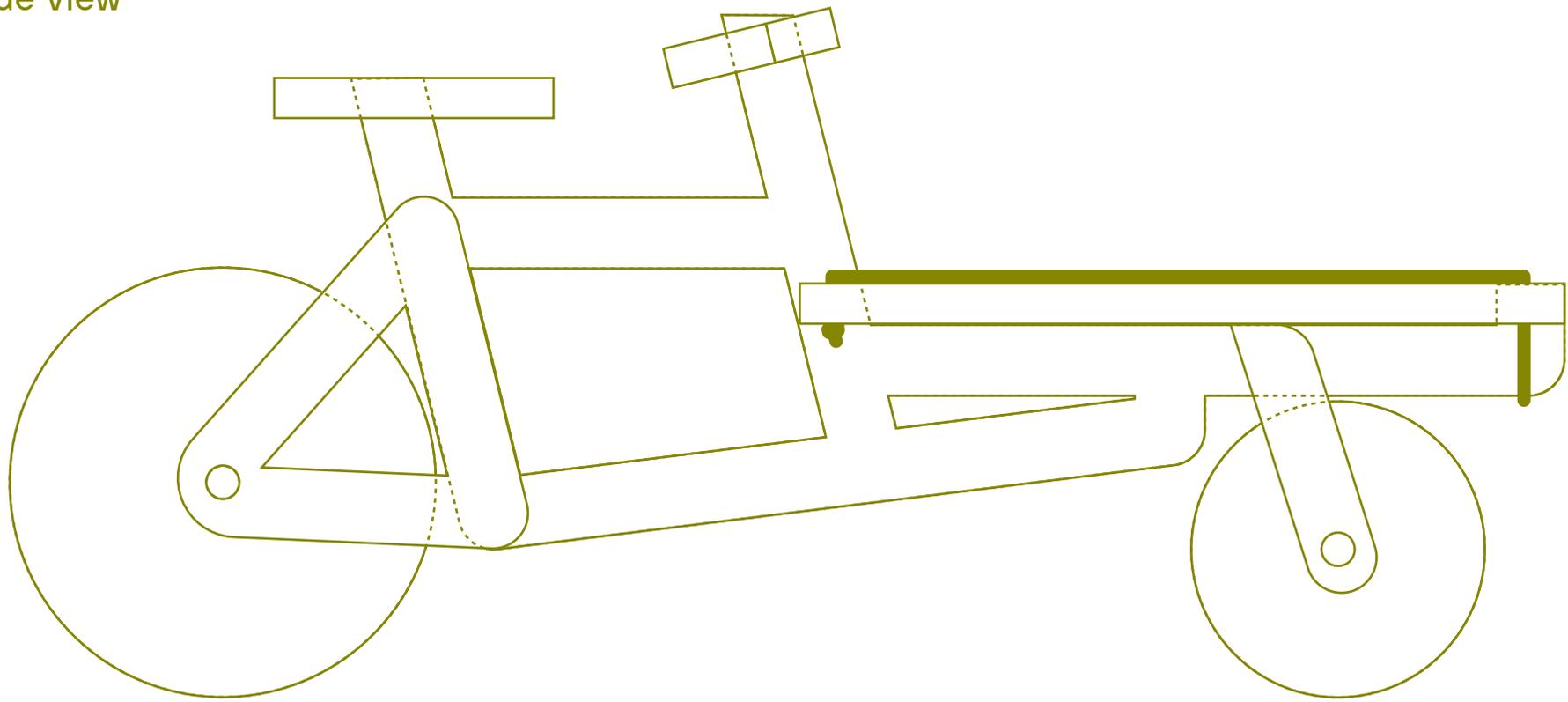
Check your local wood recycling project and Library of Things for supplies and tools:
<https://www.communitywoodrecycling.org.uk>
<https://www.libraryofthings.co.uk/>



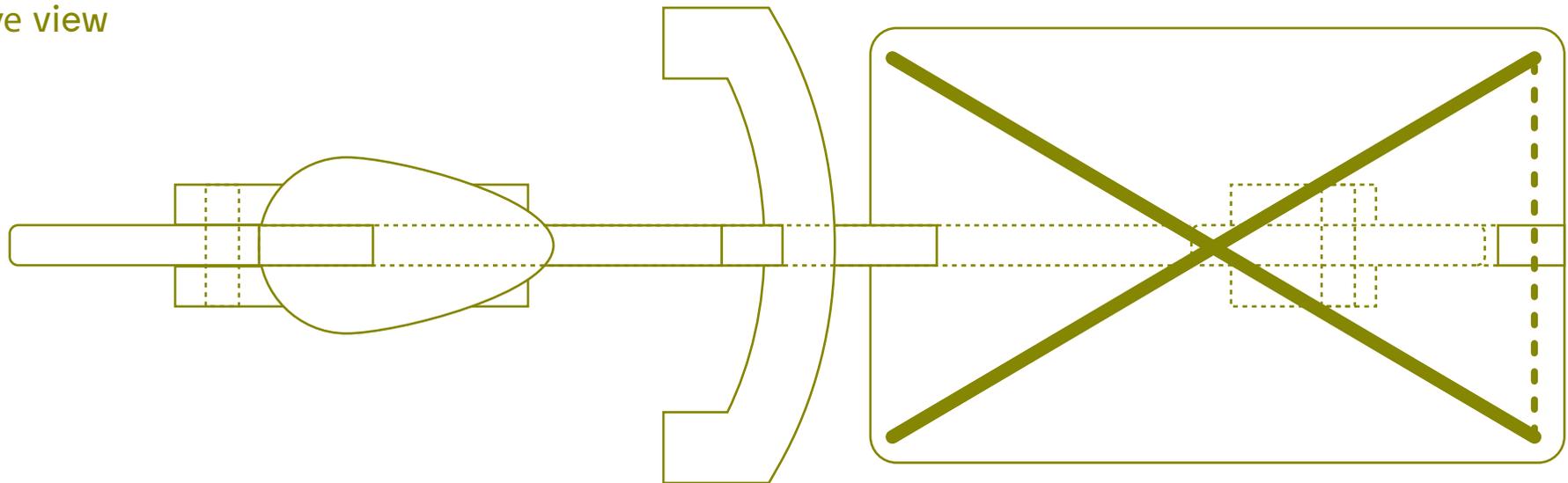
shapes guide to print



drive side view



bird's eye view



step by step

1. Cutting the shapes:

Print the guide on page 4 at 100% scale. You can check the scale by measuring the cargo platform is the right size on your printout.

Cut loosely around the paper shapes and use these as guides for your wood cuts, by sticking them on the wood.

I found it easier to do one shape after the other, instead of laying it all up and cutting it all up in one go.

4. Cutting the slots:

I cut them a bit smaller than needed at first and opened them up gradually to make sure the fit was snug. Sand a little, check the fit between the pieces, then repeat.

It can seem repetitive and boring, but if the fit is too baggy it will look bad and won't hold together as well.

Another round of sanding as needed.

2. Drilling the holes:

Use the 6mm drill bit to drill the rear triangles, the fork blades and the wheels. Try to drill square to the surface of your material.

When drilling the rear triangles and the fork blades, I clamped each pairs together on my bench to drill in one go.

You want a snug fit for the dowel in the rear triangles and forks. But you want to open up the wheel hole a touch by wiggling the drill, so it will be able to spin around the dowel.

5. Assembling:

Before gluing anything, make sure everything fits nicely. Check for clearance between the wheels and the frame.

Glue the rear triangles and fork blades either side of the frame, while keeping a piece of dowel through the holes, to make sure all is aligned. Keep the wheel out at this time, to avoid it getting glued in place. Once the glue is dry, fit the wheels and trim the dowels flush.

Glue the bars, the saddle and the cargo platform.

3. Sanding:

Start with the coarse sandpaper to tidy the edges and surfaces. When you are happy with the shapes, move to the fine sandpaper, to put the finishing smoothing touches.

I find it easier to tape a big section of paper to my work bench and work by moving the piece on the sandpaper.

6. Finishing:

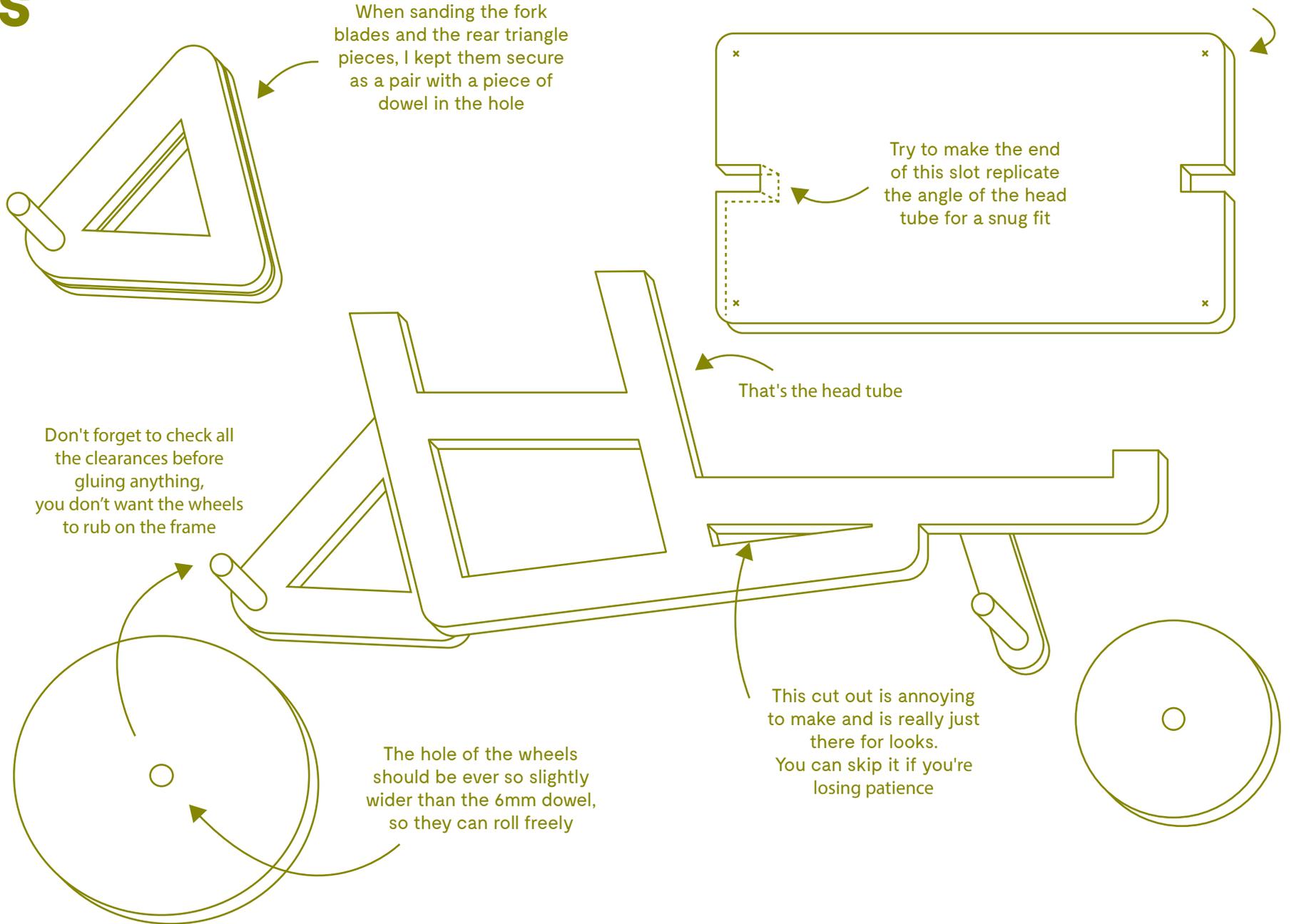
You can choose to let the cargo bike go commando, or to finish it with a wood treatment product.

If it's made for kids, make sure the product you use is food safe!

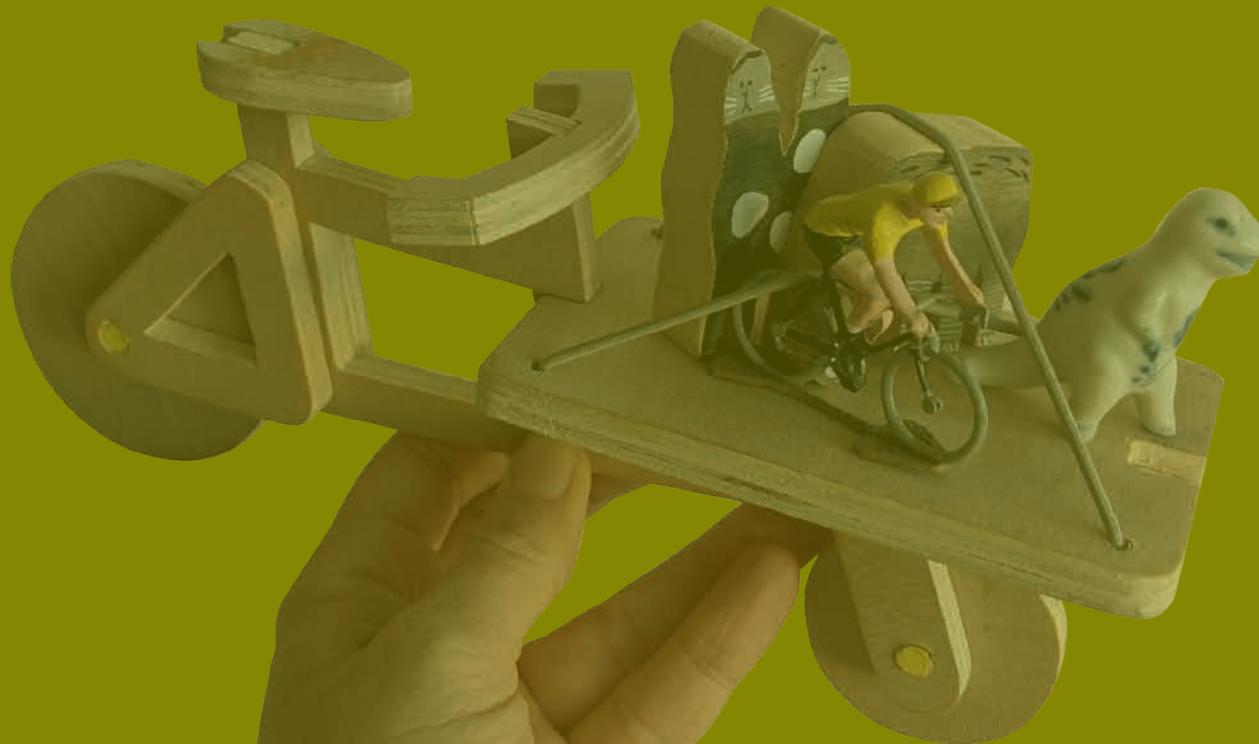
When the treatment is cured, thread the elastic through the holes on the platform – start and finish with knots under the platform, and cross over on the top.

Load up and go!

a few tips



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Share your process and results using
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