The Game of the Goose (Juego de la Oca / Jeu de l'Oie / Ganzenspel) is a classic board game of pure chance played with **two dice** and a track of **63 spaces**. The "***Game of the Goose… for Satellites!***" is a special version of this game to illustrate the space weather impacts on satellites. For this game, these impacts have been aggregated over the various orbits. In real life of course, atmospheric drag will not impact satellites in GEostationary Orbits (GEO), whereas satellites in a Low Earth Orbit (LEO) will not be impacted by a magnetopause crossing. Special cases such as the destruction by an anti-satellite weapon or the impact from a nuclear detonation (e.g. Starfish Prime) have been omitted.

🏁 How to Begin

Starting Position: All players place their tokens just outside space 1 at "Lift-Off!".
Turn Order: Players roll the dice; the highest roller goes first.
Movement: Roll two dice and move your token forward that exact number of spaces.
First roll is 9 ("3 and 6" or "4 and 5"): Go to space 26.
No stacking: There can't be two satellites at the same space at the same time. Go back to the space you came from.

🏆 How to End

Exact Landing: You must land on space 63 by exact count.
Overshooting: If you roll more than needed, move forward to 63 and then bounce backward by the remaining count. If, by going back, you land on a satellite (e.g. square 59), you have to go further back by your same roll.

🎲 Special Spaces

The Satellite spaces (5, 9, 14, 18, 23, 27, 36, 50, 54, 59): Move forward again by your same roll.
Satellite Operator (Space 6): Despite a magnetopause crossing during the passage of a strong coronal mass ejection, the satellite operator was able to keep your satellite's attitude under control. *Move to space 12.*
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🎲 Special Spaces (Continued)

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Solar Array (Space 15): High-energy protons from a proton event caused displacement damage in your satellite's solar arrays. Your satellite can no longer generate as much power as it used to. *Go back 4 spaces to space 11.*

Atmospheric Drag (Space 19): A severe geomagnetic storm has increased the atmospheric drag for your satellite, which is now at a lower altitude. While waiting until your satellite is pushed back into its original orbit, *miss one turn.*

Coronal Hole (Space 31): The high-speed stream from a large coronal hole has elevated the energy of the electrons present in the magnetosphere. These "killer electrons" have accumulated around your satellite's electronic components and are creating continued single event effects (SEE). You have to wait until satellite operators get your satellite back operational. *Stay trapped until another player lands on your space* and puts you back in operation.

Space Debris (Space 32): Your satellite has been hit by space debris. While performing safety checks, *skip one turn.*

Plasma Bubbles (Space 41): Plasma bubbles in the ionosphere are interfering with the signal of your satellite. *Retreat to space 30* while waiting for this "Ionospheric Scintillation" to be over.

Star Tracker (Space 42): The energetic particles of a severe solar proton event are affecting the star trackers of your satellite. Your satellite doesn't know anymore its location. Sit out this proton event and *skip one turn.*

Solar Radio Burst (Space 46): The strong radio emission associated with a solar flare is overpowering the weak signal from your satellite. While waiting for the radio burst to subside, *go back to space 34.*

South Atlantic Anomaly (Space 52): Your satellite is flying through the South Atlantic Anomaly, facing intense bursts of ionizing radiation that cause computer reboots, data glitches, sensor noise, and hardware damage. The price is high: *skip two turns!*

Satellite failure (Space 58): The continued accumulation of charged particles has resulted in a solid electrostatic discharge and subsequent, unrecoverable satellite failure. *Reset completely back to the "Lift-Off!" space.*