


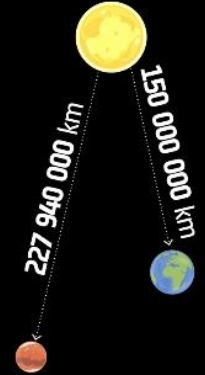




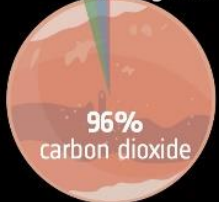









What do we know about Mars?

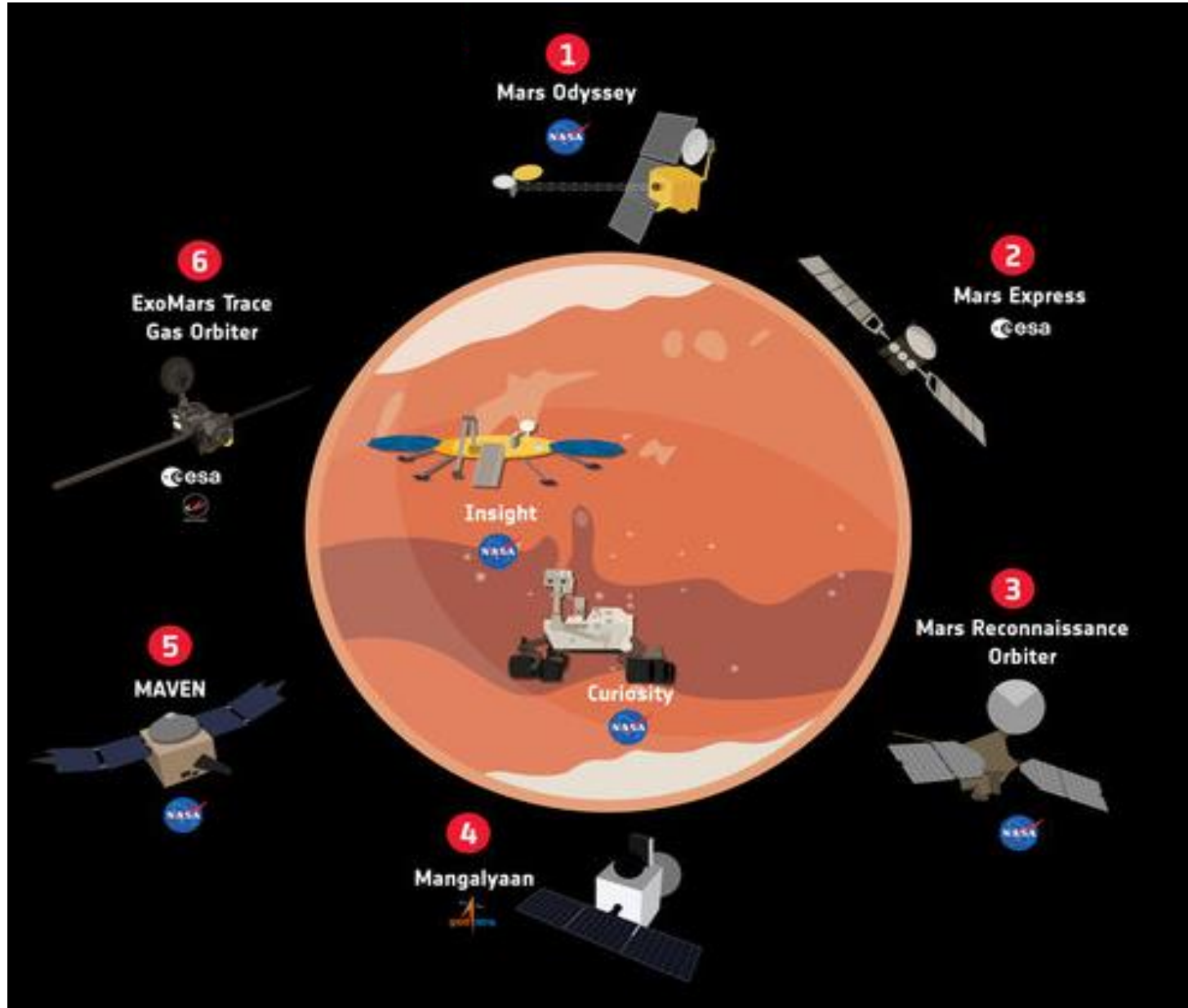


→ MEET MARS

Diameter  6 794 km about half the diameter of Earth	Gravity 3.71 m/s ²  about 1/3 of Earth's gravity	Density 3.93 g/cm ³  Earth: 5.51 g/cm ³	Average distance from the Sun  227 940 000 km 150 000 000 km	Martian day  24:37 Martian year  687 Earth days	Average temperature  max +27°C -55°C min -133°C	Atmospheric surface pressure  6.35 mbar	Atmosphere  1.9% nitrogen 1.9% argon 0.2% trace gases 96% carbon dioxide
Surface area 145 million sq km about the same as Earth's land area 	Moons Deimos  12 km x 11 km x 15 km Phobos  22 km x 18 km x 27 km 20 000 km 6 000 km	Olympus Mons  25 km x 600 km Mount Everest Valles Marineris  4 000 km x 600 km x 7 km Grand Canyon Impressive features Hellas Basin  9 km deep x 2 300 km One of the Solar System's largest impact basins Smooth northern lowlands  6 km average elevation difference between the two hemispheres Cratered southern highlands					



Missions to Mars



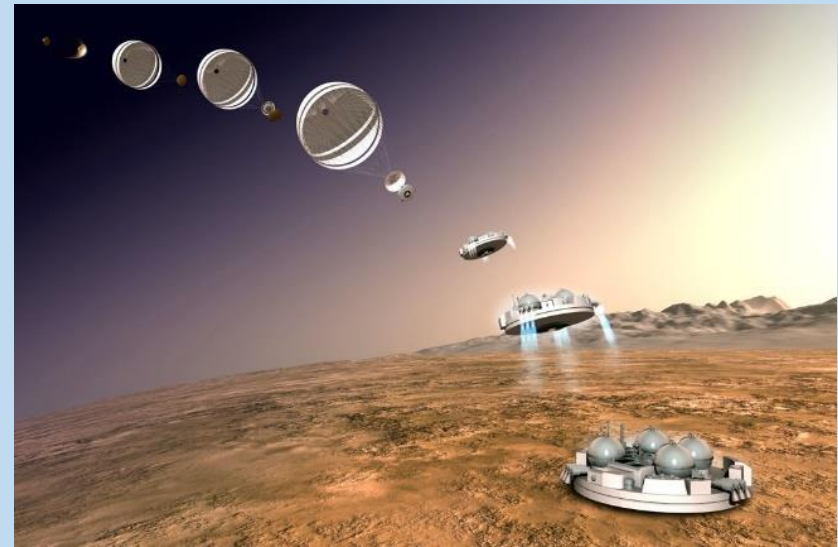
1

LET'S PACK



2

LET'S LAND ON MARS



GAME 1

LET'S PACK



What do you bring to Mars for the moving?

**1.
FOOD**



**2.
DRINKS**



**3.
AIR**



**4.
CLOTHING**



**5.
HEALTH
SOLUTIONS**



**6.
ENERGY**



**7.
ENTERTEIN
MENT**



**8.
SOSTENIBLE
SOLUTIONS**





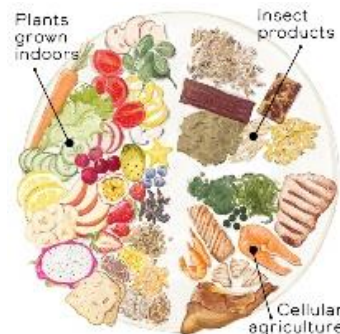
FRESH FRUIT



RECENT PIGLET



DESHYDRATED FOOD



INSECT PRODUCTS



BOTTLE OF WATER



CARBONATED DRINKS



INSTANT MILKSHAKE



OXYGEN



NITROGEN





HELIUM



WARM CLOTHING



WORKING CLOTHES



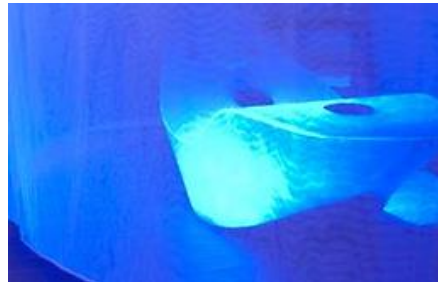
SKIRT



VITAMINS



TREADMILL



UVA MACHINE

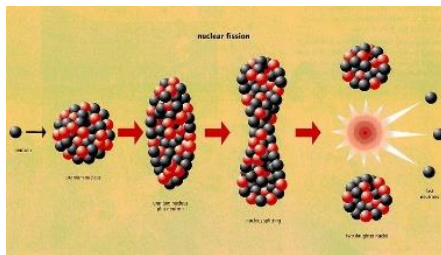


SOLAR ENERGY



WIND ENERGY





NUCLEAR ENERGY



MUSICAL INSTRUMENTS



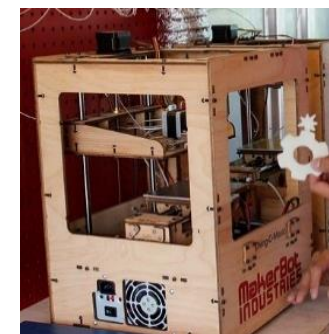
SERIES



PETS



MACHINE CAPABLE OF EXTRACTING O₂ FROM CO₂ IN THE MARTIAN ATMOSPHERE (MOXIE)



3D PRINTER



MACHINE CAPABLE OF EXTRACTING WATER FROM ICE



MÁQUINA CAPABLE OF RECYCLING URINE

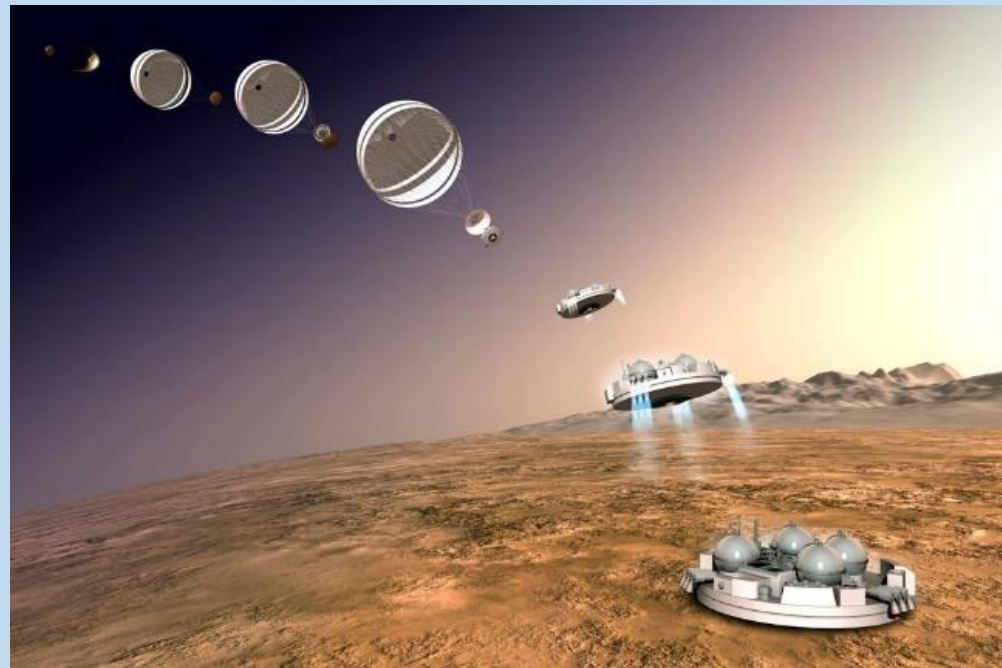


HYDROPONICS



GAME 2

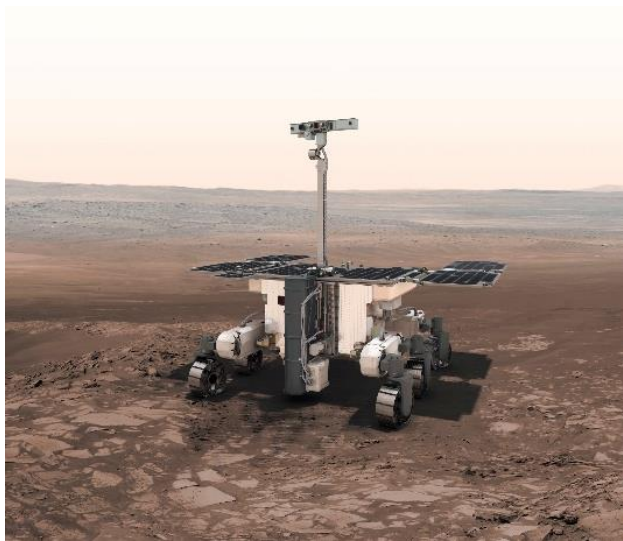
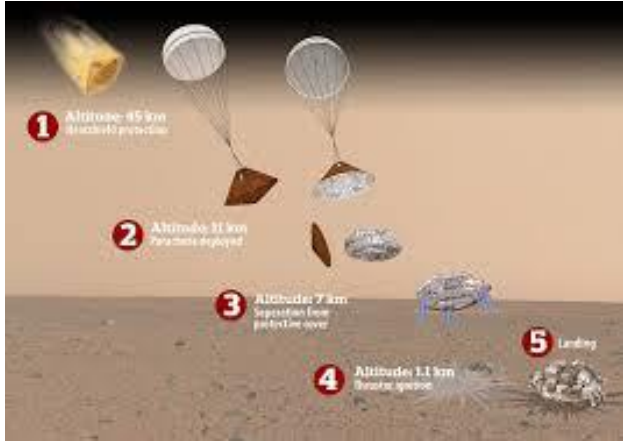
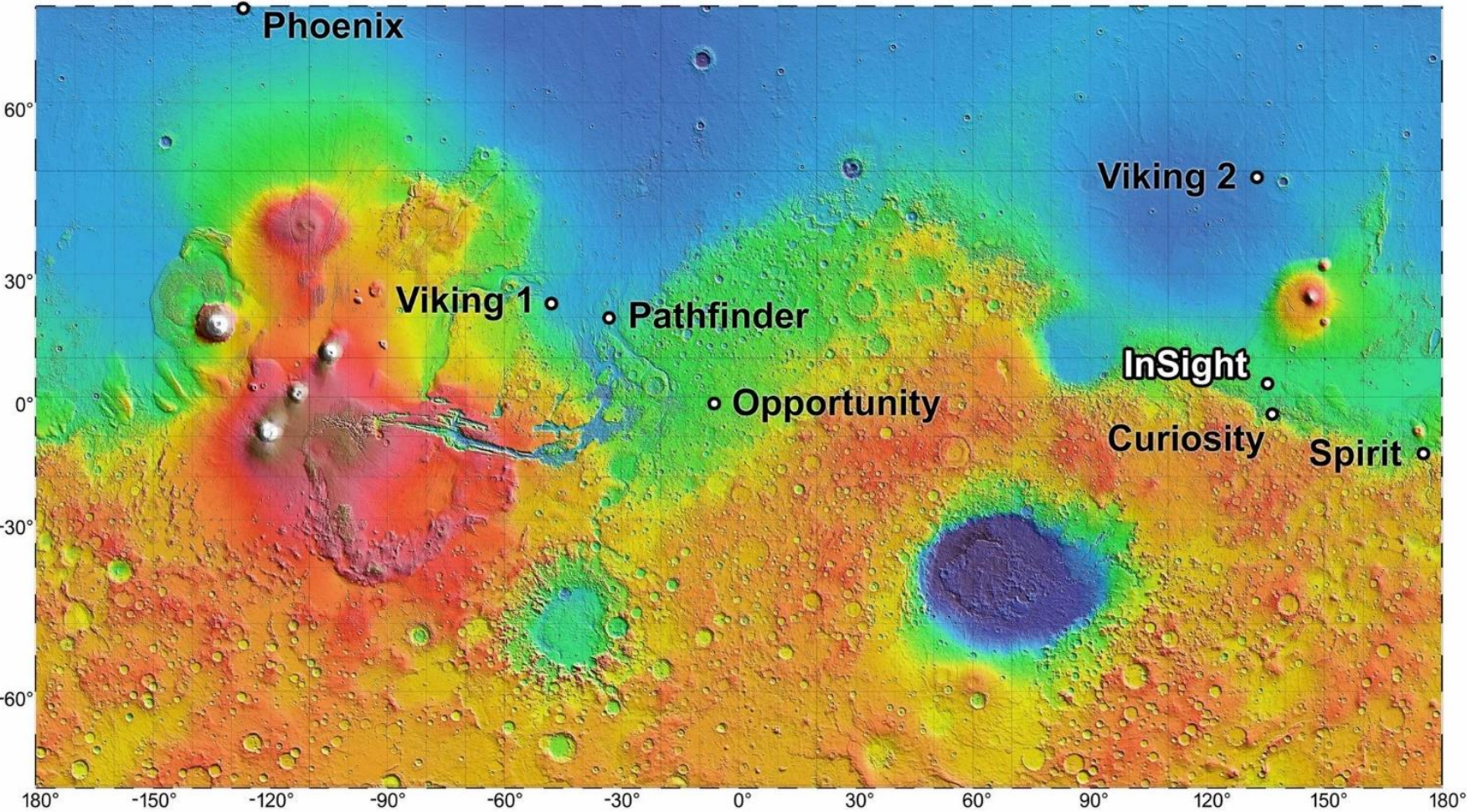
LET'S LAND ON MARS



¿ Where to land on Mars?

Identify the coordinates,

name & picture



**1.
SUNLIGHT
LIMITATIONS**



**In latitude
(degrees)**



**2.
WATER RESOURCES
LIMITATIONS**



**In latitude
(degrees)**



**3.
SURFACE LIMITATIONS
(ROVER)**



**In longitude
(degrees)**



North

LATITUDE

60°

30°

0°

-30°

-60°

(0-45)° ABUNDANT SOLAR ENERGY

-(0-45)° ABUNDANT SOLAR ENERGY

South

West

LONGITUDE

East

180°

-120°

-60°

0°

60°

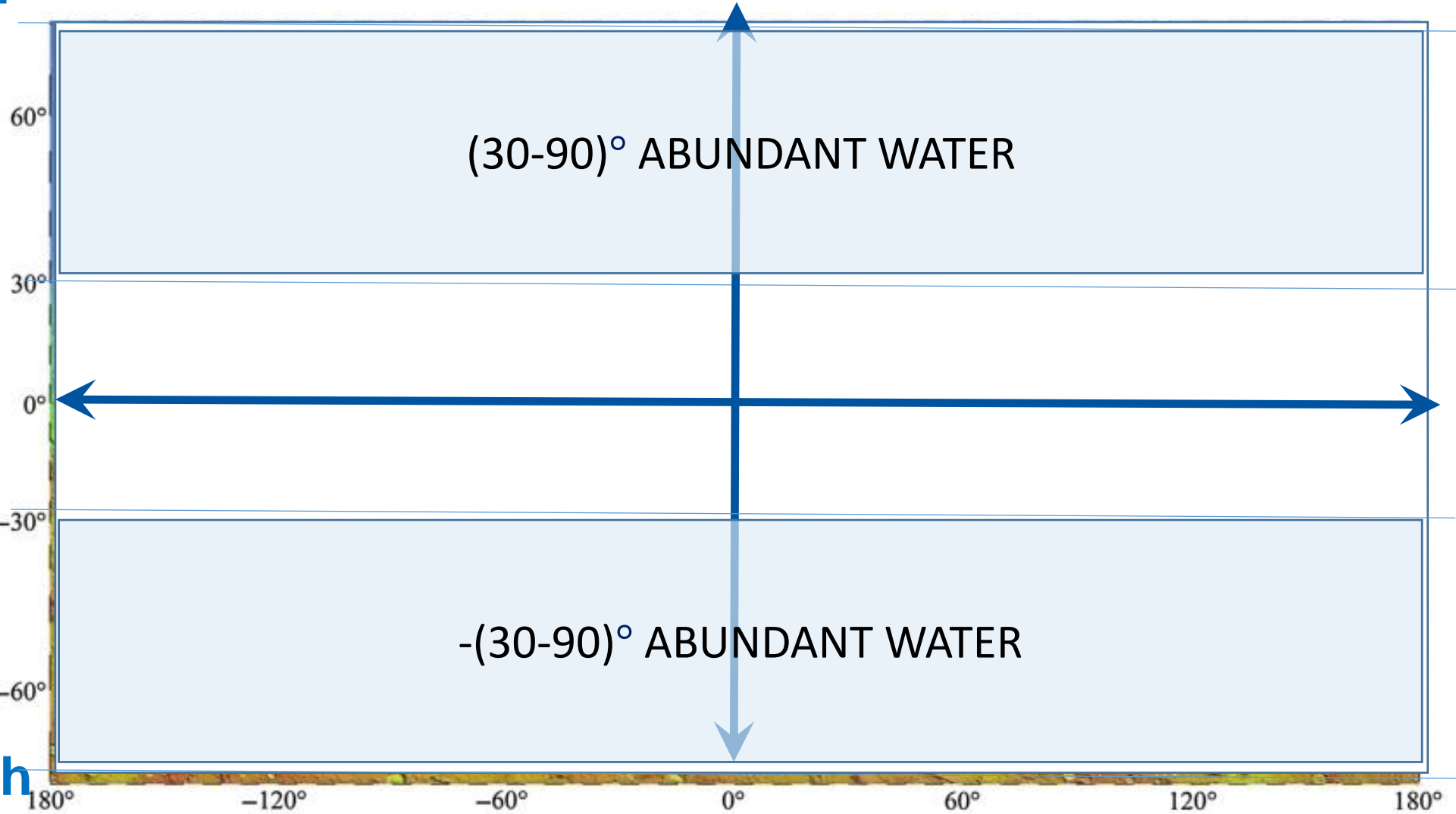
120°

180°



North

LATITUDE



South

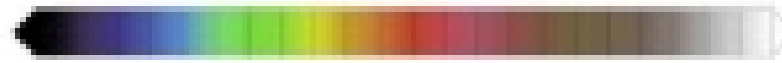
West

LONGITUDE

East



-8 -4 0 4 8 12 km



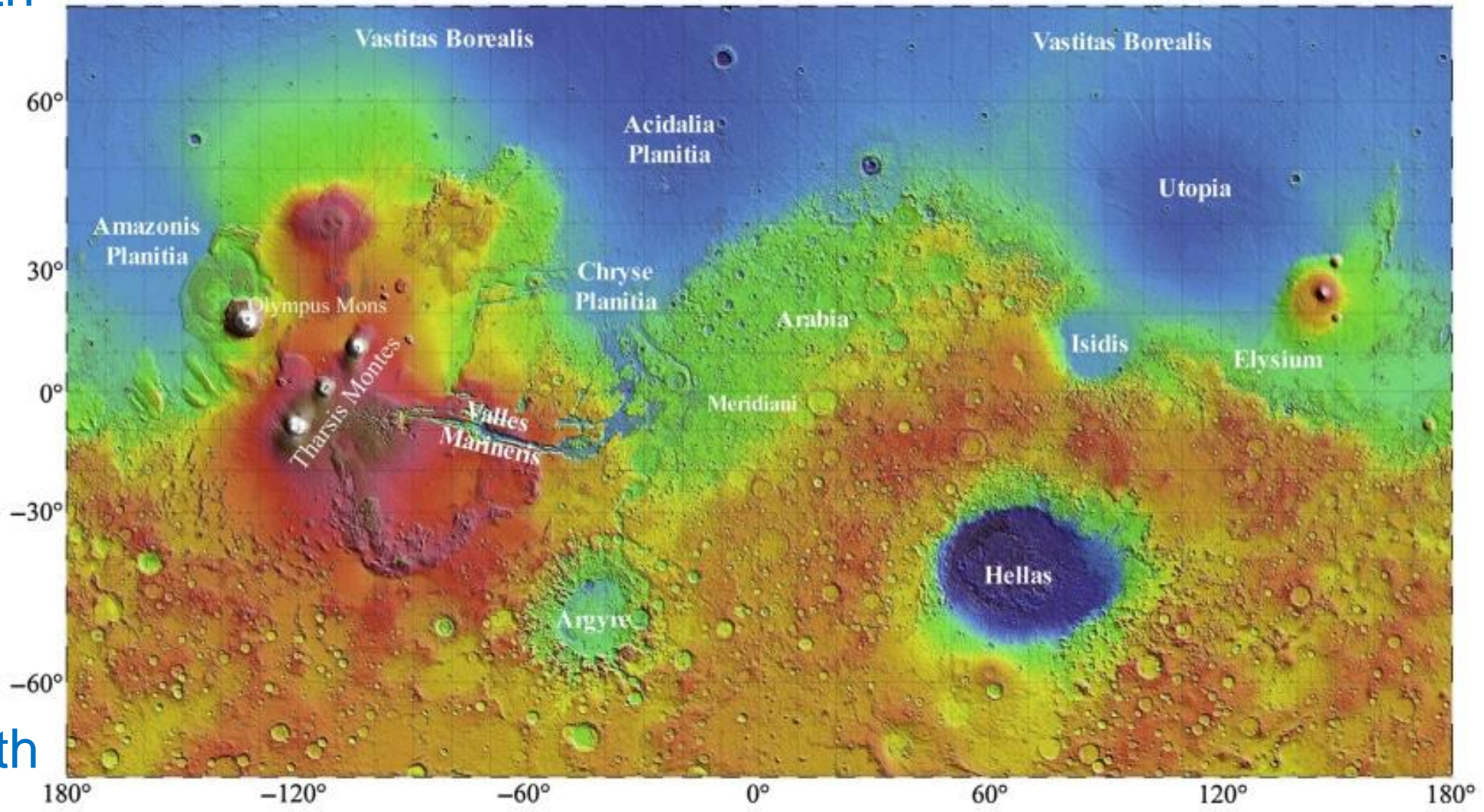
ROVER:

**FLAT REGIONS
ADECUATE TERREAIN**

North



LATITUDE



South

West

LONGITUDE

East

