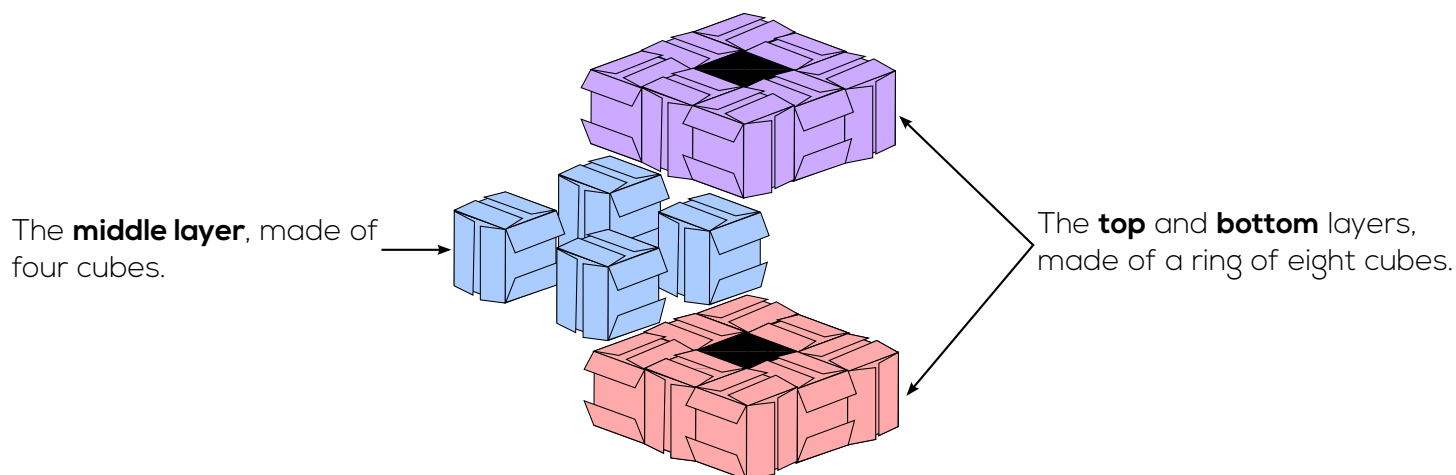


MEGAMENGER

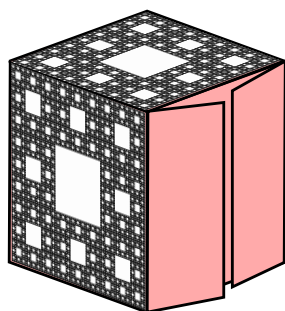
Layer-by-layer construction: level-1 Menger sponge

In this method, as the name suggests, we build the three layers of the level-1 Menger sponge separately

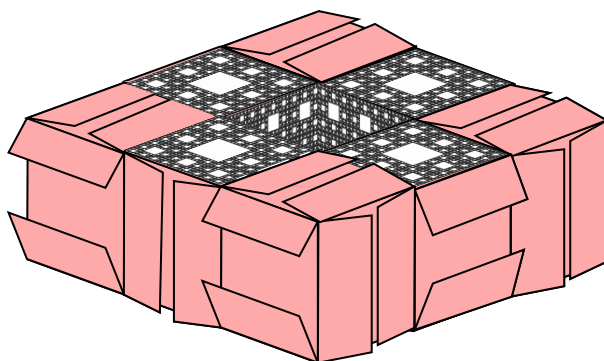


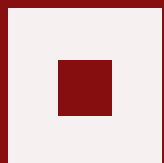
and then stick them together. We also need to clad some of the cubes to strengthen the sponge. We have put together some instructions below showing you how to do this. Of course, there is more than one way to layer the sponge, so feel free to mix it up if you want! Just make sure the end result is the same as what we have shown here.

Step 1. Build 20 cubes. You will need to double-panel 12 of these (four for each layer).



Step 2. Pick four double-panelled cubes and four unpanelled cubes to build a ring. Make sure the unpanelled cubes are at the corners of the ring.

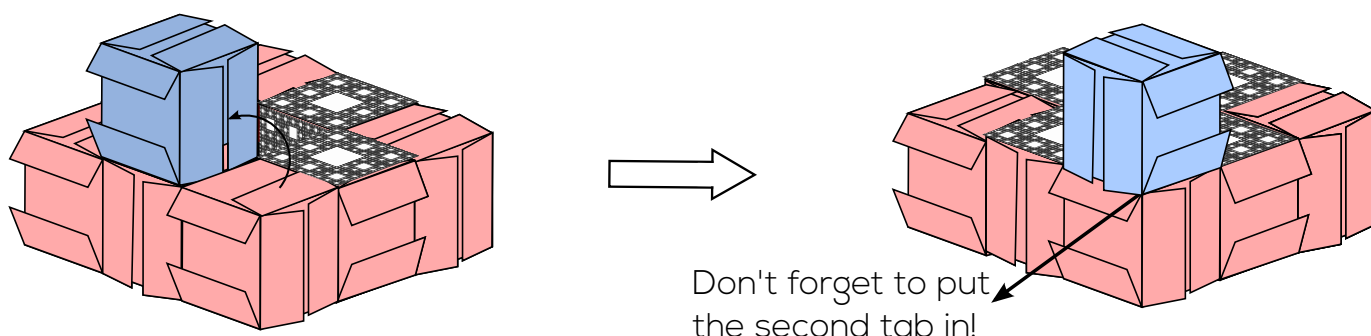




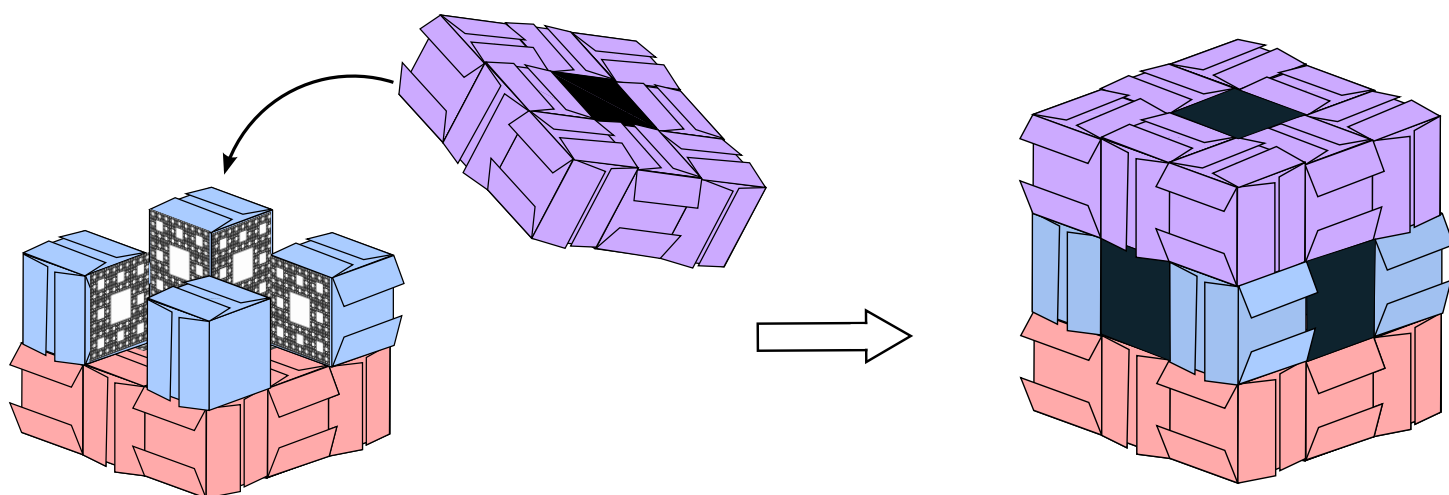
MEGAMENGER

Step 3. Construct a second ring of cubes, which should look the same as step 2, with the panels applied in the same places.

Step 4. Now link the remaining four double-panelled cubes to the corners of one of the rings. This can be a bit tricky, as each cube needs two tabs linked to the ring. We think it's easiest to start with the one on the inside first, as shown in the diagram below. Repeat this at the other three corners.



Step 5. We now need to put on the final layer. This will rest on top of the base you constructed in the previous steps, with the panelled sides on the underneath.. We prefer to place the ring on top and then work our way around to put in the 8 tabs. It is hard to get the internal tabs, but don't worry if you miss a couple out as the structure should still hold. If all else fails - use TAPE!!!!



Your level-1 Menger sponge is ready to be attached to a larger structure - or if you are just building a level-1 sponge, you can finish off by panelling the outside.