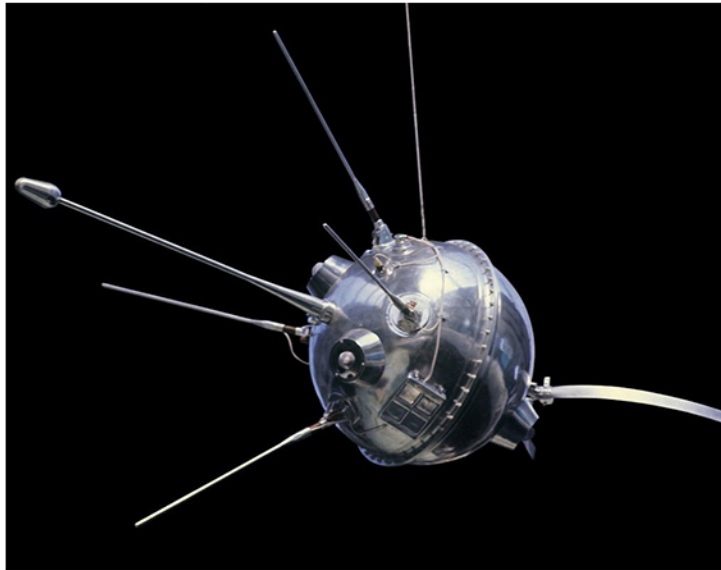




Luna 1, also known as Mechta was the first spacecraft to leave Earth's orbit, the first to reach the vicinity of the Earth's Moon, and the first spacecraft to be placed in heliocentric orbit.

Intended as an impactor, Luna 1 was launched as part of the Soviet Luna programme in 1959, however due to an incorrectly timed upper stage burn during its launch, it missed the Moon, in the process becoming the first spacecraft to leave geocentric orbit.

After Luna 1 passed by the Moon 1959 Jan 4, it went into orbit about the Sun and became the first artificial planet. Its orbit carries it between 146 million kilometres and 197 million kilometres from the Sun, taking 450 days to complete an orbit.

While traveling through the outer Van Allen radiation belt, the spacecraft's scintillator made observations indicating that a small number of high energy particles exist in the outer belt. The measurements obtained during this mission provided new data on the Earth's radiation belt and outer space. The Moon was found to have no detectable magnetic field. The first ever direct observations and measurements of the solar wind, a strong flow of ionized plasma emanating from the Sun and streaming through interplanetary space.

The spacecraft also marked the first instance of radio communication at the half-million-kilometer distance.

The primary objectives of the mission were to measure temperature and pressure inside the vehicle; study the gas components of interplanetary matter and corpuscular radiation of the Sun; measure the magnetic fields of the Earth and moon; study meteoric particles in space; study the distribution of heavy nuclei in primary cosmic radiation; and study other properties of cosmic rays.

Luna 1 Statistics:

Launch Vehicle: Vostok

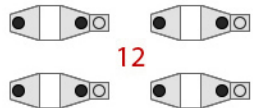
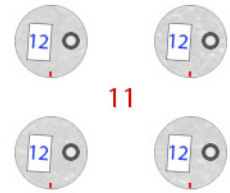
Launching Technique: Direct ascent

Mass: 361.3 kilogrammes (1,472 kilogrammes including the final-stage rocket)

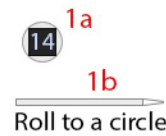
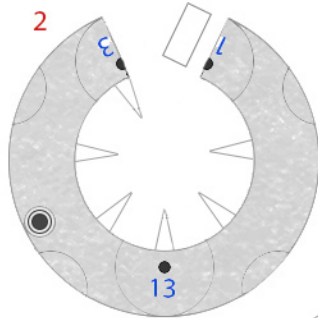
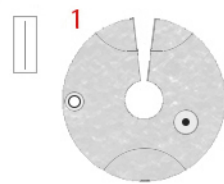
Diameter: 0.9 metres

Luna 1 was launched on January 2, 1959 from Site 1/5 at the Baikonur Cosmodrome by a Luna 8K72 rocket.

luna-1



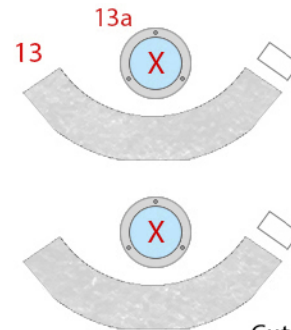
Poke small holes on the circles on the square tabs.
Need four plastic broom straws or similar material cut at 62 mm long, colored light grey or silver.



Roll to a circle

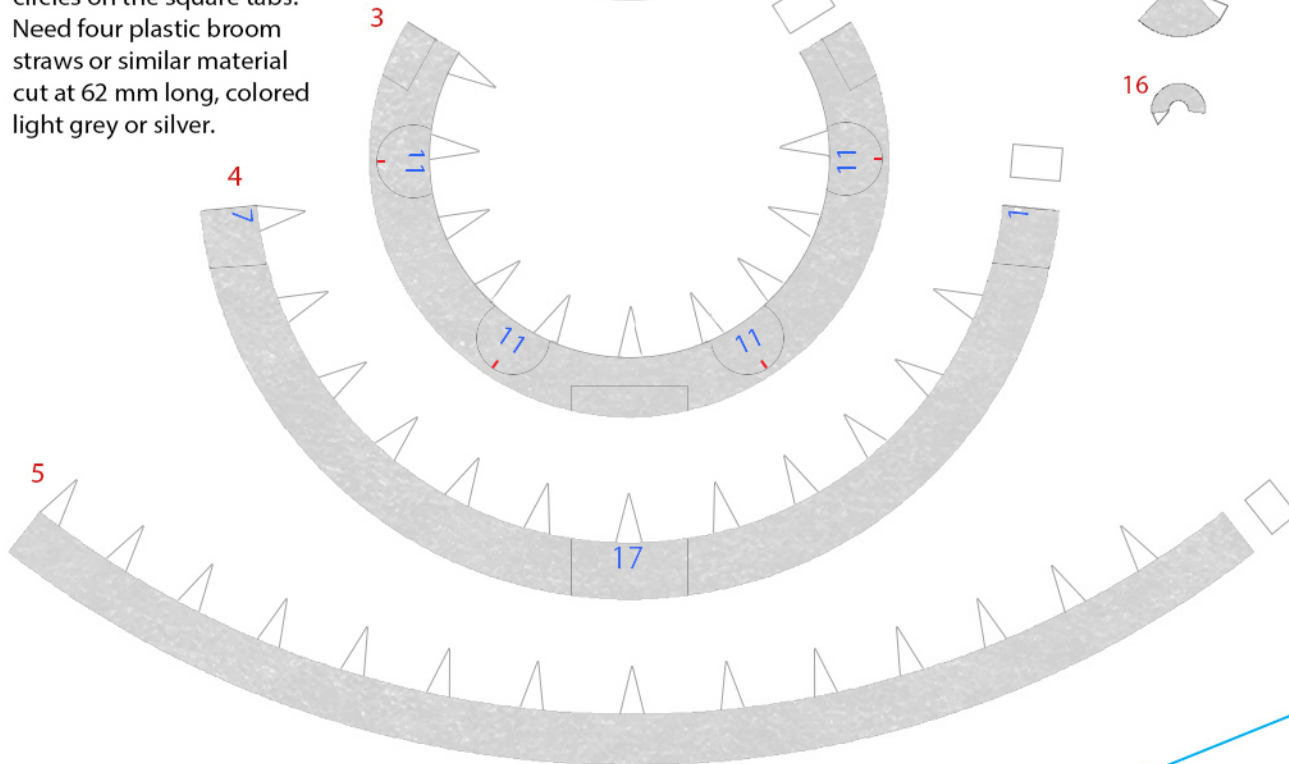


Need plastic broom straw cut at 70 mm long, colored light grey or silver.



Cut cut the blue circles

Need four tooth pics - similar material cut around 6 mm long, colored light grey or silver - **OR** use the parts indicated by the blue arrow.



Optional detail parts...

Can use use these instead of the four tooth pics as stated above.

Roll these to tight solid rods, glue on the black dots in the circle marked "13" after gluing parts 13 and 13a in place.

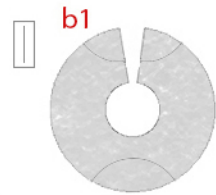


Glue part 6a or 7a here

Glue one of these to cardstock, then glue both back-to-back



Glue part 6a or 7a here

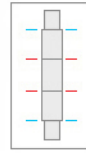


b1

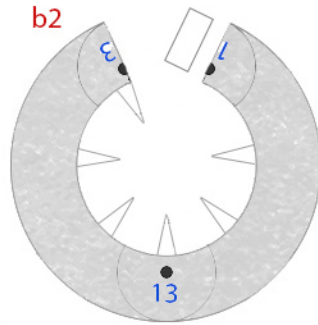


b1a

18

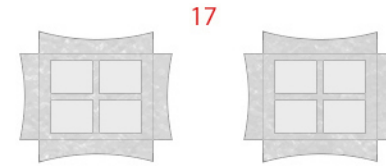


Color back light grey.
 Valley fold at the red lines,
 Mountain fold 45 degrees
 at the blue lines.



b2

13

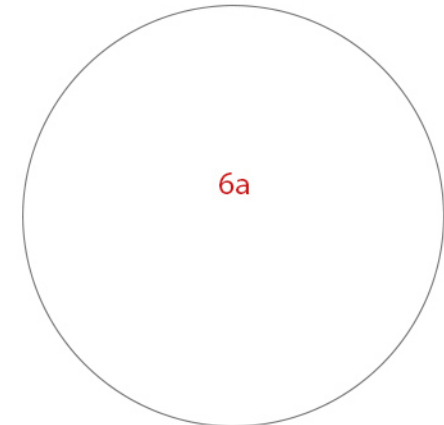


17

19

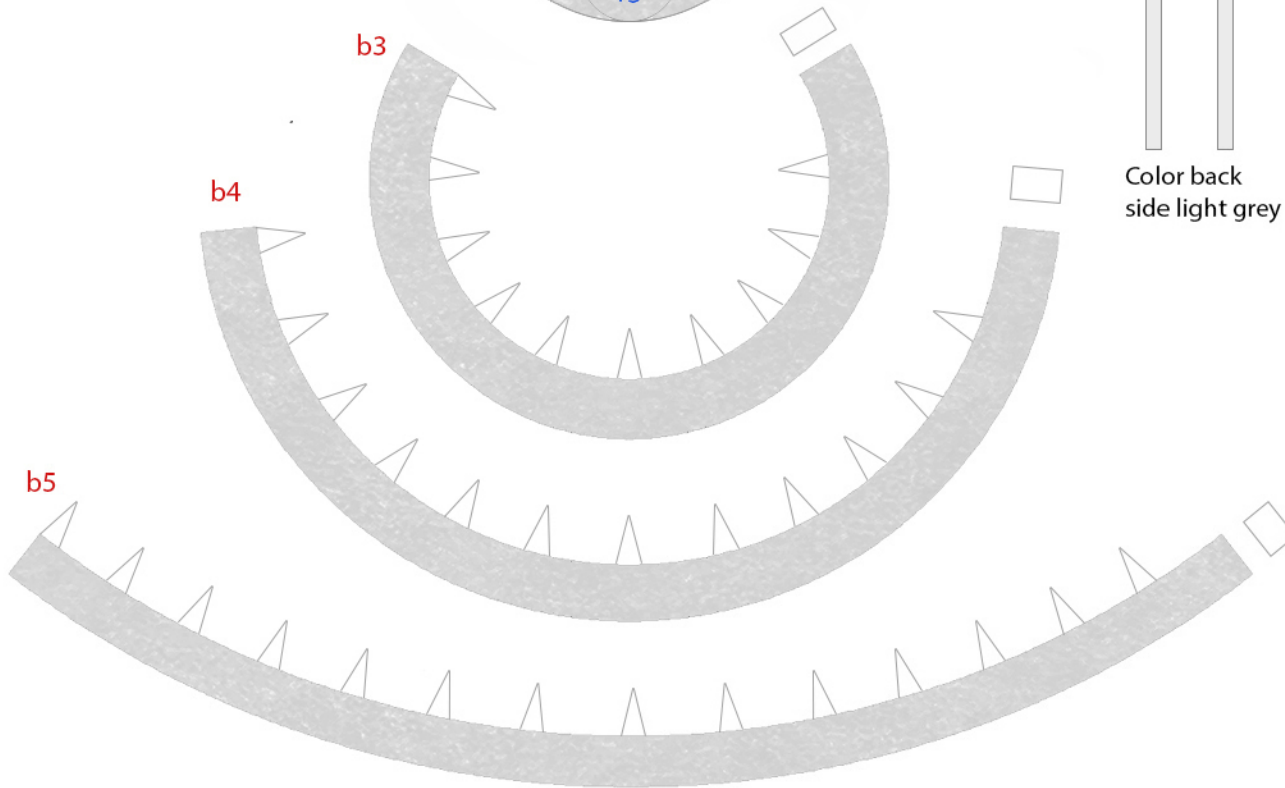


Color back
 side light grey



6a

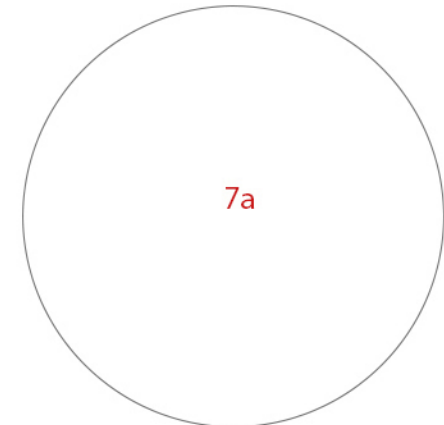
Glue each to cardstock, then glue each one to
 one side of parts 6 and 7 for easier assembly.



b3

b4

b5



7a