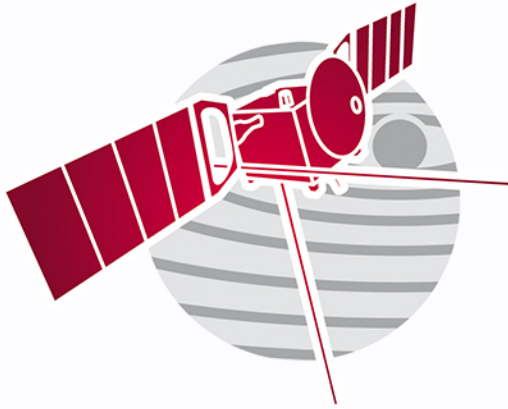


Mars Express



European Space Agency (ESA) launched its first mission to Mars in June 2003 and went into Mars orbit on December 25, 2003.. Mars Express has given scientists an entirely new view of the Earth's intriguing neighbour, and is still helping to answer fundamental questions about the geology, atmosphere, surface environment, history of water and potential for life on the Red Planet. An on-board 'webcam' captured 3D colour images of water ice and carbon dioxide ice in the planet's south polar region, which is probably the orbiter's most significant discovery.

Designed and built by Airbus Defence and Space-led team, the ESA's first Mars orbiter will provide an important help when the second orbiter, ExoMars, arrives at the Red Planet in October 2016.

Airbus Defence and Space also designed and manufactured the surface lander Beagle 2, which was unfortunately lost after its release, and supplied the on-board camera, the propulsion system and the lander's heat shield and thermal system.

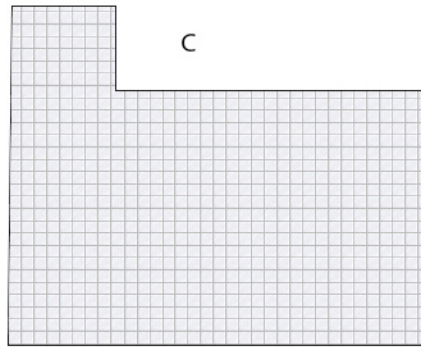
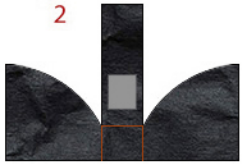
Mars Express carried a colour stereo camera, an energetic neutral atoms analyzer to study how the solar wind erodes the atmosphere, a mineralogical mapping spectrometer, and atmospheric and radio science experiments.

The orbiter started returning a series of striking images of the Martian surface after settling into its operational orbit on January 28, 2004. Data from onboard instruments indicated the presence of trace quantities of methane over an area containing water ice. This finding was taken as a possible sign of microbial life on Mars. The Mars Express orbiter also deployed the Mars Advanced Radar for Subsurface and Ionosphere Sounding (MARSIS) instrument, which used microwave pulses to search for radar signatures of subsurface water. MARSIS found evidence of liquid water on Mars in a possible underground lake beneath the south polar cap. An ultraviolet spectrometer was used to discover aurorae on Mars. The Mars Express mission is scheduled to last until 2020.

Mars Express is so called because it was built more quickly than any other comparable planetary mission. The Beagle-2 lander was named after the ship in which Charles Darwin sailed when formulating his ideas about evolution.

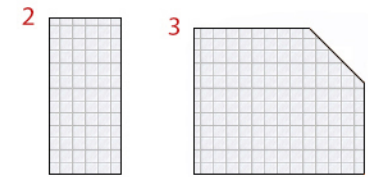
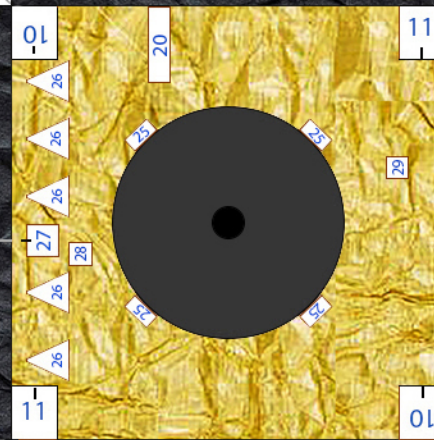
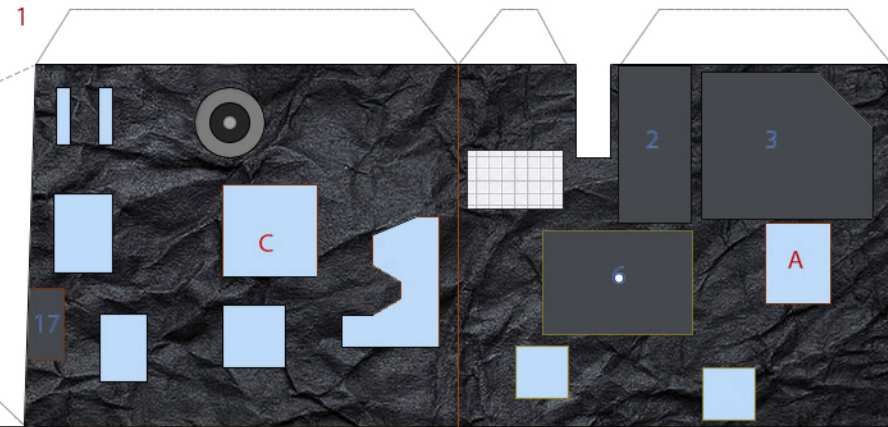
Mars Express is one of the oldest still-functioning missions to the Red Planet. Launched on June 2, 2003 atop a Soyuz-FG rocket from the Baikonur Cosmodrome, the orbiter arrived at Mars on December 25 of that year. Since then, it has spent 14 years revolving about Mars taking photographs and gathering a mountain of scientific data to send back to mission control in Darmstadt, Germany.

Mars Express

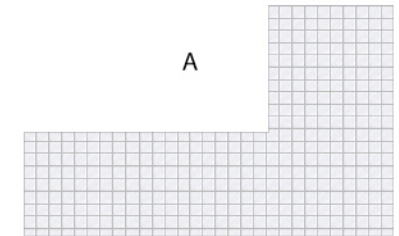


Cut out all blue areas

Poke small holes on the two grey dots for the solar panel support rods.



Glue to cardstock



Color back Black



Glue to two layers of cardstock

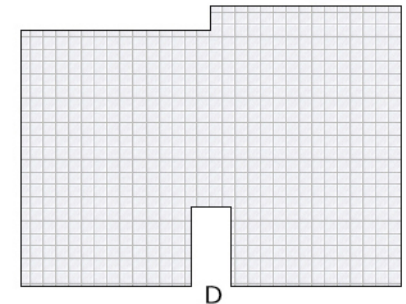


Glue to cardstock
Color back Black

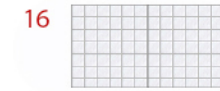
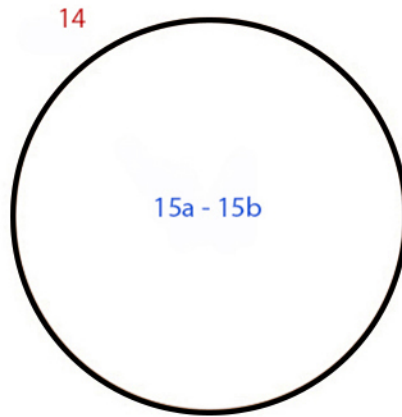
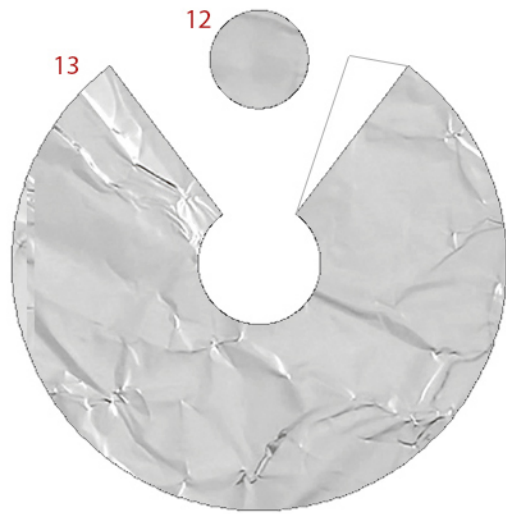


Color back Black

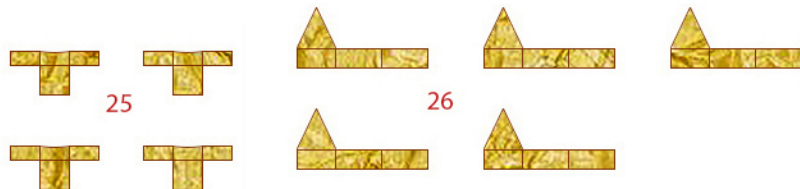
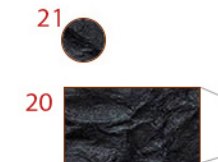
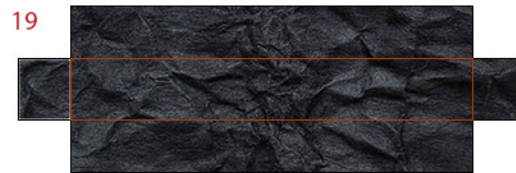
4 Color back light grey or silver



Mars Express



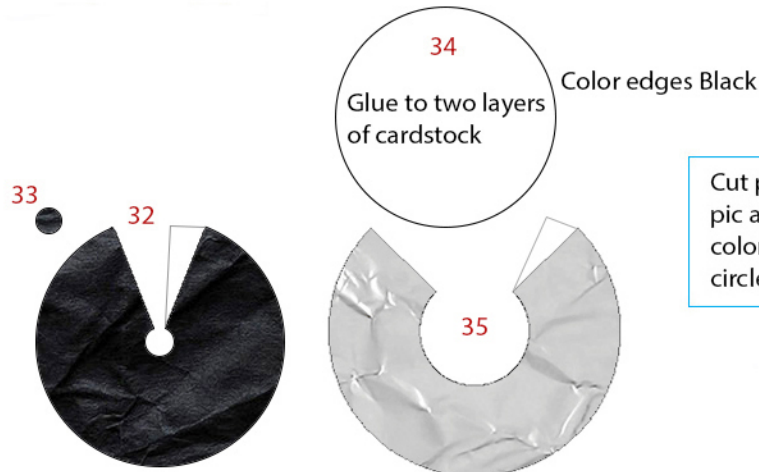
Fold-glue back-to-back



Cut pointed end of tooth pic around 7mm long, colored white. Glue to the circle on part 27.



Glue to cardstock



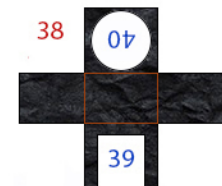
Cut pointed end of tooth pic around 7mm long, colored white. Glue to the circle on part 36.



Glue to three layers of cardstock
Color edges Black

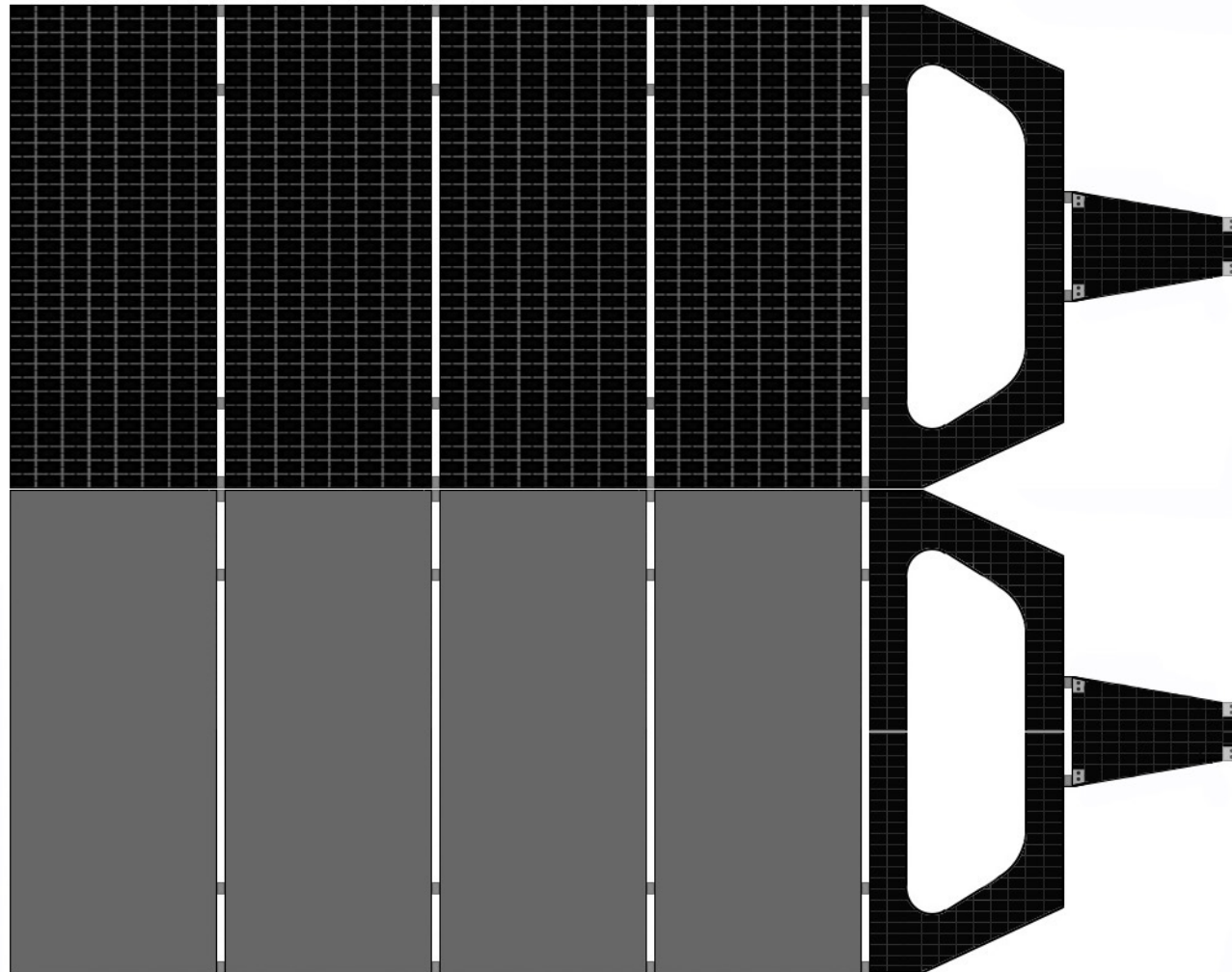
Glue to cardstock

Color back Black



Cut a thin music wire (or similar material) the same length as the line below, colored light grey or silver for the solar array support rod.

Fold - glue back-to-back



Fold - glue back-to-back

