



EUROPA CLIPPER Spacecraft

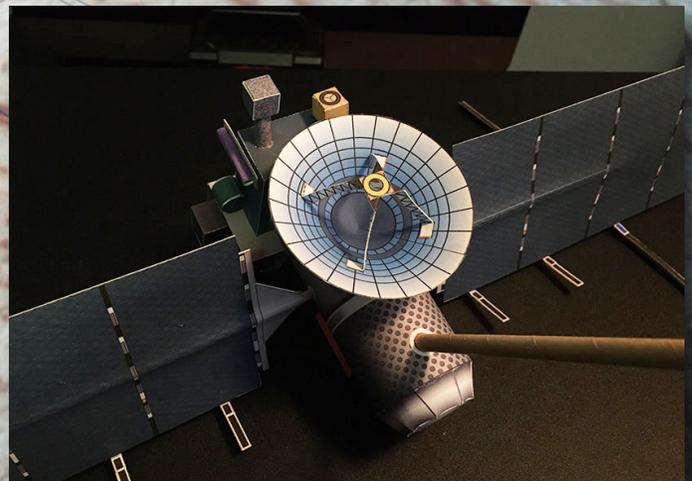
Paper Model (Advanced Level)

Age level: 12+

Degree of difficulty: Advanced

Estimated time to build as an individual: 4.5 – 5 hrs

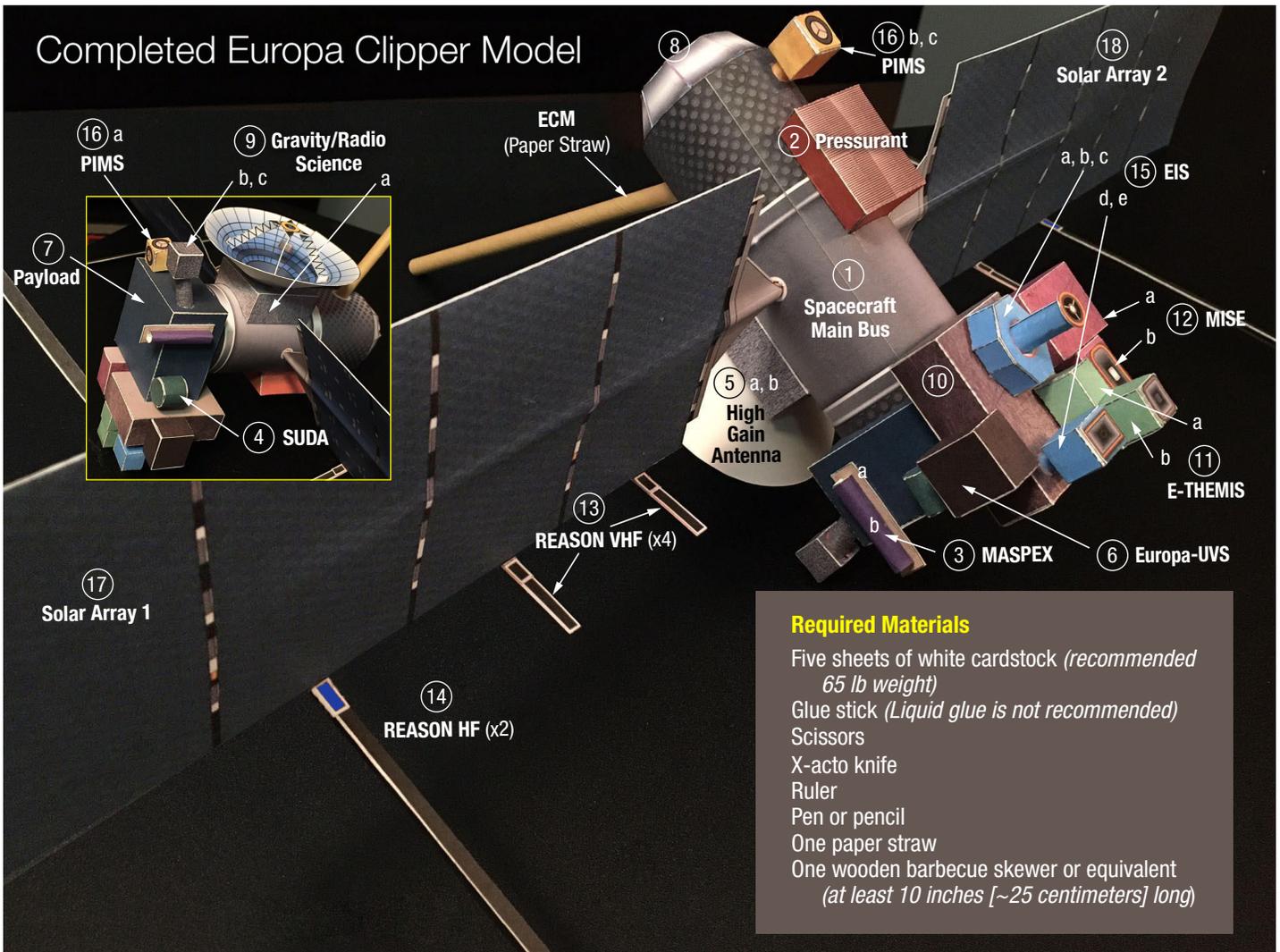
Finished model size: 22 inches long



NASA's Europa Clipper spacecraft will conduct a detailed survey of Jupiter's moon Europa to determine whether the icy moon could harbor conditions suitable for life. The spacecraft, in orbit around Jupiter, will make about 40 to 50 close passes over Europa, shifting its flight path for each flyby to soar over a different location so that it eventually scans nearly the entire moon.

After each flyby, the spacecraft will send its haul of data back to Earth. The time between flybys will also give scientists time to study the data and consider adjusting the timing and trajectory of future flybys if they find regions that spark curiosity and need more study.

An artist's rendering of Europa and Jupiter based on images sent by visiting spacecraft.
 Credit: NASA/JPL-Caltech



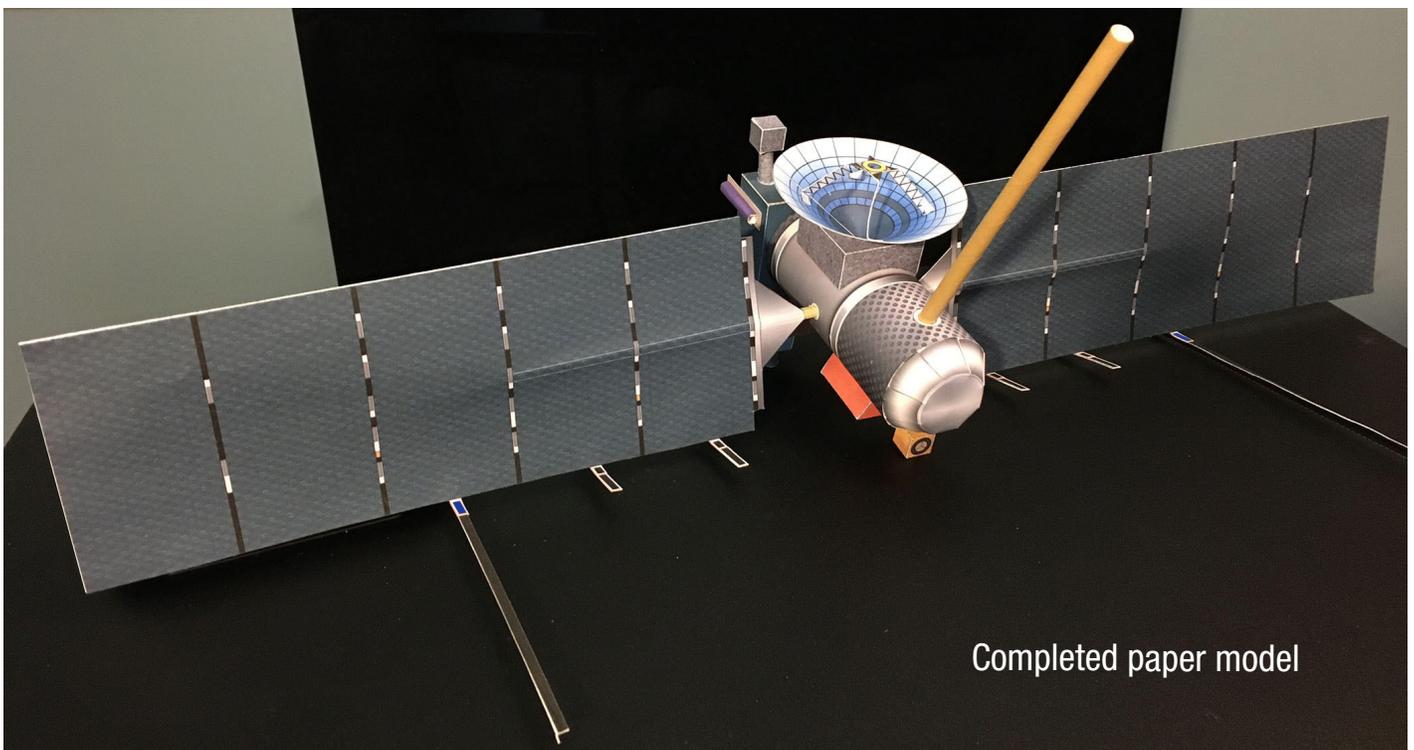
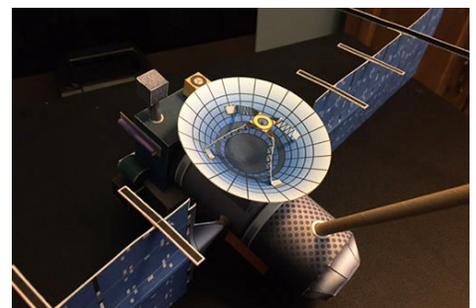
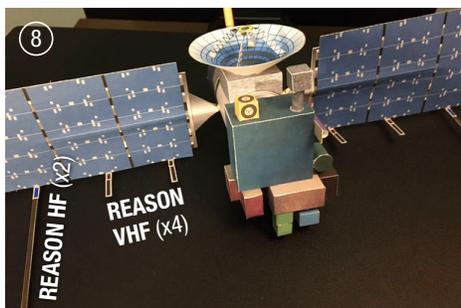
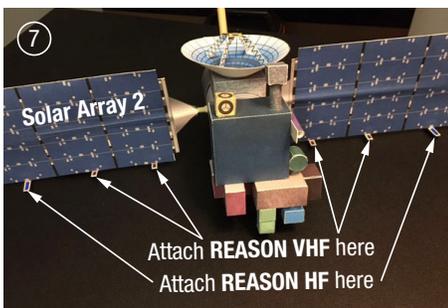
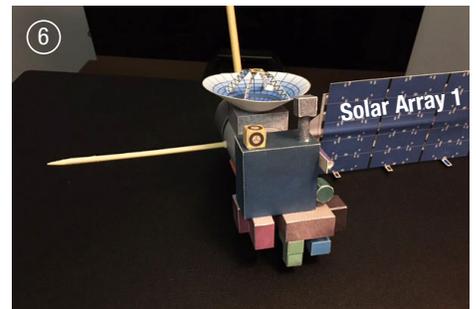
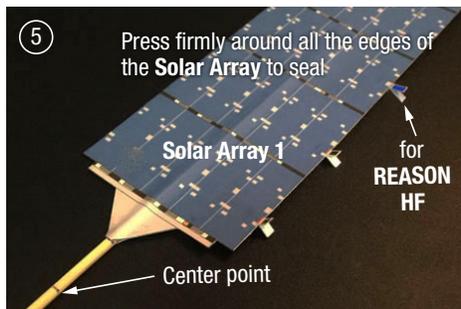
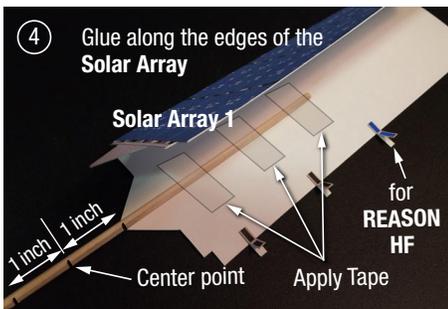
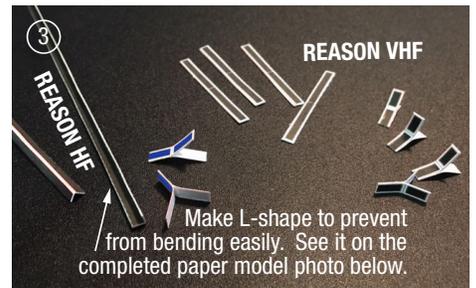
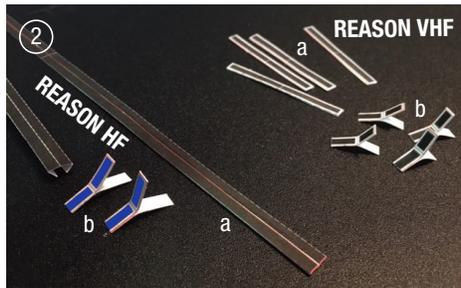
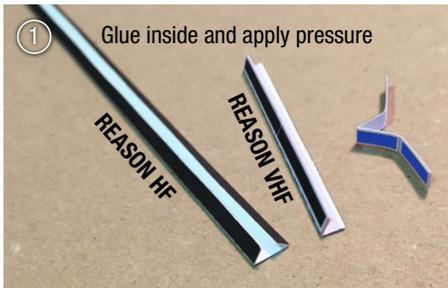
INSTRUCTIONS (Part 1 – Main Body and Instruments Assembly)

Print pages 4–8 of this instructional PDF in color on white cardstock. Use an X-acto knife (gently press to avoid cutting through) to score along all the dashed lines. Next, cut out all the parts, fold where indicated, and glue the dark-gray areas first; glue the light-gray areas afterwards. **Make sure to follow this instructional sequence to assemble. Also, follow the build sequence on photos 9, 15, 16, 18, 19, 20 to assemble these parts.** Use color print for desired results.

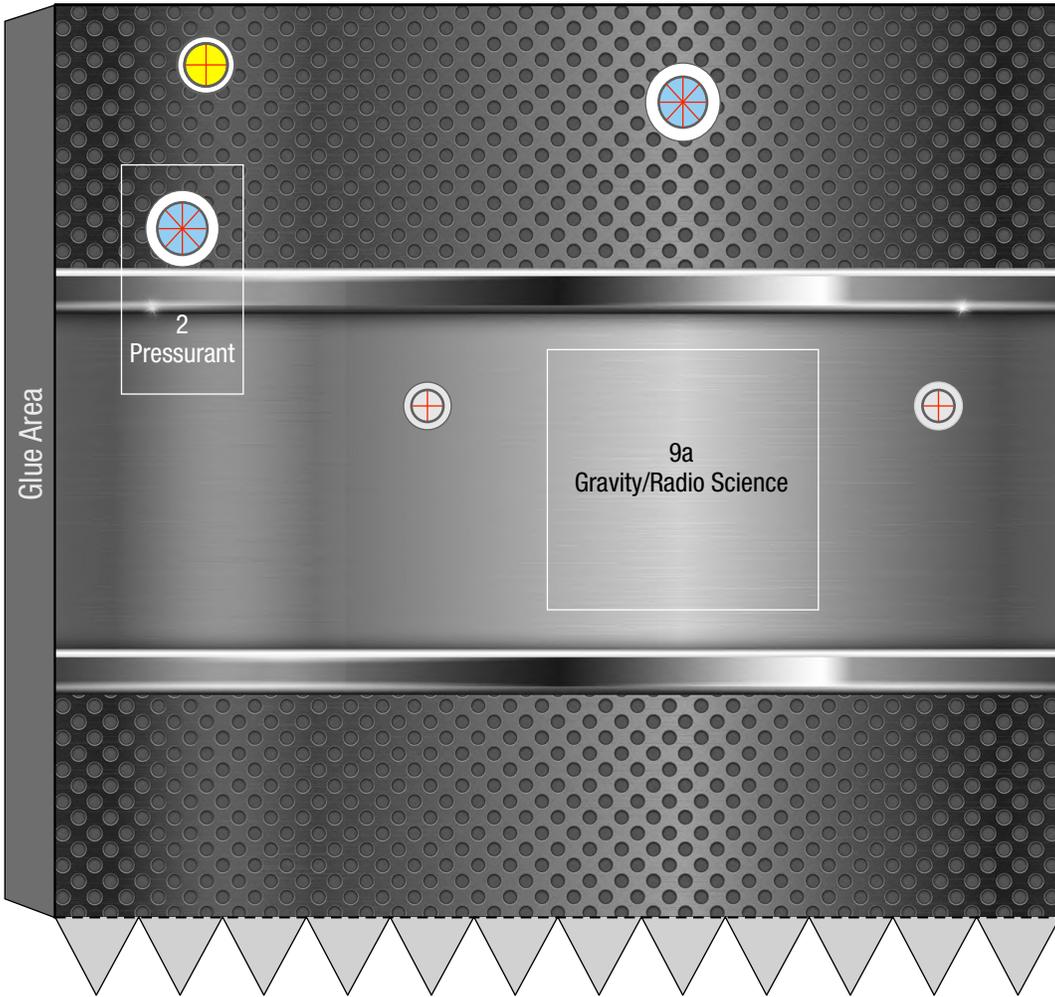


INSTRUCTIONS (Part 2 – Solar Array Assembly)

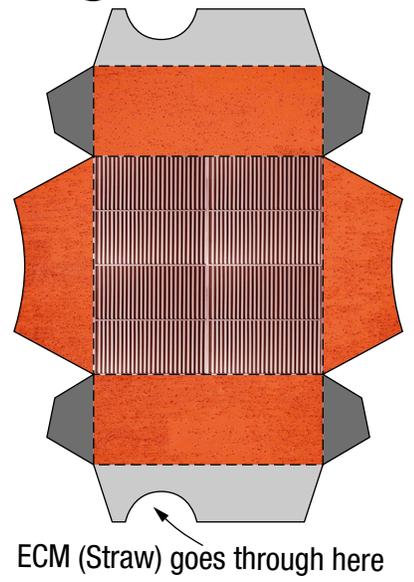
Glue REASON VHF b and REASON HF b to the inside of the Solar Array 1 before you fold and glue the Solar Array as in photo ④. Use wooden skewer to assemble the solar array as indicated. After Solar Array 1 is completed as shown in photo ⑤, insert the pointy skewer into the holes on the Spacecraft Main Bus as in photo ⑥. Repeat the same process to complete Solar Array 2 as in photo ⑦. Glue REASON VHF and REASON HF and attach them as shown in photo ⑧.



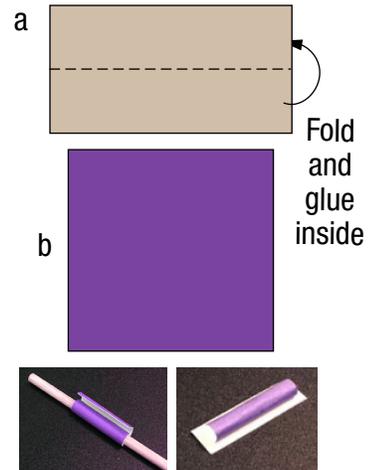
① **Spacecraft Main Bus**



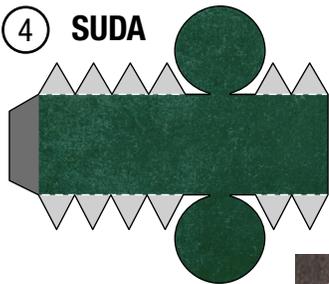
② **Pressurant**



③ **MASPEX**



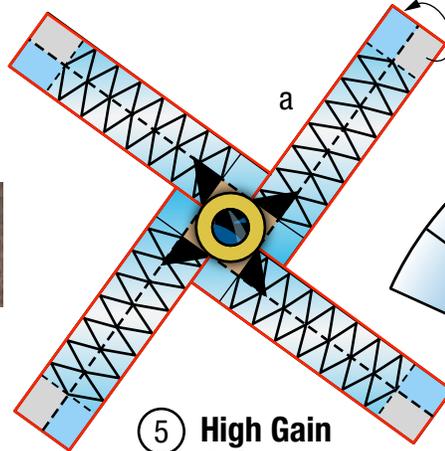
④ **SUDA**



Cut on red lines

Score along all the dashed lines

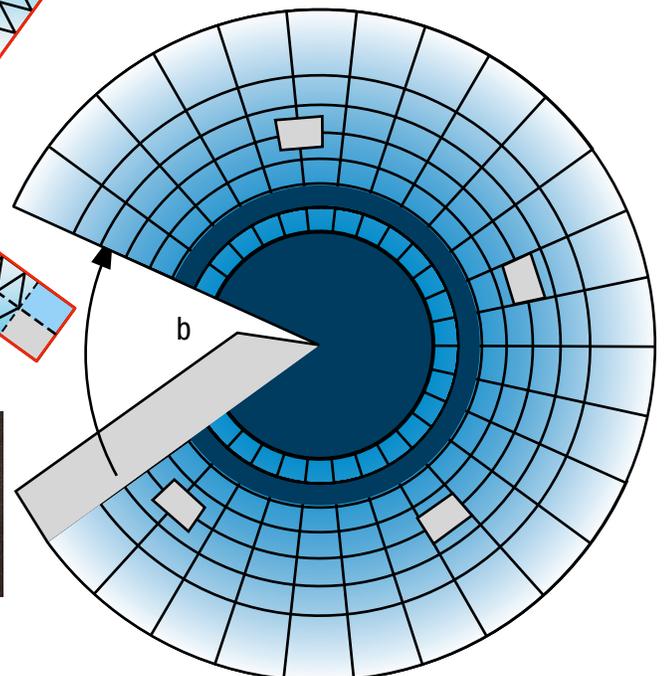
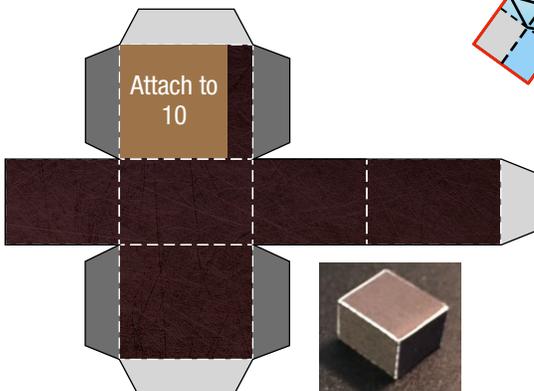
Fold and glue inside

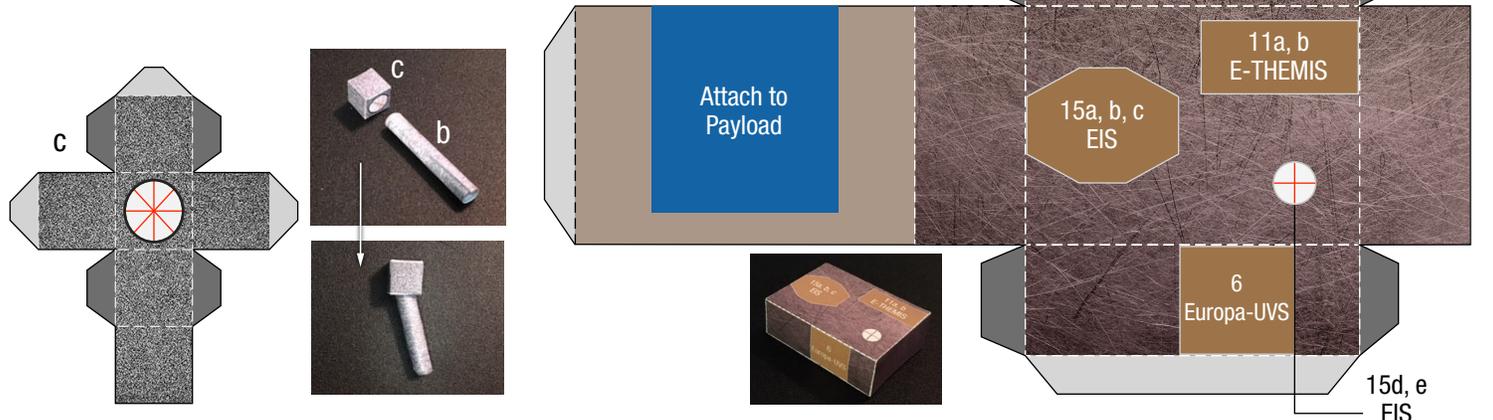
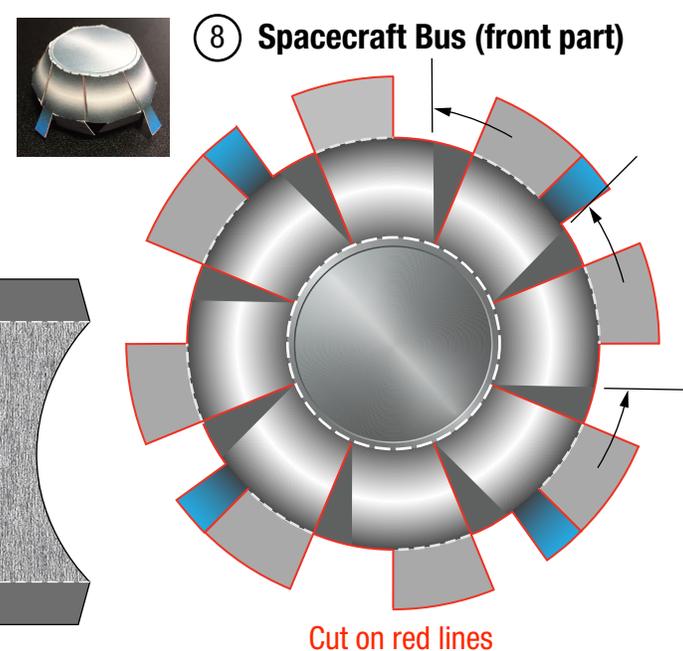
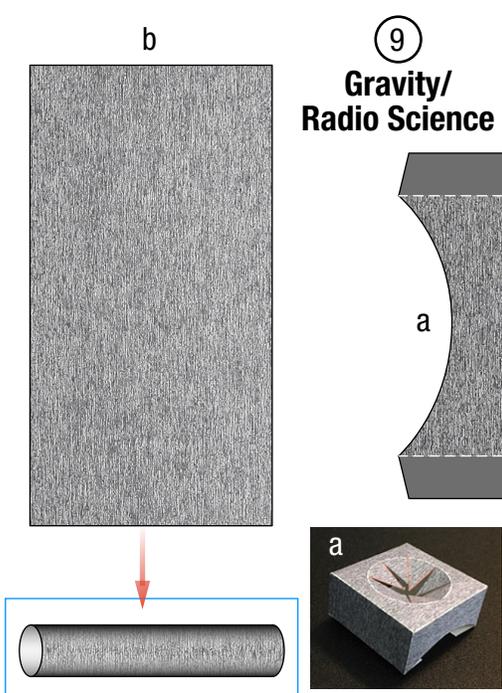
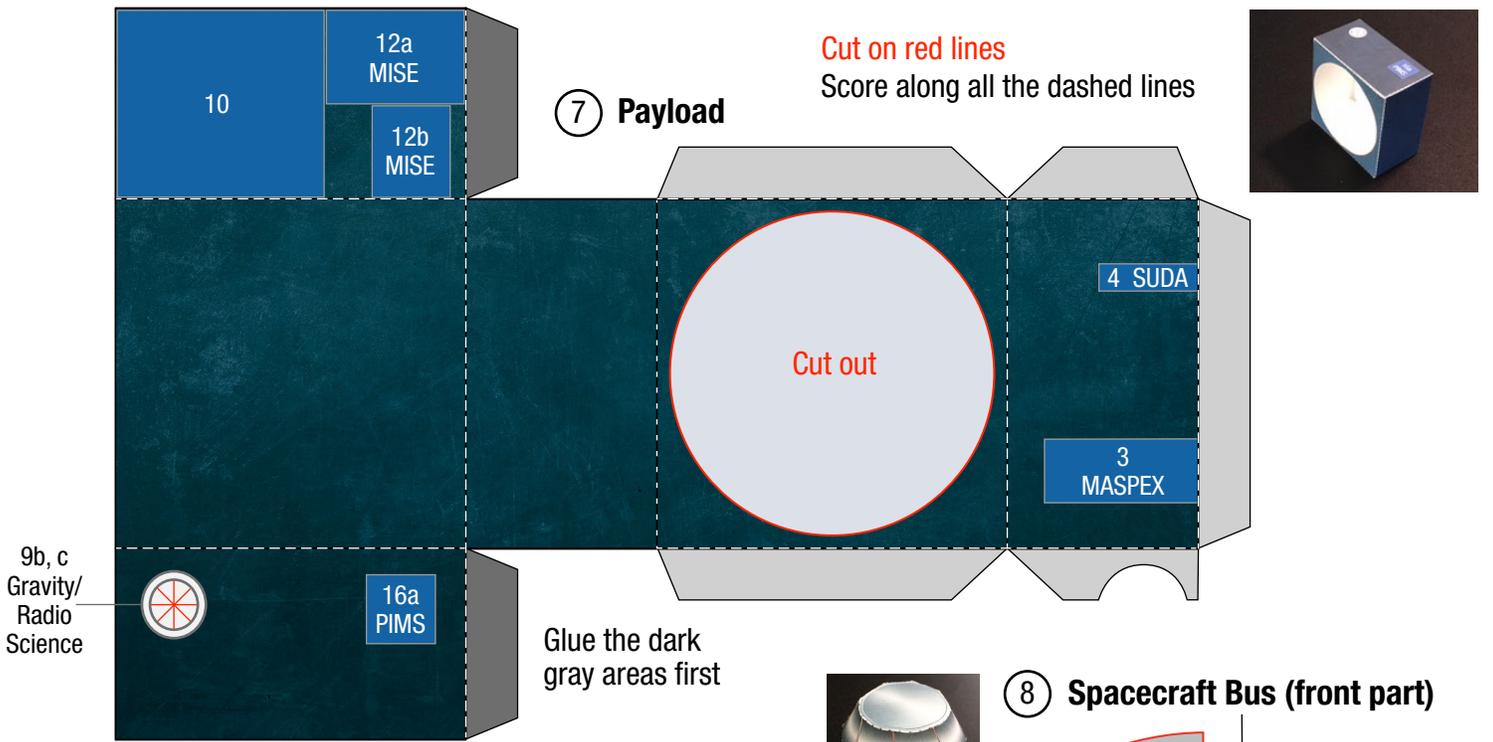


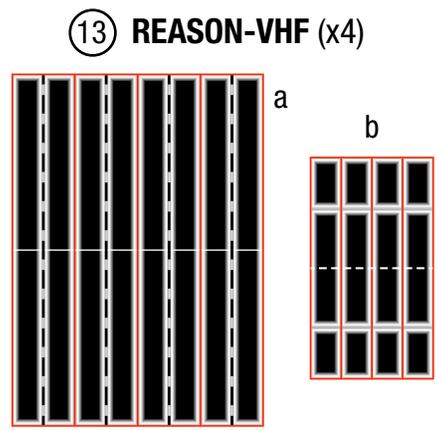
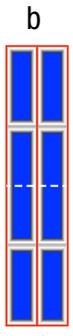
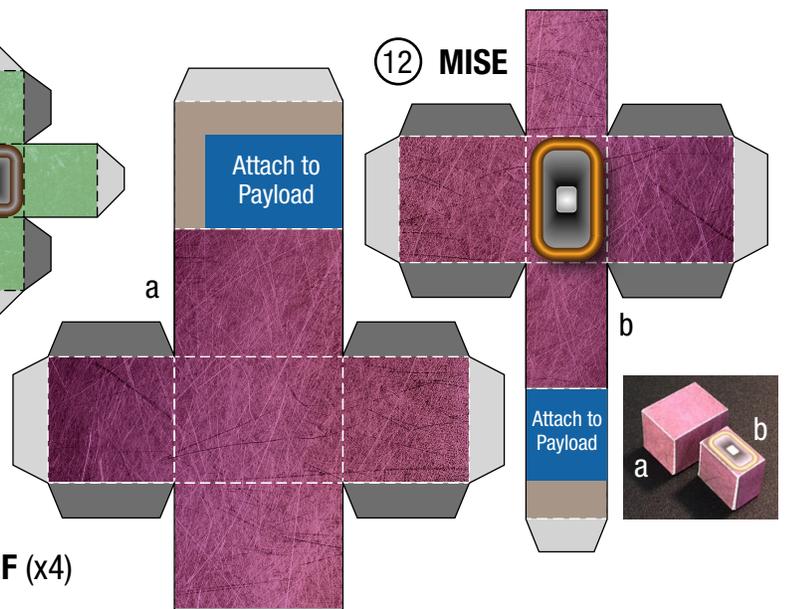
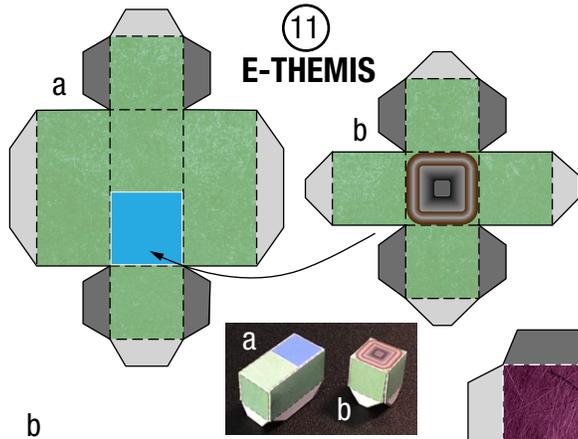
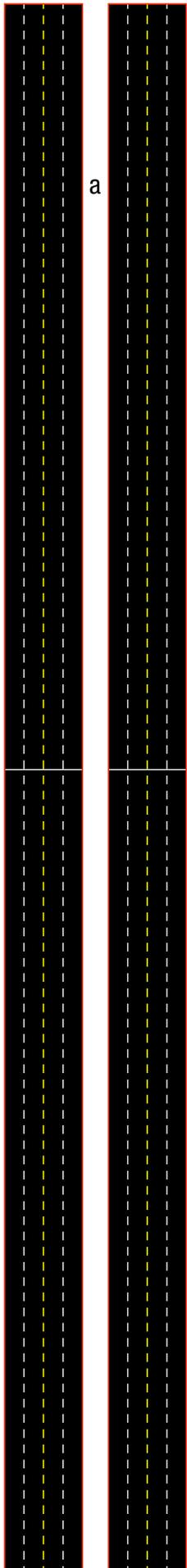
⑤ **High Gain Antenna**



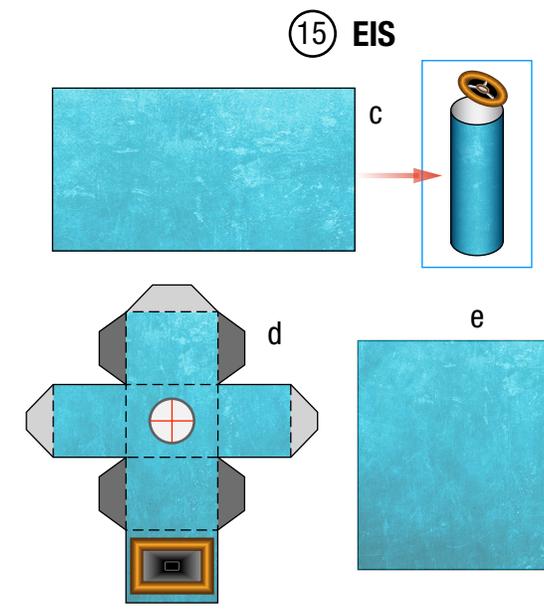
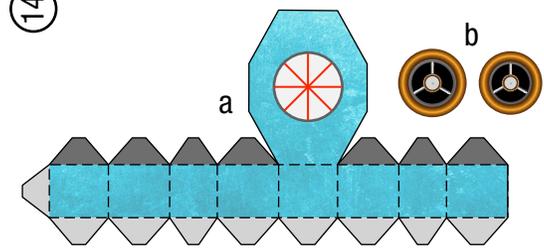
⑥ **Europa-UVS**



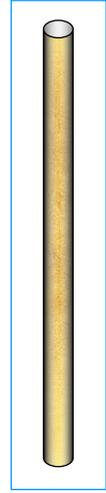
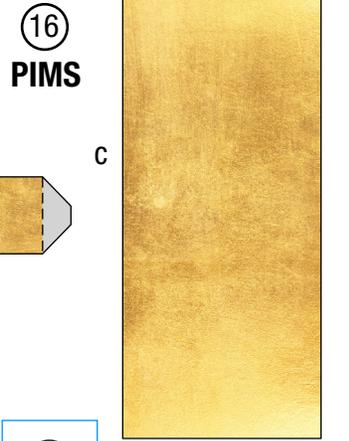
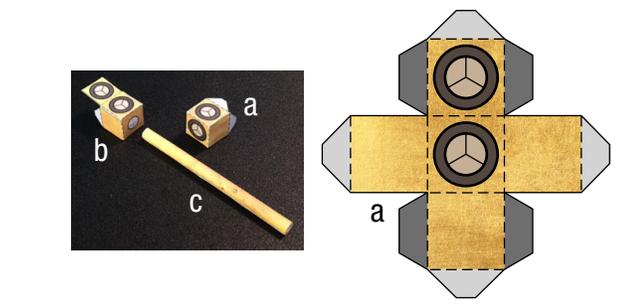




Cut on red lines



Glue the dark gray areas first

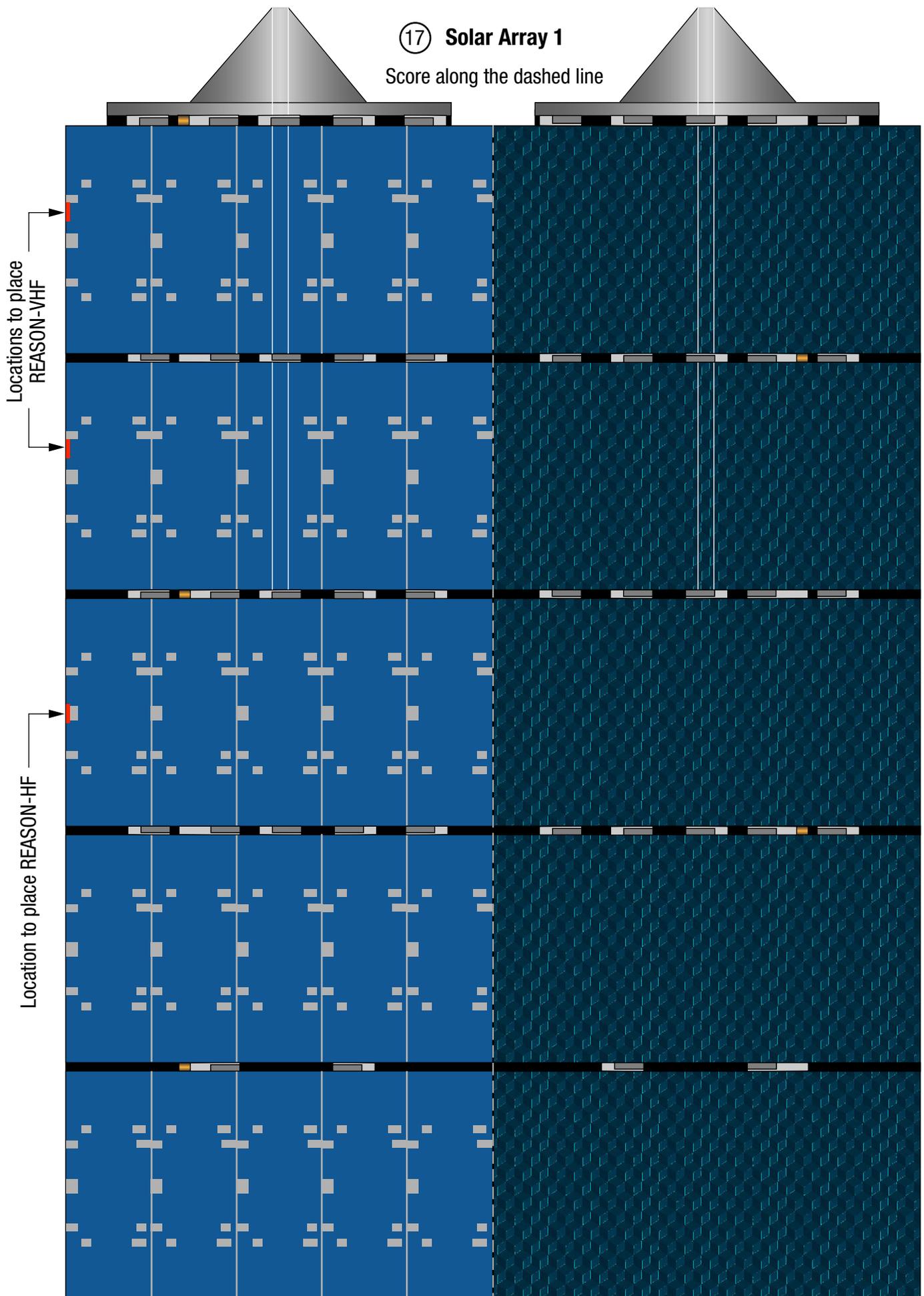


Cut on red lines

Score along all the dashed lines

①7 Solar Array 1

Score along the dashed line



18 Solar Array 2

Score along the dashed line

