



TO THE MOON

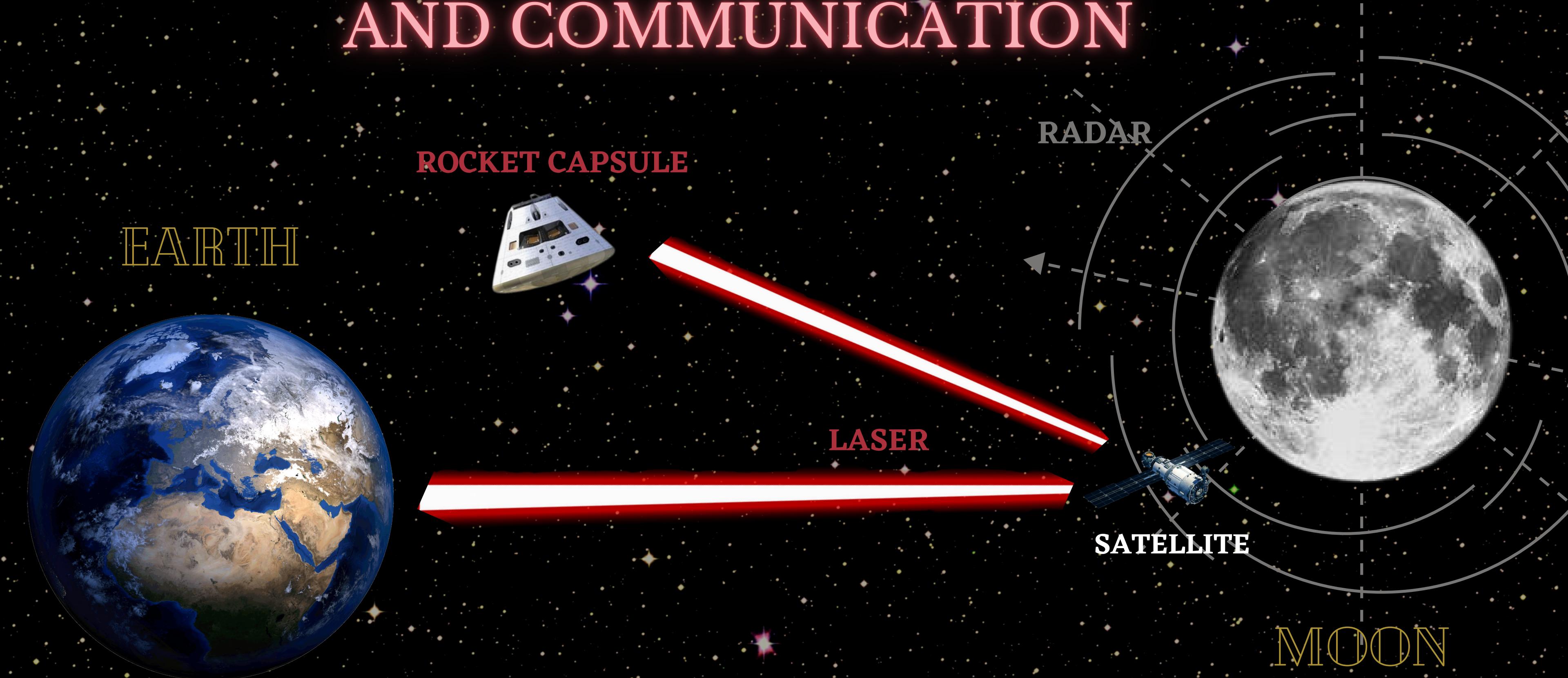
COMING SOON 2024



HUMANITY'S RETURN TO THE MOON



ASSURING DATA TRANSMISSION AND COMMUNICATION

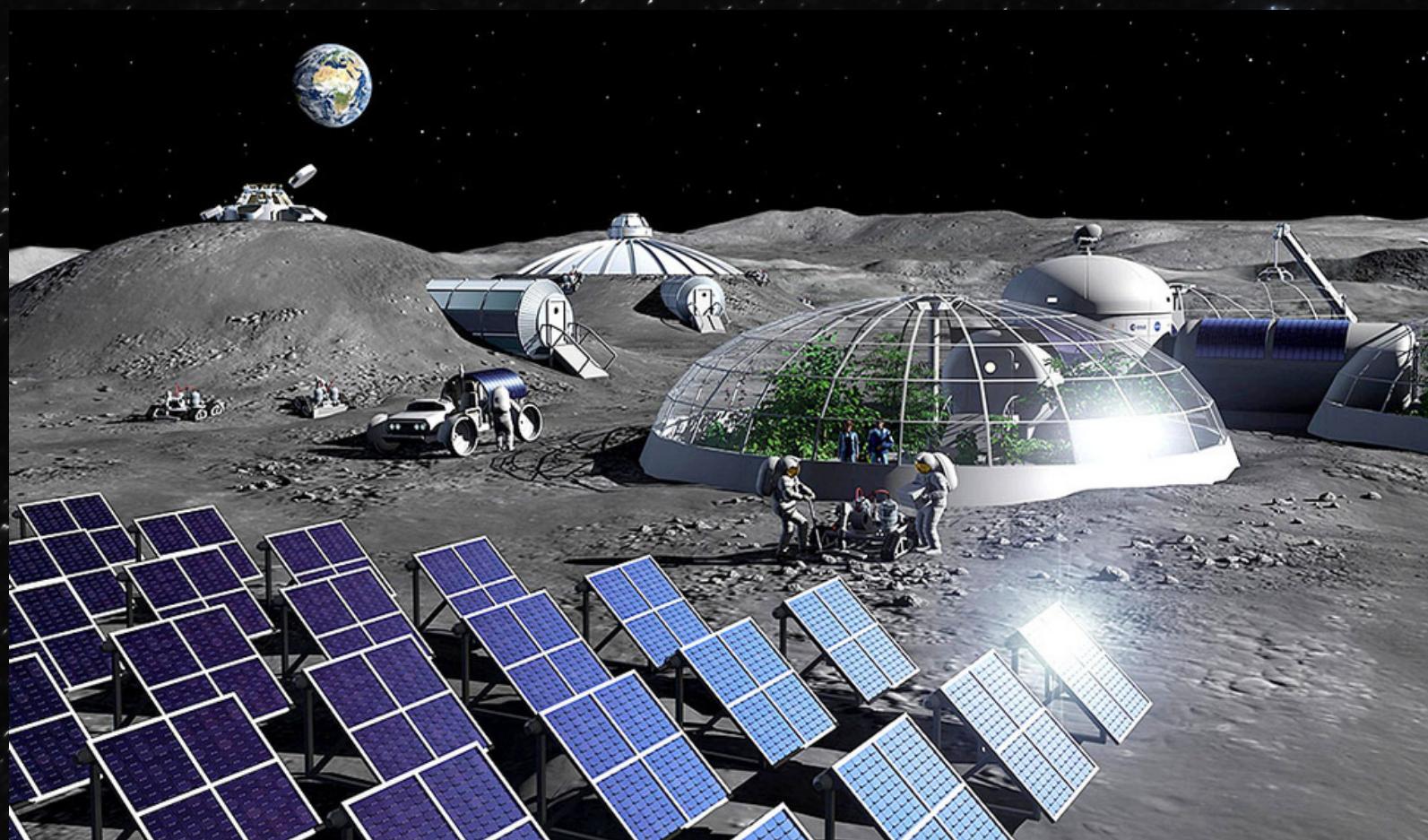


BASE CAMP

They will live On two caravans that will be made using the same strategy as the costume

making

The caravan will look like this to provide faster and easier transportation for astronauts

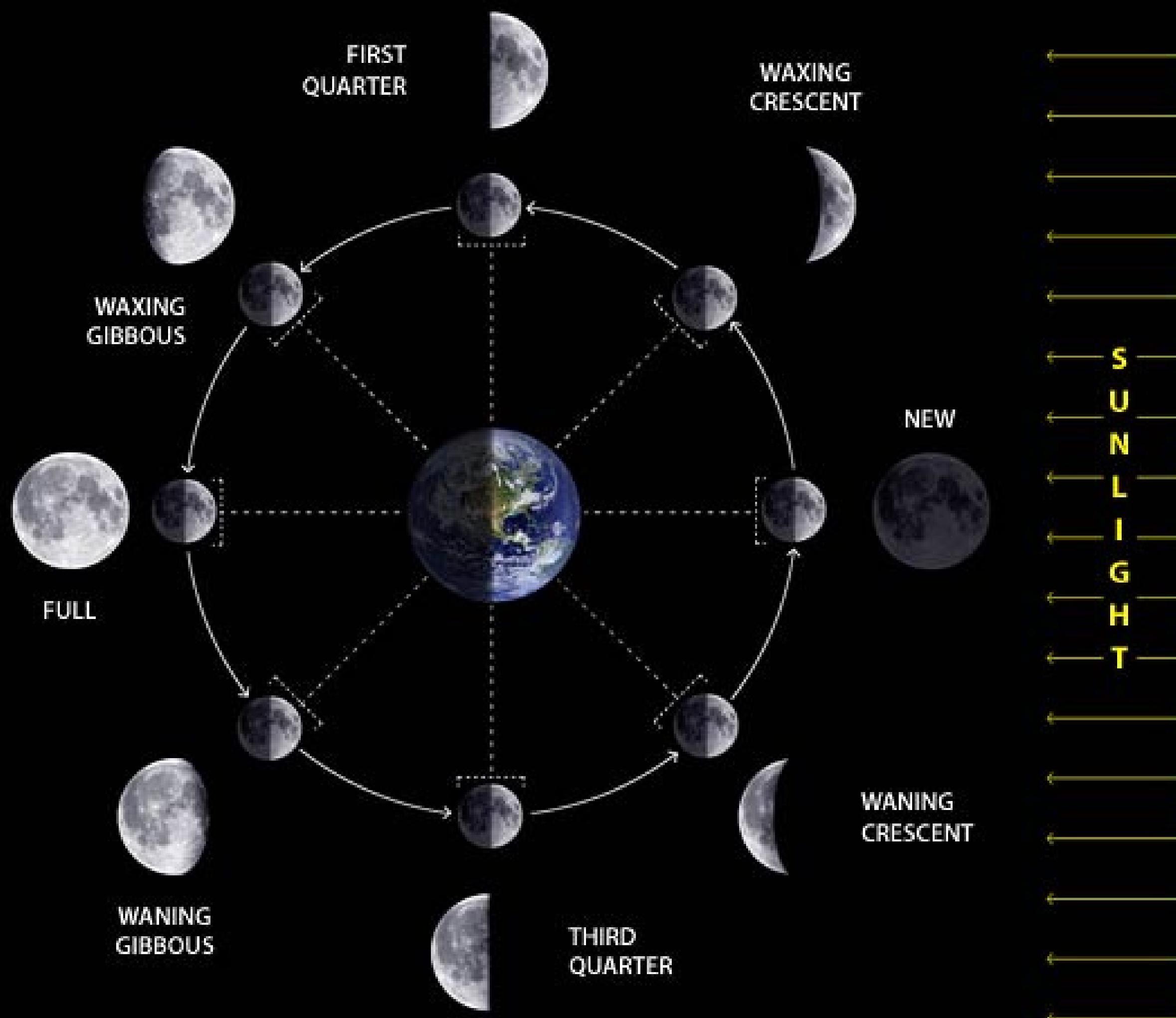


The living environment will be mobile and connected to the james webb telescope to alert them of all these accidents

The james webb telescope will capture any rocks approach near the surface of the moon and send them to the astronauts

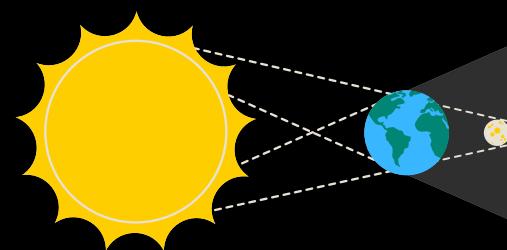
EVOLUTION OF THE MOON





Total lunar **eclipse** occurs when the Moon and Sun are on opposite sides of Earth.

Partial lunar **eclipse** happens when only part of Earth's shadow covers the Moon.



STUDYING TERRAIN

CAN WE FARM ON THE MOON?

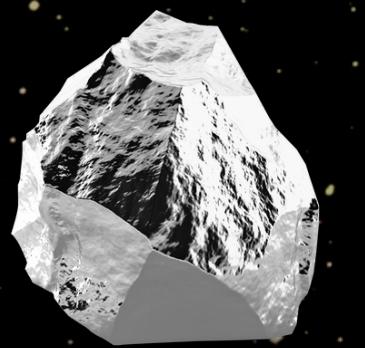
FARMING ON THE MOON COULD BECOME A REALITY SOONER RATHER THAN LATER. SCIENTISTS HAVE FOR THE FIRST TIME SUCCESSFULLY GROWN PLANTS IN THE MOON'S SOIL. THIS LUNAR SOIL, ALSO CALLED REGOLITH, WAS BROUGHT TO EARTH FROM THE MOON BY THE APOLLO-ERA ASTRONAUTS.

>INNOVATIONS FROM PREVIOUS NASA PROJECTS HAVE HELPED ADVANCE THE AGRICULTURAL INDUSTRY, INCLUDING THE VERTICAL FARMING SYSTEM THAT HAS NOW DEVELOPED INTO A MULTI-BILLION-DOLLAR INDUSTRY, AND INCLUDES COMPANIES LIKE SQUARE ROOTS, FOUNDED BY ELON MUSK'S BROTHER KIMBAL MUSK.

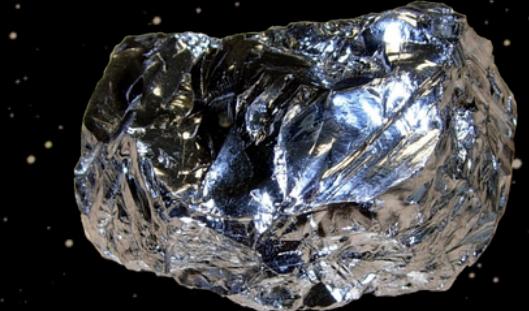
WHAT METAL IS FOUND ON THE LUNAR SURFACE?



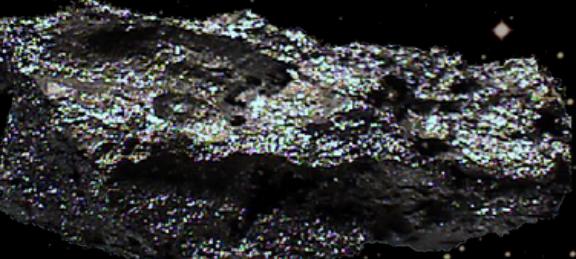
IRON



ALUMINUM



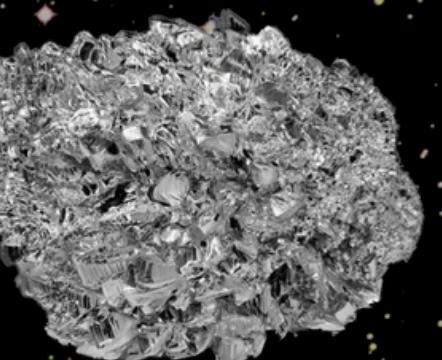
SILICON



TITANIUM



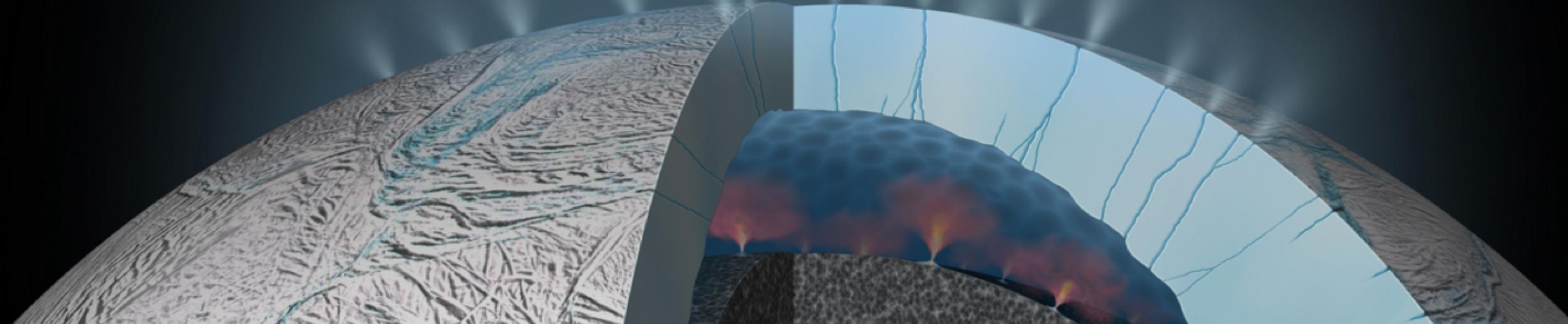
CALCIUM



MAGNESIUM

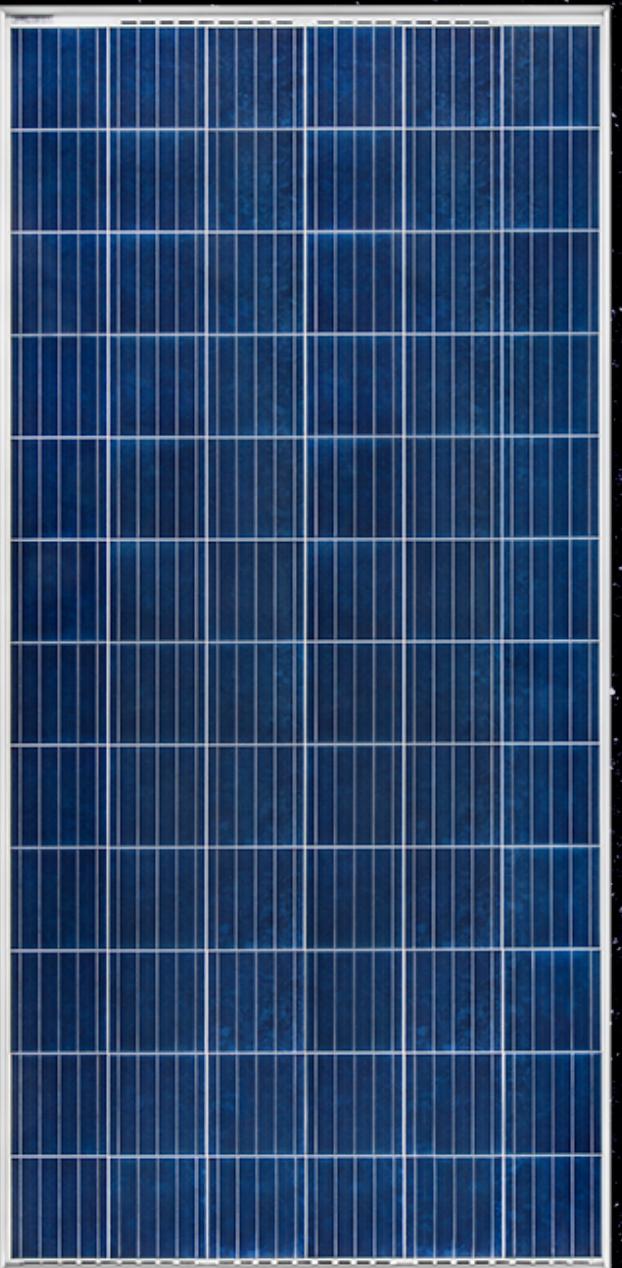


ICE ON THE MOON

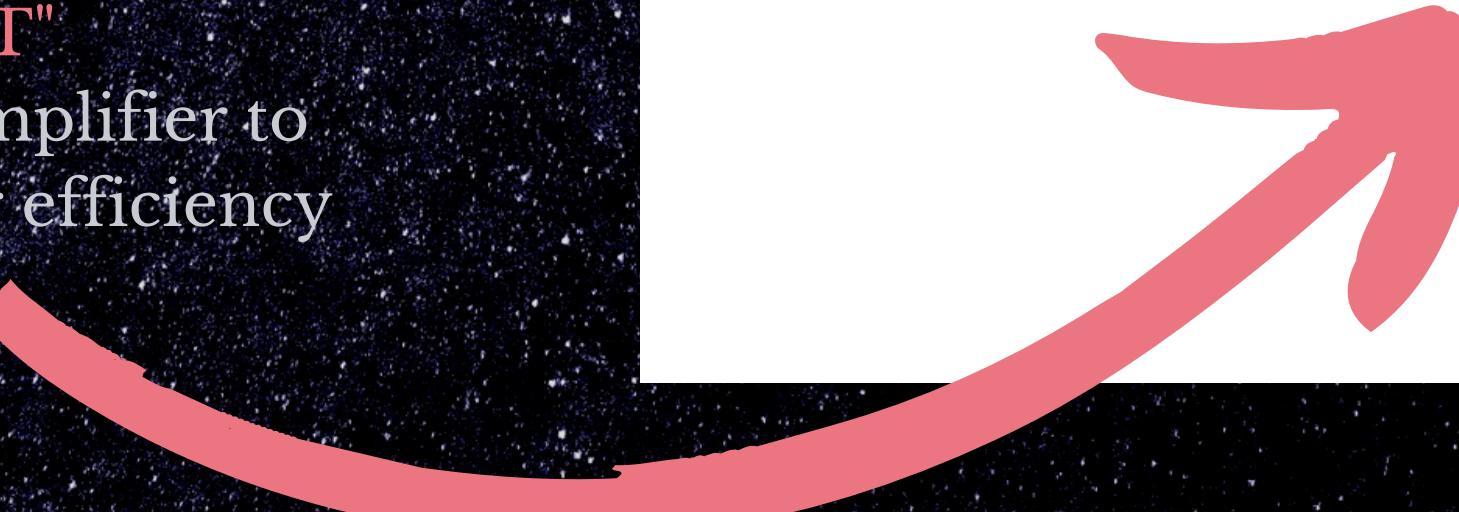
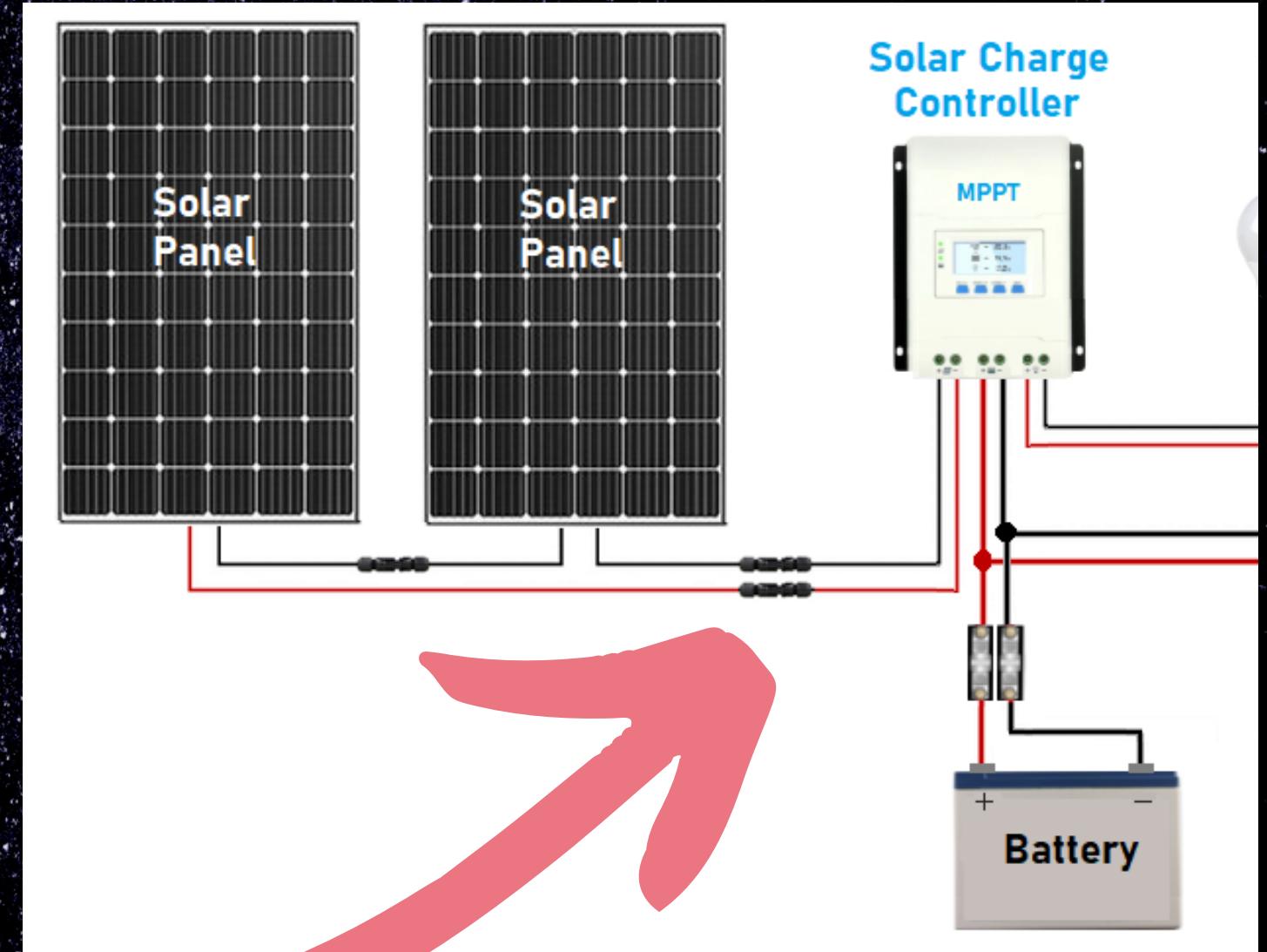
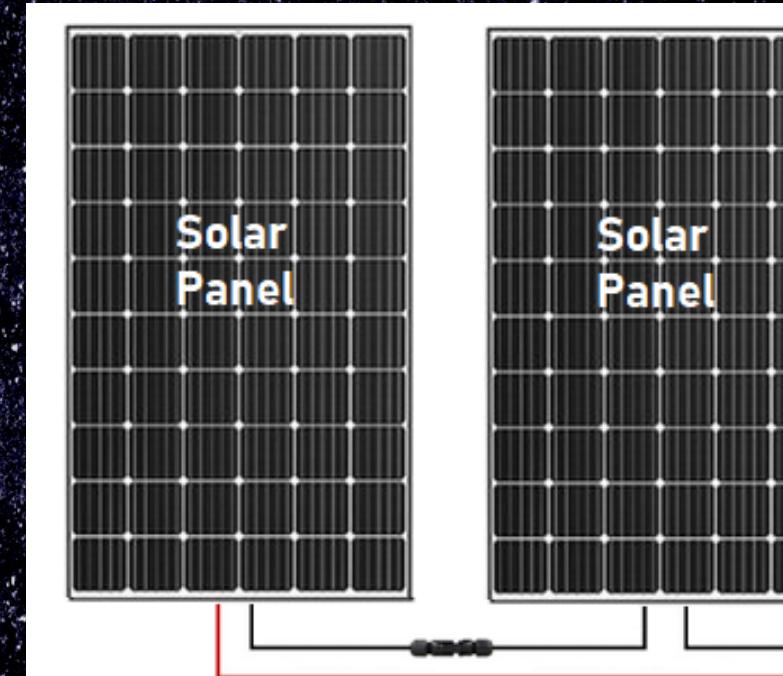


AT 2009, NASA SENT A MISSLE RIGHT THE SOUTH POLE OF THE MOON AFTER SCANNING SOME WATER RADIATIONS USING THEIR SATELLITES AND AFTER HITTING THE TARGET, THE ICE RADIATIONS GOT STRONGER PROVING THE EXISTING OF AN IMPORTANT QUANTITY OF ICE IN THE SOUTH POLE AND MOREOVER THE ENTIRE MOON BUT UNDER THE SURFACE

ESTABLISHING SUSTAINABLE POWER DURING DAY/NIGHT CYCLE



Using
72-cell solar panels
with an
"MPPT"
as a voltage amplifier to
improve power efficiency



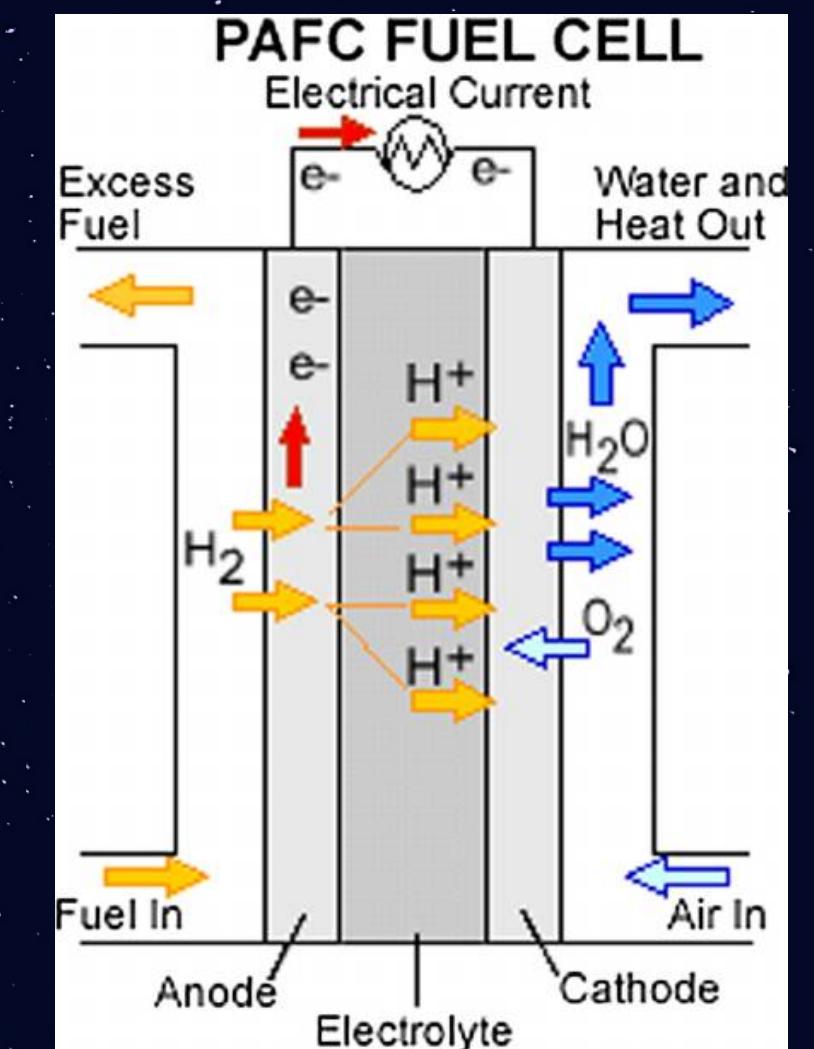
Using solar energy to raise the temperature during the night
and lower it during the day .

ESTABLISHING SUSTAINABLE POWER DURING DAY/NIGHT CYCLE

for the rest the devices which needs energy we can use "Hydrogen energy" as an energy source our solution is the fuel cell spring

there are many kinds of fuel cells ,we just need "PAFC"
(phosphoric acid fuel cell spring)

PAFC phosphoric acid fuel cell Efficiency ranges from 40 % to 80 % operating temperature is between 150°C to 200°C Outputs energy up to 200kw



UTILIZING MOON RESOURCES

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Resources on the Moon

Helium-3

Non-radioactive isotope
for nuclear energy

^3He

Hydrogen

Propellant to power
rockets

H

Water ice

Can be split a hydrogen
and oxygen for fuel

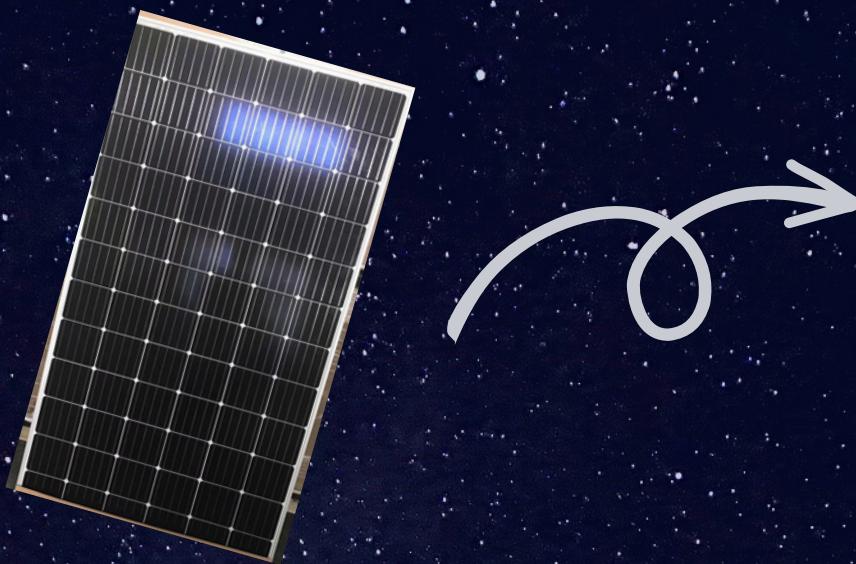


Sunlight

Solar energy

RESOURCES MANAGEMENT ON THE MOON

Thanks to solar panels that will collect the sun radiations we will get around **130kwh per day** which all that only using one solar panel (**a 72-cell panel**)



a complete household in the USA consumes about 30kwh per month so even if we use only one solar panel it would be enough.

As the water we all know about the iced water on the moon specially on its southern pole and it would be used for the **drinking** and also for producing the **oxygen** using the electrolysis of the water and finally for the **agriculture** on the moon.





THANK YOU ALL

