

Architecture Advent Calendar

Assembly Instructions

Printing

Print all files using their original orientation at 0.2mm layer height. **No supports are needed!** And, the model can be printed in full color by using filament changes at various heights – you don't need a multi-color printer. You can use the illustrations and photos as a color guide, or do something entirely different. A few printing specifics:

- Print two copies of `edfu_cap.stl`
- For `edfu_hieroglyphics.stl`, print the lower layers in black and the top .4mm in the same color as `edfu_base.stl`.
- Print five copies of `mughal_lattice.stl`. Metallic or silk gold filament is good for these and the circular Mughal window.
- Print two copies of `tudor_window.stl` and `tudor_insert.stl`. It's best to print the windows in transparent filament, with black or brown for the topmost layer.
- If you have a textured print bed, use this for `tudor_roof.stl`
- You may want to print the columns from the Roman side in 0.1mm resolution; either use a slicer capable of changing layer height in mid-print, or use the separate files (`roman_base_a.stl` and `roman_base_b.stl`) to print at different resolutions.
- For `planisphere_starwheel.stl`, print the first layer in dark blue or black, and the rest in white (or even better, Silk White PLA). You may want to reduce your extruder's flow rate down a few percent to get all the details of the star map, and make sure you have "elephant's foot" prevention enabled.
- The Planisphere window (`planisphere_window.stl`) should be printed with a dark or black first layer or two, and the rest white, or vice versa.

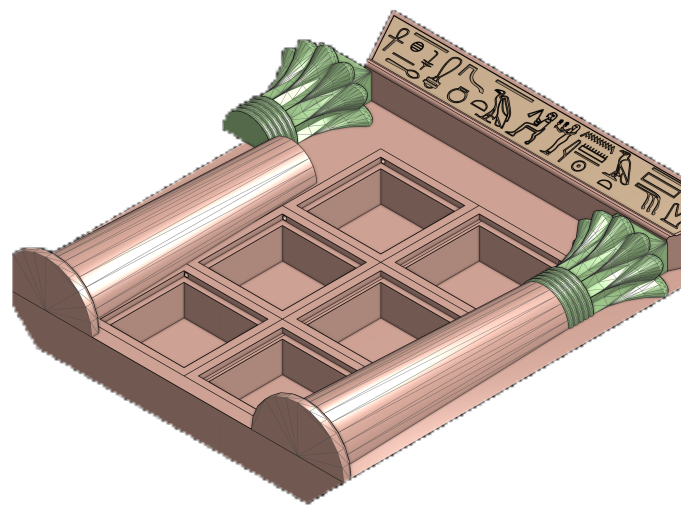
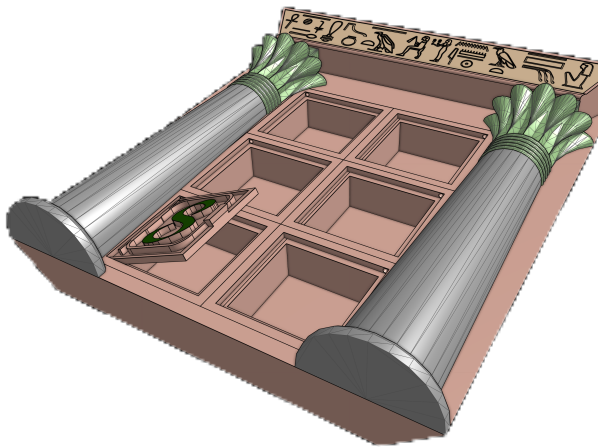
The Tudor colors can be a little difficult to match; the ones used in the photos are Warm White and Chocolate Brown PLA from [American Filament](#). Also, you may want to choose a "marble" type filament for the Roman columns, such as Polymaker Matte PLA Filament Marble White.

Assembly

Some general tips on assembly:

- Be sure you have a flat and level surface when assembling the calendar, especially when the glue is setting. E6000 is a great glue for this project; superglue is not recommended.
- Some doors may need a little sanding to close properly, but otherwise are designed to stay closed with a bit of tension between the door and the base. You can also snap in the doors as the final step, after you've glued together the panels.

Glue the hieroglyphics panel into the lintel panel of the Edfu base. Slide each of the column caps into position - it will be a tight friction fit, so no glue will be needed.

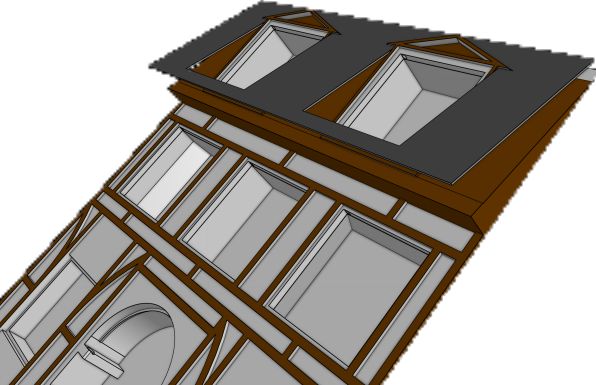
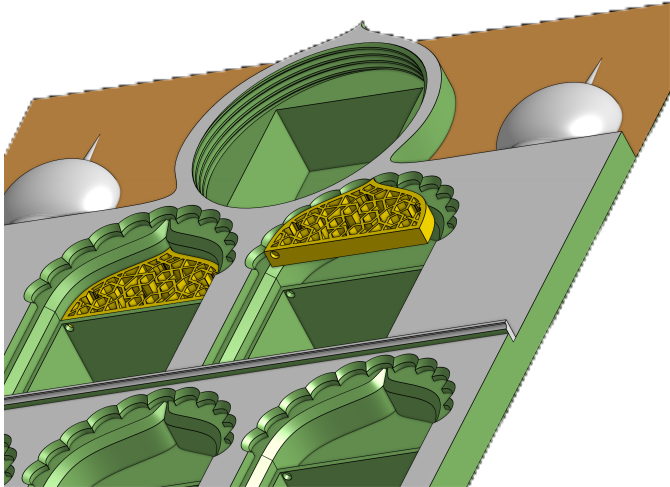


Add the doors by inserting the pegs on the door's hinges into the holes in the doorframe. This part can be a little tricky - you may want to insert top peg first, and then slide the other peg along the bottom of the frame until it snaps into place.

If you printed `roman_base_a.stl` and `roman_base_b.stl` separately, glue the columns in place on top of the Roman base. Snap in the doors.

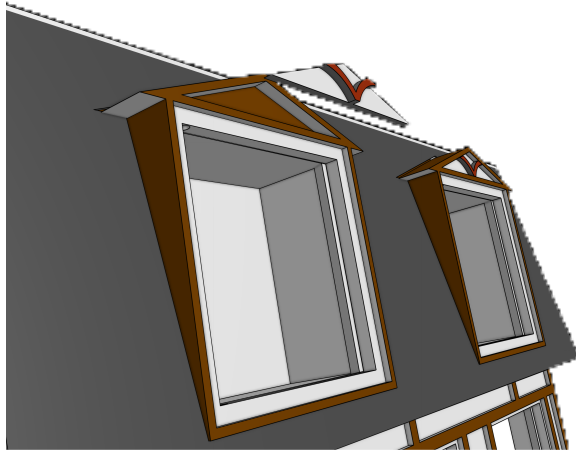


Snap the Mughal lattice pieces into the Mughal base. Be sure the holes in the lattice parts align with the holes in the base, as in the illustration. Then screw the Mughal circular window into the opening at the top of the Mughal base, and snap in the doors.



Glue the Tudor roof panel into position on the Tudor base.

Insert the Tudor dormer inserts into the triangular slots on the Tudor base. You may need a spot of glue to hold them in if they don't friction fit.

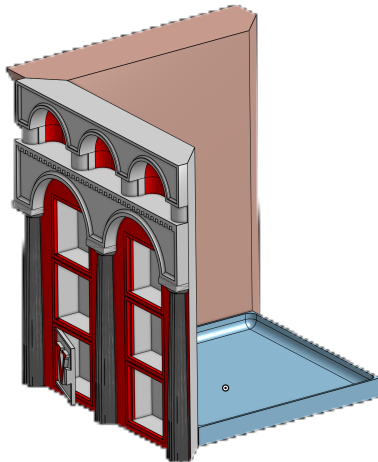
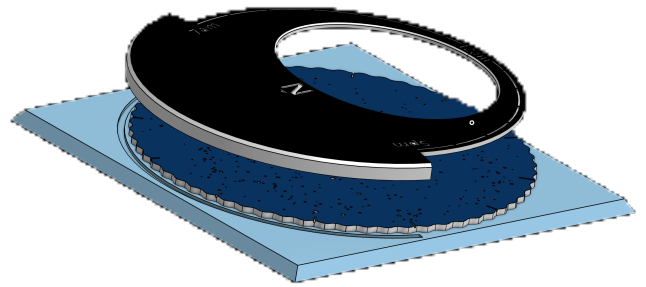


Snap the Tudor front door into the hinges on the Tudor base. You may have to sand the outer edge of the door for it to close completely. Be sure it isn't too tight to open.



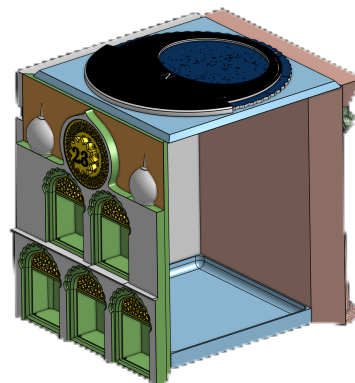
Snap the windows into position on the Tudor base. They should friction-fit and stay in without glue. Snap in the remaining doors.

Assemble the planisphere roof as shown - the starwheel's peg fits into the central hole in the roof, and the planisphere window can then be glued into the semicircular hole in the roof. Be careful to use just enough glue (don't get any on the wheel, it needs to turn freely).



On a flat and level surface, glue together the base and the first two panels. It's important that these first three parts are all aligned precisely before the glue sets. Let the glue set a few hours before moving on to the next step.

Glue the Planisphere and the Mughal panel into place, and let the glue set another few hours.



Glue the Tudor panel into place, and let the glue set one last time. Snap in any remaining doors, and then you're ready to add candies. Dove Promises™ chocolates will fit perfectly in doors 1 to 23, as will individually wrapped Life Savers and Werther's Original™ hard candies. Door 24 is just right for a Ghirardelli Mini™ square, but other thin candies will fit as well, like an Andes Chocolate Mint™.

