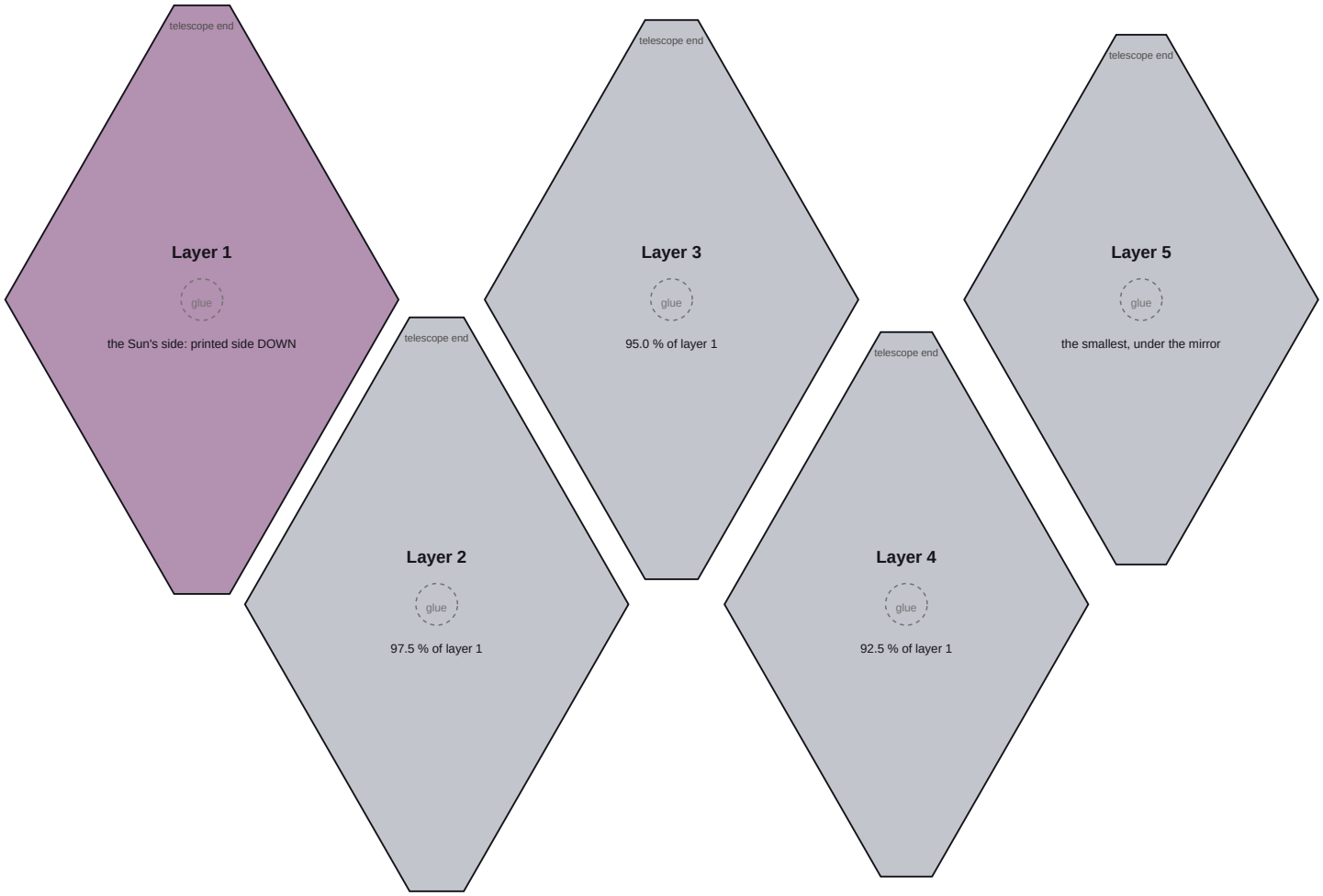
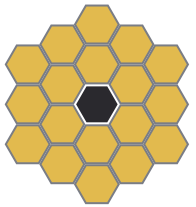
The fold-up James Webb Space Telescope

Find Webb at L2 in the live 3D map:
www.spaceradar.ai/#at=deep-jwst

Every part at 1 : 250: one metre of Webb is 4 mm here, so the sunshield, which NASA calls the size of a tennis court, is 85 mm long and the gold mirror 26 mm tall. Cut on the solid lines, fold on the dashed ones, glue the grey tabs.



Primary mirror: 18 segments



Cut round the outer edge. The black middle is the hole light leaves by.

secondary 0.74 m

Three struts (black): feet on the mirror's edge

top, 7.9 m

lower left, 7.8 m

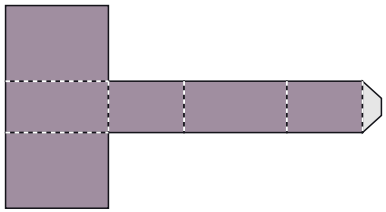
lower right, 7.8 m

Instrument box (behind the mirror)



Tower: fold it into a 3 mm square tube

Spacecraft bus



Solar array and high-gain dish



dish

1. The sunshield.

Cut out the five layers. Lay layer 1 printed side down (on Webb its Sun side is violet), then 2, 3, 4 and 5 on top, every 'telescope end' the same way. Glue them at the middle circle only, so the edges stay a little apart: on Webb the layers are 1 to 2 inches apart at the middle and about 10 inches at the edges.

2. The spacecraft.

Fold the bus into a box and glue it under the middle of layer 1. Glue the solar array to the bus's face that looks away from the telescope end, sticking out under the shield, and the dish dot under the bus.

3. The telescope.

Fold the tower and stand it on the middle of layer 5. Fold the instrument box, glue it on the tower, and glue the mirror upright on its face looking towards the telescope end. Glue the struts' feet on the mirror's edge (one at the top, two low at either side) and their tabs together in front of the hole, with the secondary on them.

To scale, from NASA (webb.nasa.gov facts, mirrors and sunshield pages; STScI JWST User Documentation, read 2026-11-07): the 18 segments, 1.32 m flat to flat, in their real layout (6.5 m across), the 0.74 m secondary, and the sunshield's 21.197 x 14.162 m. Estimated from NASA's own 3D model of Webb, as NASA's pages do not give them: the shield's blunt ends, the bus, the solar array, the dish, the instrument box, the tower and the secondary's 7.2 m from the primary. Simplified: flat layers (the real ones curve and fan apart at their edges), our own steps in size from layer 1 to 5, plain boxes, no booms, cables or radiators.