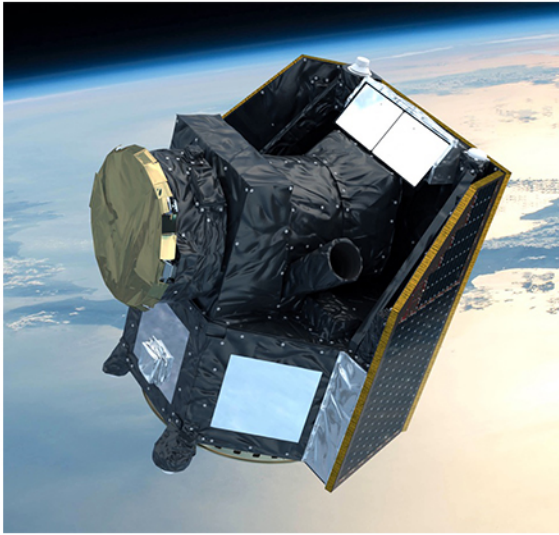


CHEOPS (The CHAracterising ExOPlanet Satellite)



The CHAracterising ExOPlanet Satellite (Cheops) — the first mission of the European Space Agency (ESA) dedicated to the study of exoplanets — lifted off from Europe's Spaceport in Kourou, French Guiana on December 18, 2019.

Cheops is a partnership between ESA and Switzerland, with important contribution from Austria, Belgium, France, Germany, Hungary, Italy, Portugal, Spain, Sweden, and the United Kingdom. The spacecraft will observe bright stars hosting planets in the Earth- to Neptune-size range, measuring tiny brightness changes due to the planet's transit across the star's disk and yielding precise measurements of the planet sizes.

This, together with independent information about the planet masses, will allow astronomers to determine their density, enabling a first-step characterization of these alien worlds.

A planet's density provides vital clues about its composition and structure, indicating for example if it is predominantly rocky or gassy, or perhaps hosts global oceans.

Unlike previous exoplanet satellites, such as NASA's Kepler and TESS missions, Cheops is not a "discovery machine" but rather a follow-up mission, focusing on individual stars that are already known to host one or more planets.

The mission also has the capability to discover previously unknown planets by measuring tiny variations in the timing of the transit of a known planet, and can also be used to search for moons or rings around some planets.

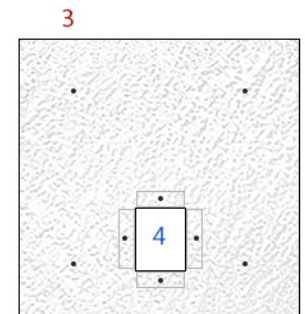
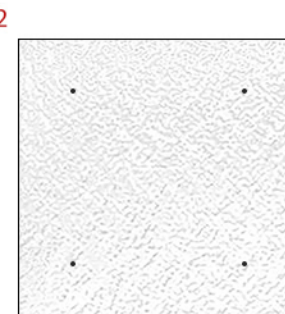
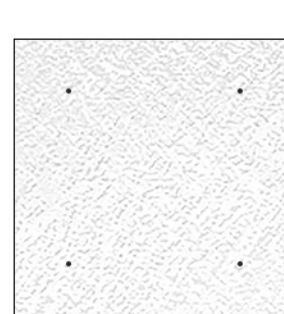
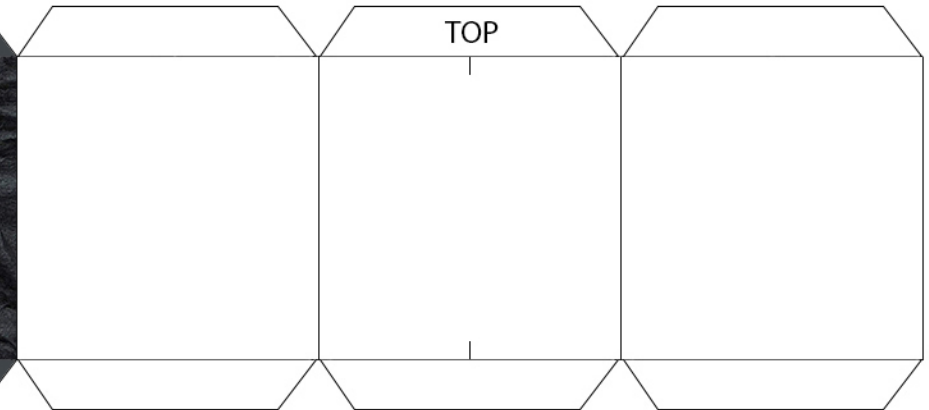
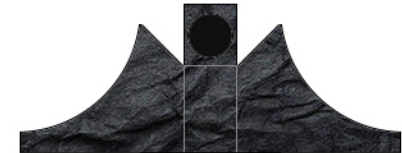
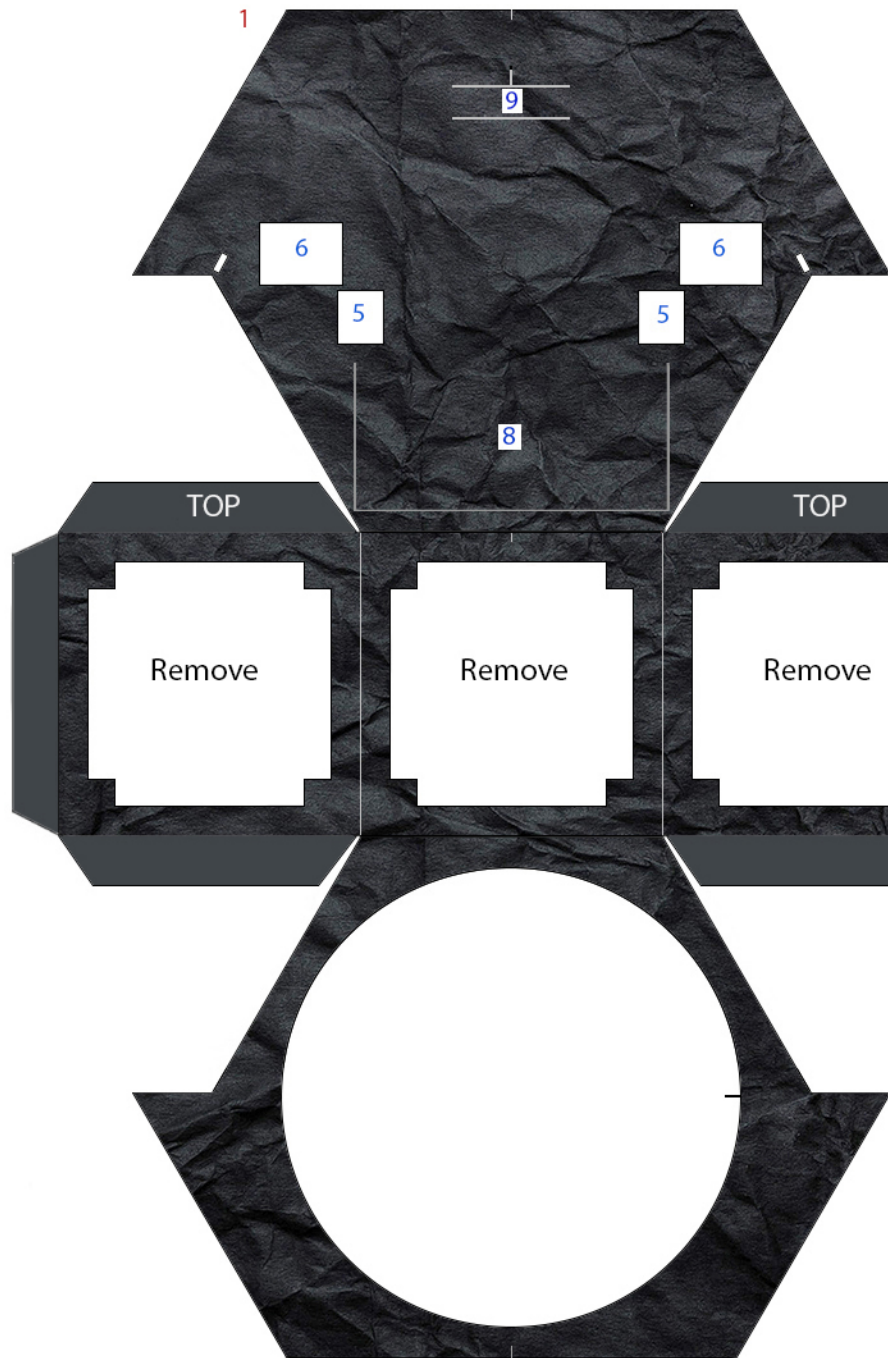
Cheops will also identify the best candidates for detailed study by future missions and observatories. For example, it will provide targets for the NASA/ESA/CSA James Webb Space Telescope, which will be used to search for the signatures of water and methane, important elements in our quest for habitable worlds.

After the discovery of thousands of planets, the quest can now turn to characterization, investigating the physical and chemical properties of many exoplanets and really getting to know what they are made of and how they formed.

Cheops will help us reveal the mysteries of these fascinating worlds, and take us one step closer to answering one of the most profound questions we humans ponder: are we alone in the Universe?

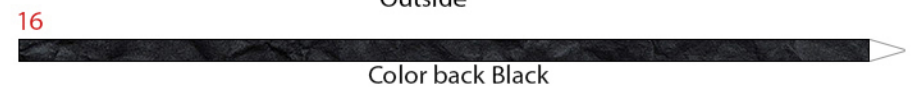
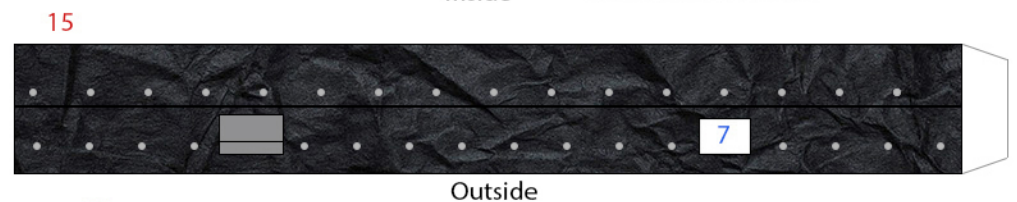
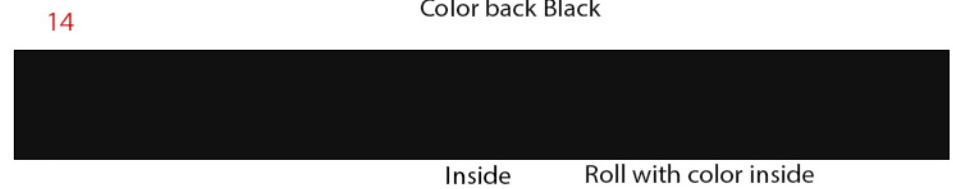
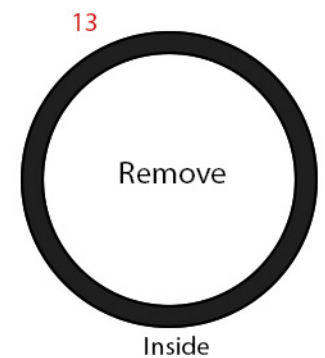
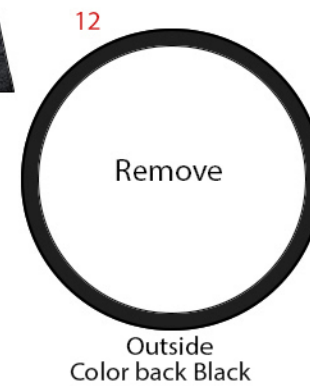
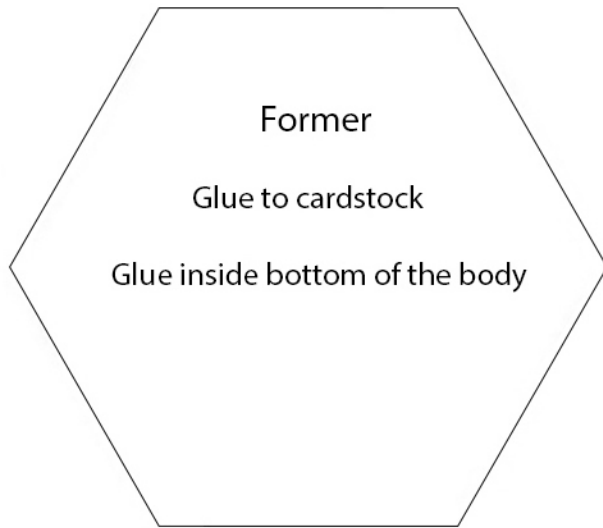


CHEOPS (The CHAracterising ExOPlanet Satellite)



Glue to three (3) layers of cardstock

CHEOPS (The CHAracterising ExOPlanet Satellite)



CHEOPS (The CHAracterising ExOPlanet Satellite)



Inside Roll with color inside



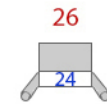
23 Color back Black



25 Outside fold with color outside



25a Inside fold with color inside



26 Color back the same color



Outside



24 Color back Black



19

Glue to cardstock



27 Color back Black



28



29



Inside Roll with color inside



31

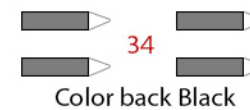
33



35

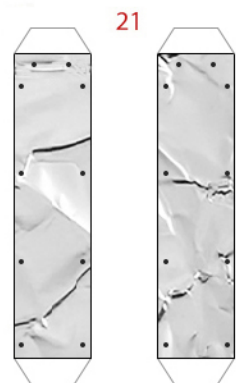
36

Glue this to two (2) layers of cardstock



34

Color back Black



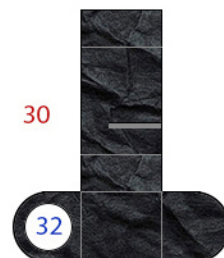
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38

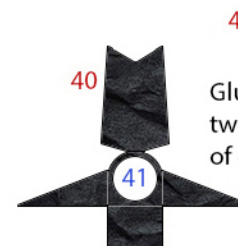
39

Glue both to two (2) layers of cardstock



30

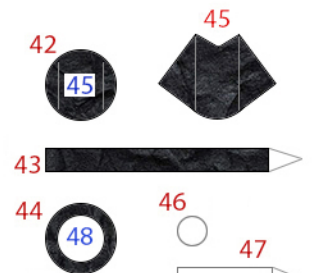
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40

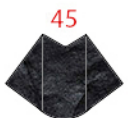
41

Glue this to two (2) layers of cardstock



42

45



45



43



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48



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CHEOPS (The CHAracterising ExOPlanet Satellite)



49



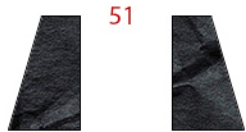
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53



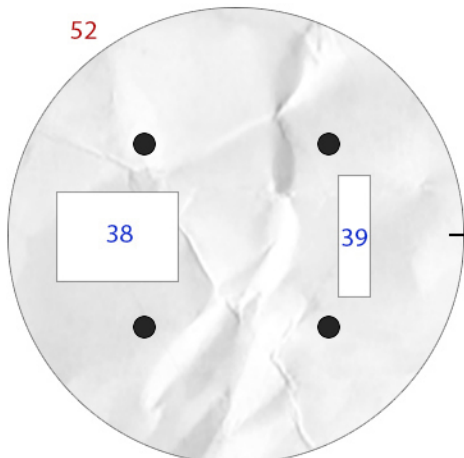
54

Glue both front and back panels to cardstock, then back-to-back



51

Color back Black



52

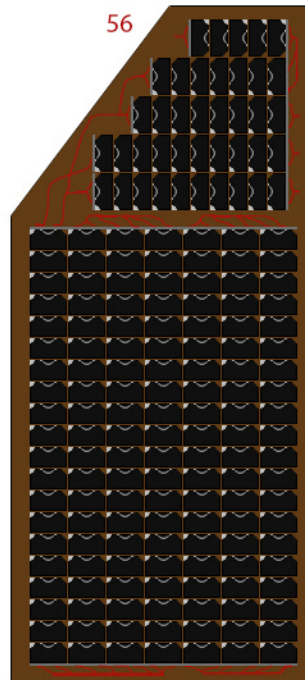
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39

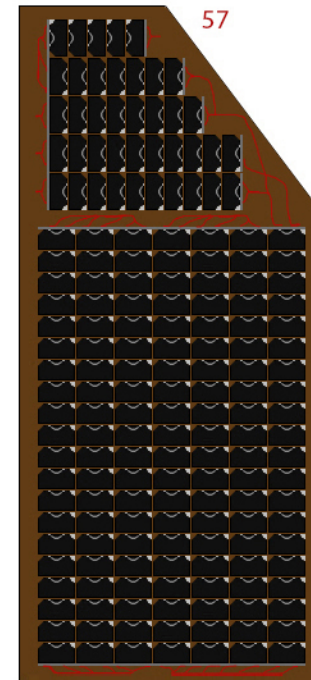
Glue to cardstock



55



56



57



58

Glue ALL panels to cardstock, then each pair back-to-back