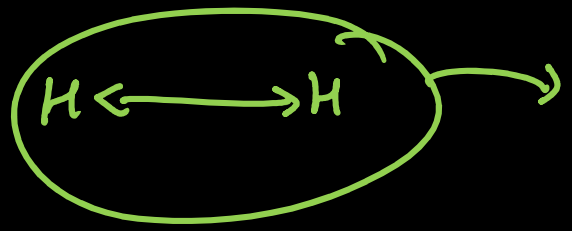
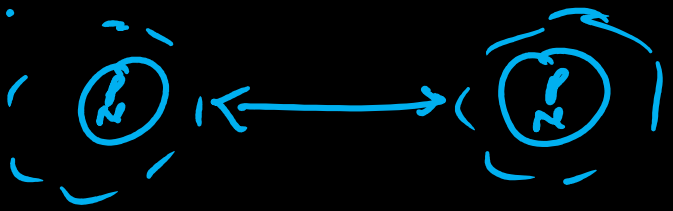
Prayag Sir

Sun : A star.

* Nuclear fusion. 

Helium.

fusion: 

Helium Nucleas

* Nuclear fission :- Nucleas Break → we produce energy.

* Narora
↳ Atomic Energy power plant. ← Thermal

* Sun's atmosphere is
  * mainly composed of Chromosphere.
  * But it also includes Corona.

* outer region of Sun is Corona.

* Life →
  * 4.6 Billion years old.
  * 5 billion years to be left.

* Sun is 99.8% of our Solar System. [Sun is 3.5 lakh times of Earth]
* Contains → 73.4% → Hydrogen, } Current
  → 25% → Helium. } Composition.

Rota

Revision:-

① o. of universe. =

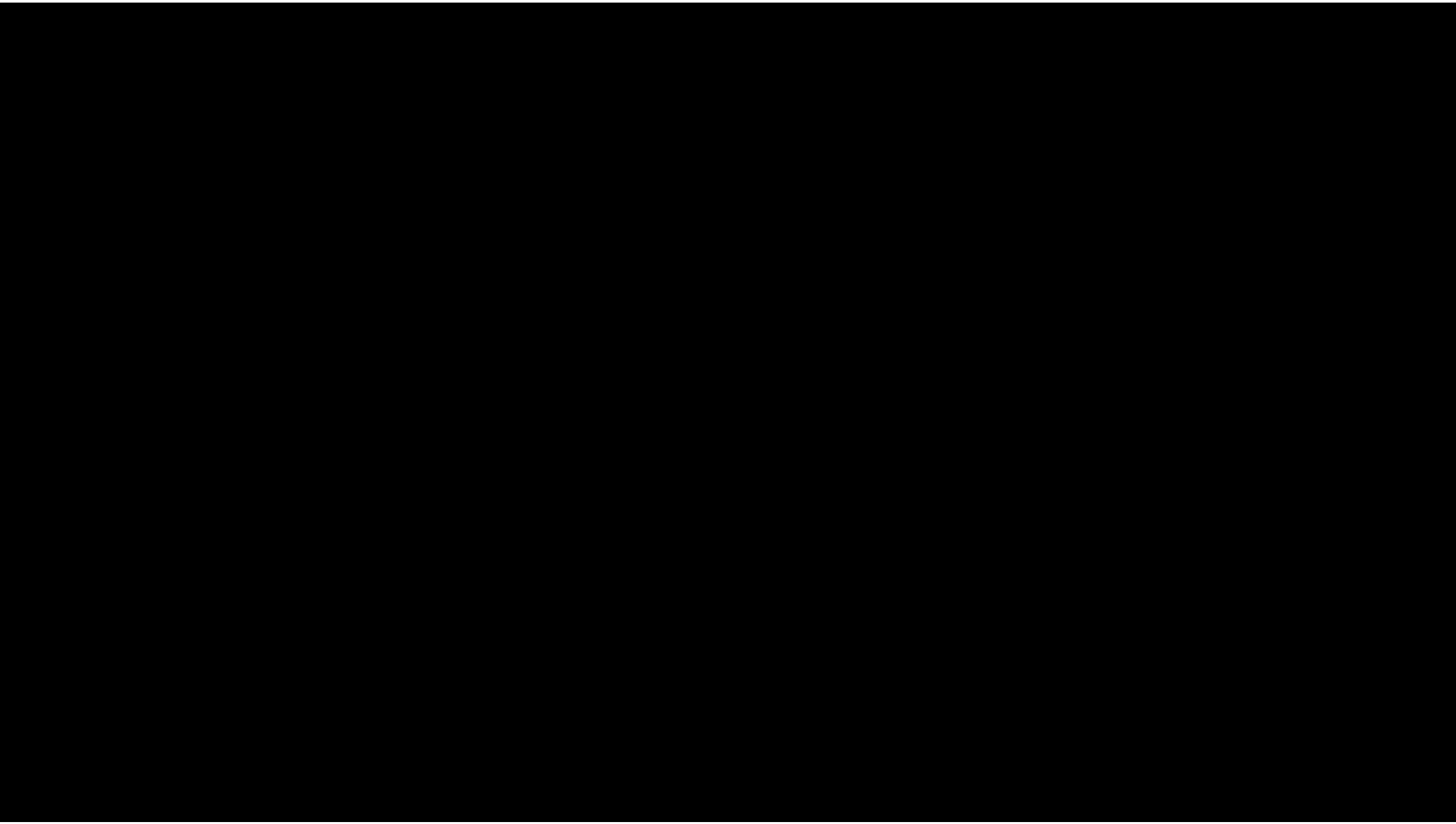
② Star → life.

③ Solar System → M
→ D.

④ Sun. =

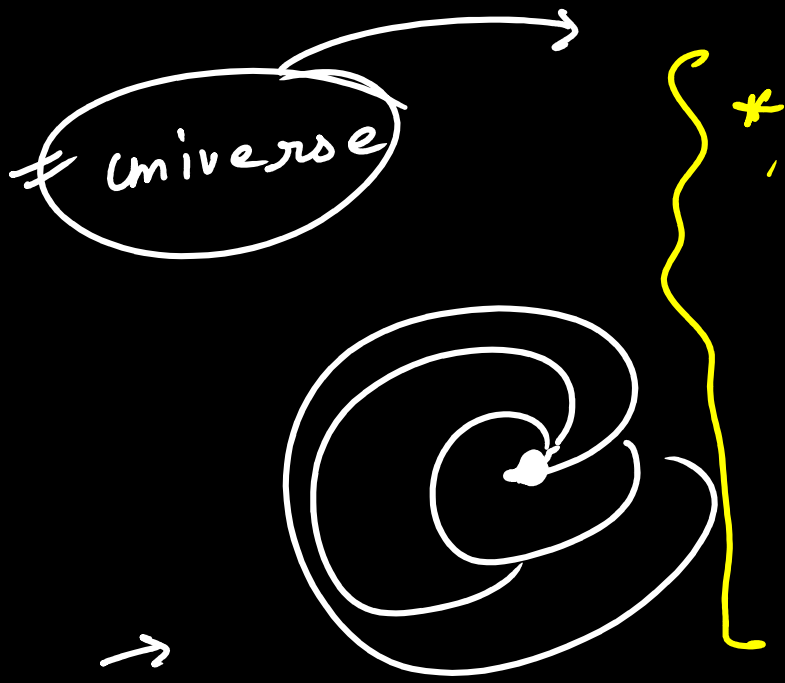
↳ Planets → Data

* Galaxies → Types.



Prayag Sir:-9170872902

west ⟶ East



* Galaxies → Rotation ✓
→ Revolution ✓
↳ centre of universe

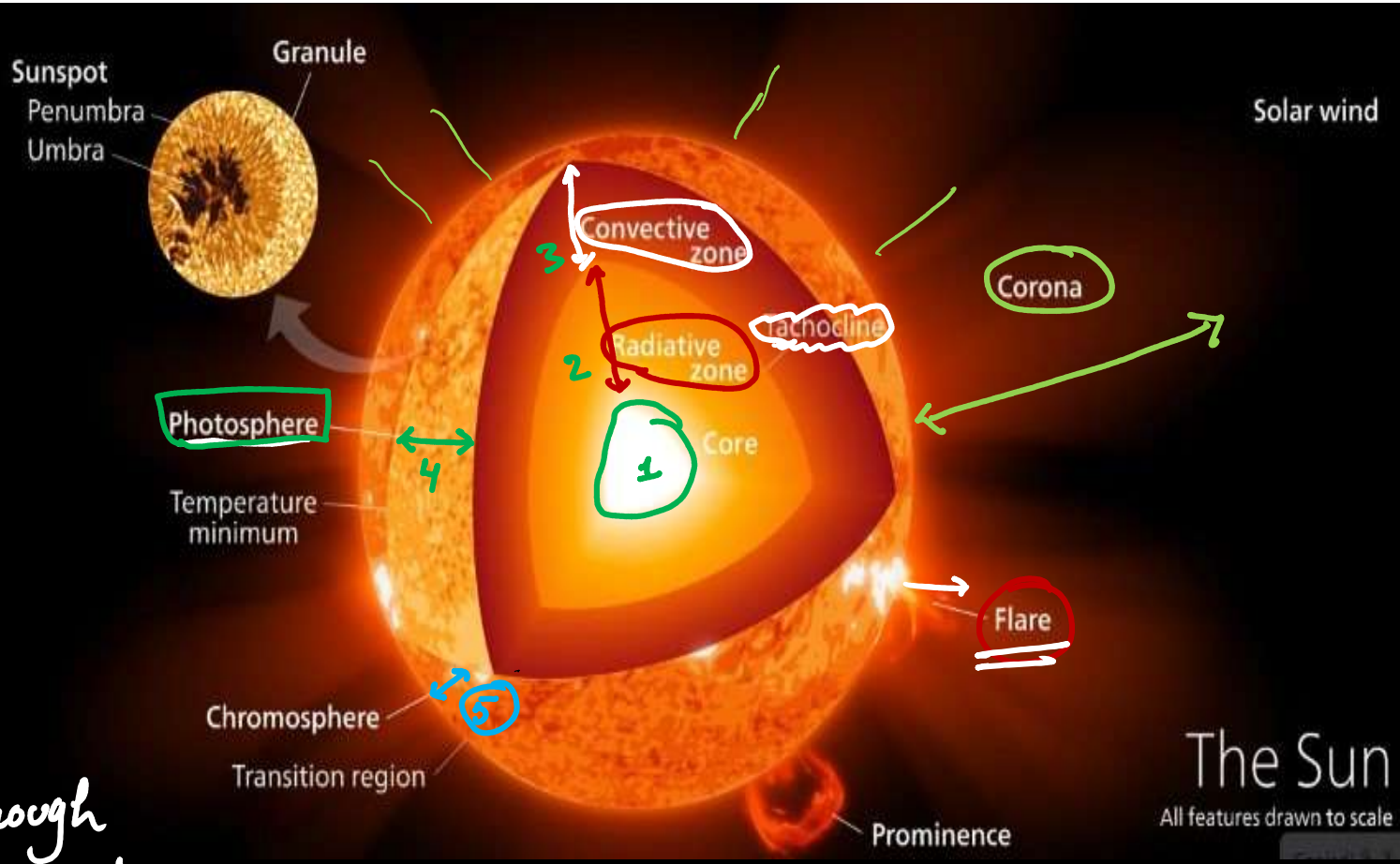
* Stars → Rotation → Axis
→ Revolution
↳ centre of Galaxy.

Rotation →

Core ⇒ 15 million °C

Radiative Zone.

Energy Transfers in vaccum



Convective Zone → through Convection.

via Cells or gas ←

most Important.

* Photosphere → 6000 °C ** (most imp)

* we cannot see Chromosphere :=

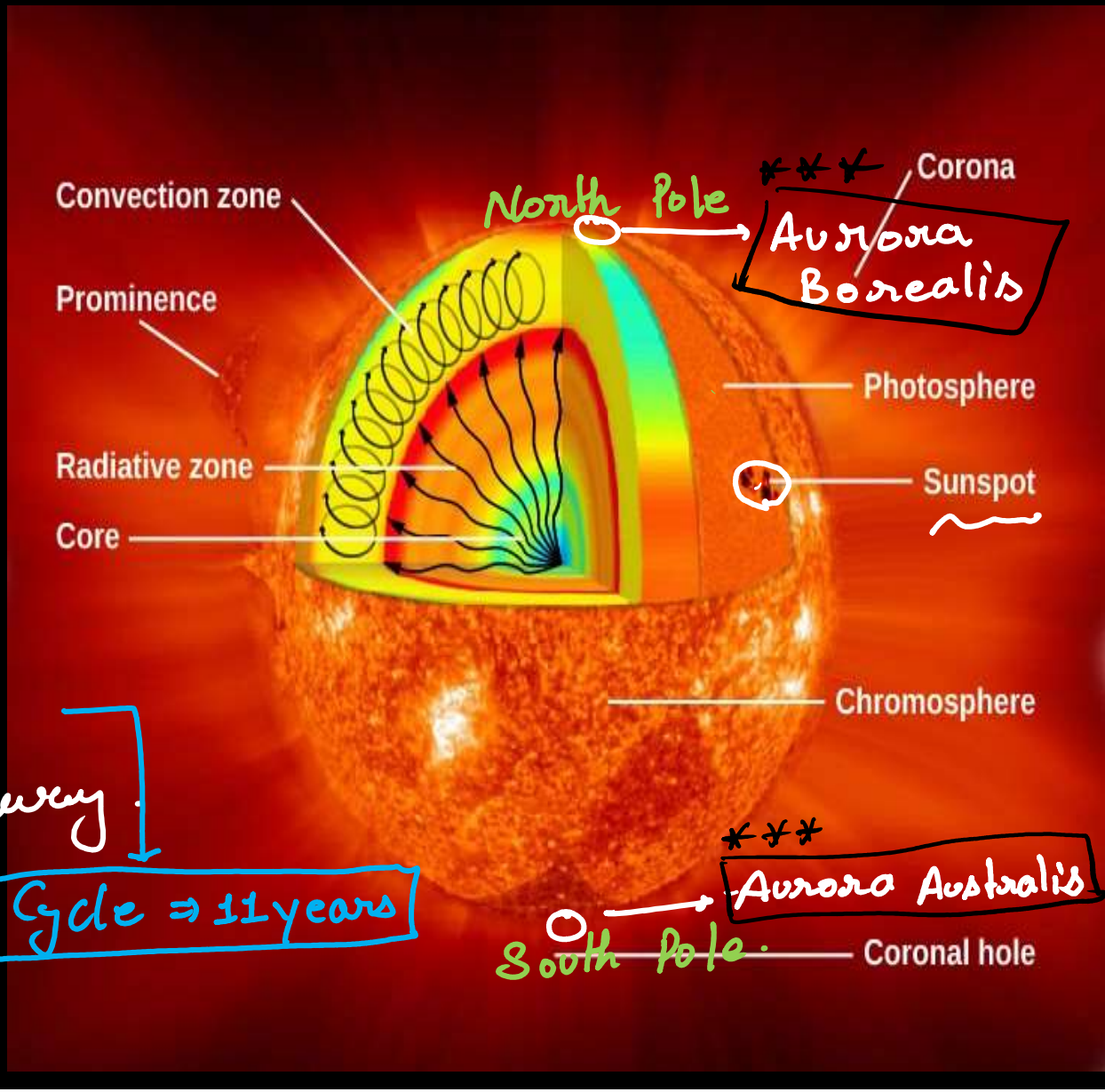
* on Solar Eclipse we can see Caronca.

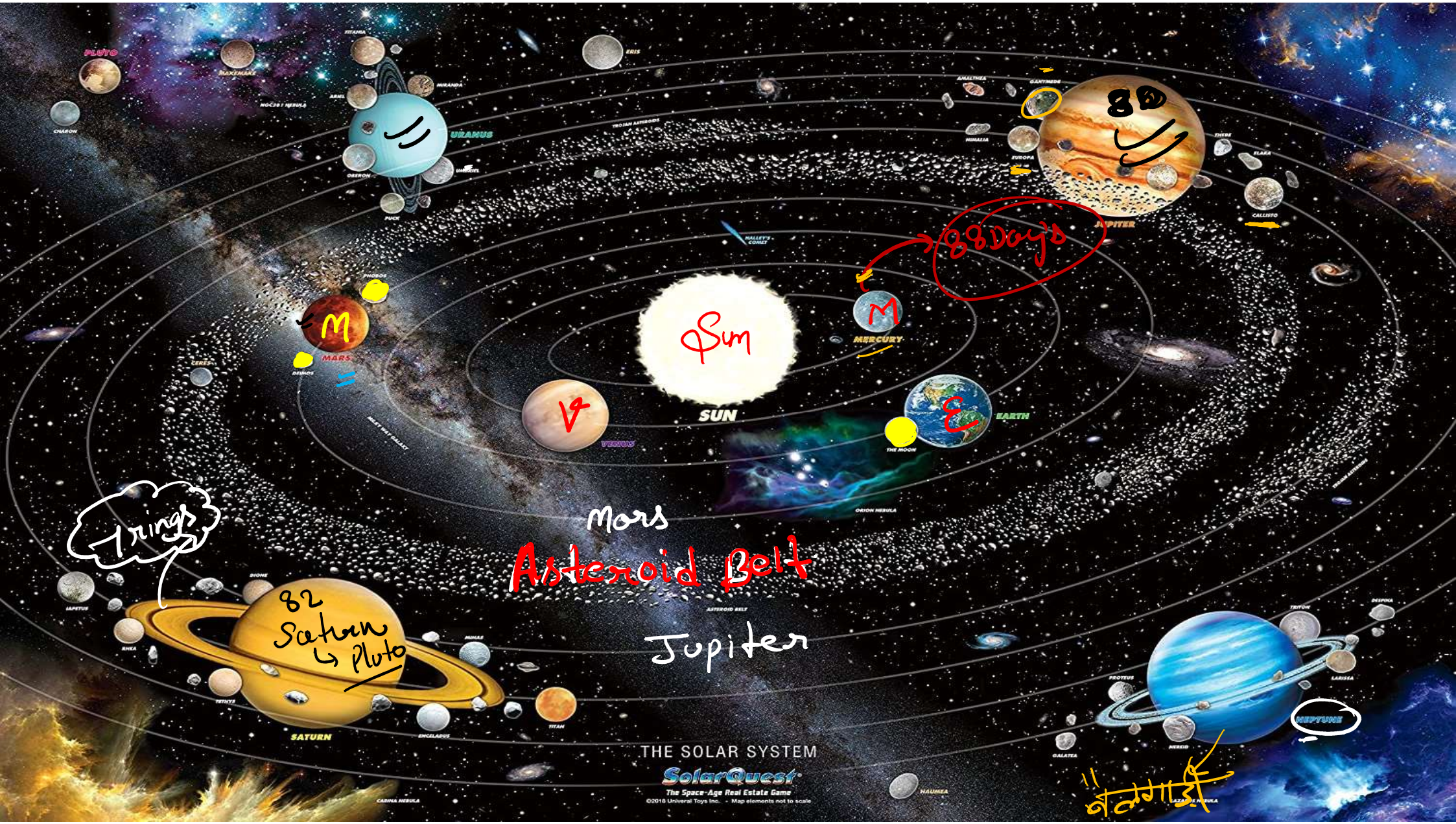
Sun Flares & Sun winds

↳ It is part of Photosphere Comes out from sun.

* Sun Spots ⇒ from where Solar flares moved away.

* "Cooler patch" → Cycle ⇒ 11 years



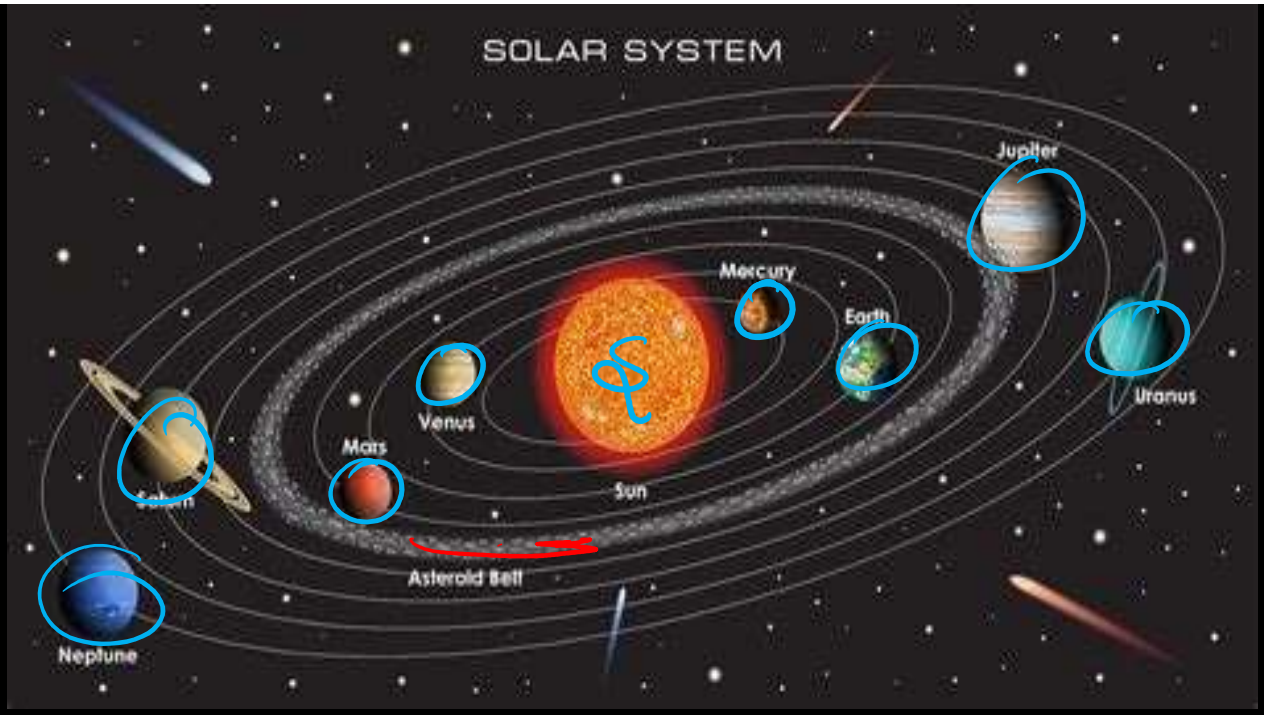

PLUTO
CHARON
URANUS
MIRANDA
ARIEL
OBERON
PUCK
ERIS
TROJAN ASTEROIDS
HALLEY'S COMET
AMALTHEA
GANYMEDE
HIMALIA
EUROPA
JUPITER
THEBE
ELARA
CALLISTO
88 Day's
PHOBOS
MARS
DEIMOS
CERES
MERCURY
SUN
VENUS
EARTH
THE MOON
MILKY WAY GALAXY
ORION NEBULA
Mars
Asteroid Belt
Jupiter
Rings
82
Saturn
↳ Pluto
DIONE
IAPETUS
RHEA
TETHYS
MIMAS
ENCELADUS
TITAN
SATURN
TRITON
NEREID
PROTEUS
LARISSA
HIPPOCAMP
GALATEA
HAUMEA
CARINA NEBULA
THE SOLAR SYSTEM
SolarQuest
The Space-Age Real Estate Game
©2018 Universal Toys Inc. - Map elements not to scale

Solar System.

Sun ⇒ father of Solar System.

MVEM J SUN

रम वेम जशन → Trick



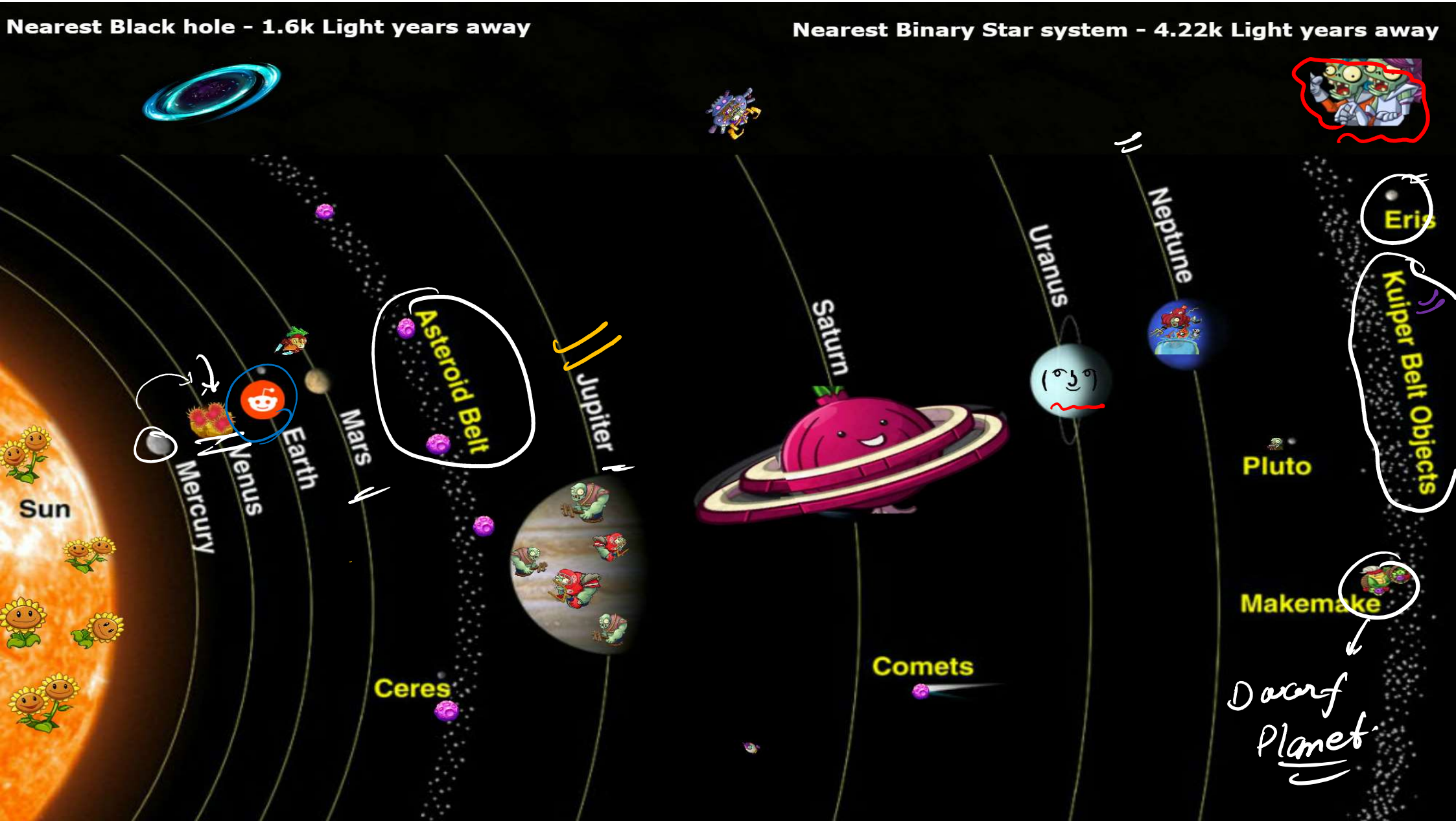
Moon

फोबोस
डीमोस

Natural Satellite

* Earth → Natural Satellite
↓
moon.

* Mars → N. Satellite
Phobos / Deimos


Nearest Black hole - 1.6k Light years away
Nearest Binary Star system - 4.22k Light years away
Sun
Mercury
Venus
Earth
Mars
Asteroid Belt
Jupiter
Saturn
Uranus
Neptune
Pluto
Eris
Kuiper Belt Objects
Makemake
Dwarf Planet
Comets
Ceres

Planets :- (1) ** West ⟶ East [Rotation].

Exception ⇒ {East to west} → UV

(2) ** MVEM ⇒ Terrestrial Planets.

(Similar to Earth)

"Made-up of rocks"

(1) ** JSUN ⇒ Jovian or Giant Planets.

Made up of Gasses.

(4) Mercury and venus are 'interior planets.

Mercury :- * Smallest Planet (4880 km - Diameter).

* No atmosphere.

* *** No natural satellite.

* Temp. → 460°c (Hottest).

→ -300°c (Coolest)

* Satellite → Revolve

* Rover.

↓

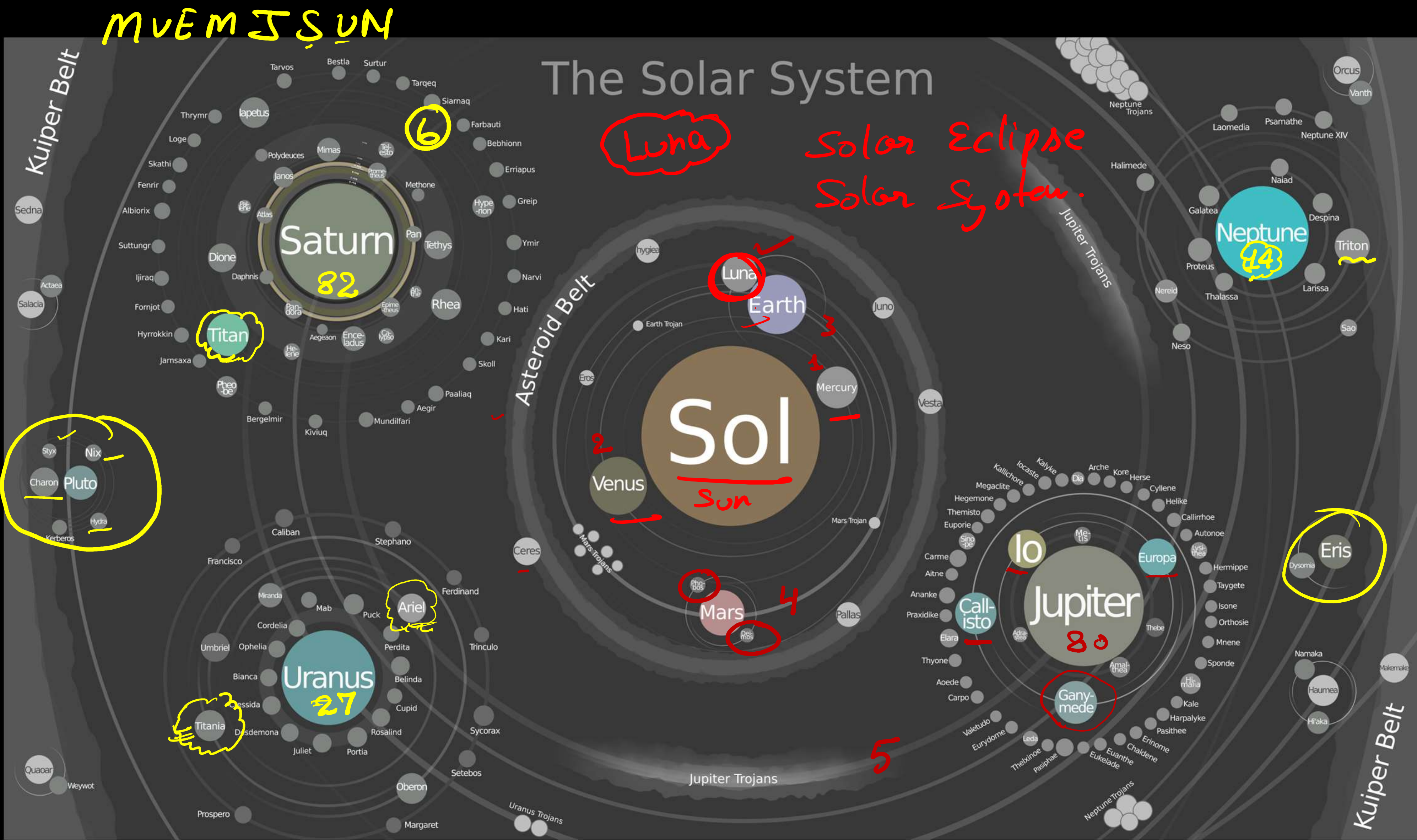
Surface missions.

*** 88 Day's to Complete one revolution.

↓

365 → Earth → 1 year.

* 3 years


MVEMJSUN
The Solar System
Luna
Solar Eclipse
Solar System
Kuiper Belt
Asteroid Belt
Jupiter Trojans
Neptune Trojans
Uranus Trojans
Mars Trojans
Sol
Sun
Mercury
Venus
Earth
Luna
Earth Trojan
Mars
Mars Trojan
Ceres
Vesta
Pallas
Juno
Eros
hygiea
Jupiter
80
Io
Europa
Ganymede
Callisto
Saturn
82
Titan
6
Rhea
Tethys
Dione
Iapetus
Mimas
Enceladus
Uranus
27
Titania
Oberon
Ariel
Umbriel
Miranda
Neptune
14
Triton
Pluto
Charon
Nix
Styx
Hydra
Kerberos
Eris
Dysomia
Haumea
Namaka
Hi'iaka
Makemake
Sedna
Salacia
Actaea
Quaoar
Weywot
Orcus
Vanth
1
2
3
4
5

② venus :- * Hottest planet and Brightest after Sun and Moon.

* East to west (clockwise).

* Atmosphere ⇒ mainly comprise of CO_2.

* No natural Satellite.

* venus is also called as sister of Earth.

* 225 Day's one revolution

* Morning Star [seen in east in morning]

Carbon Dioxide

- Property
  - Heat Block
  - Pollution → Globe → warm.

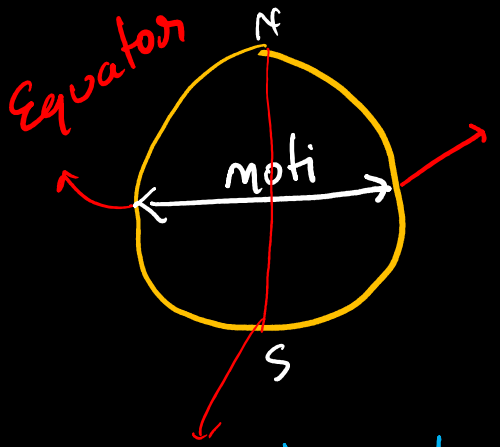
Global warming

③ *** Earth

* Shape → Geoid

Geo - Earth

* Sun light takes 8 min and 18 Sec to reach Earth. (20 Sec)



12,750 Km (Equatorial Diameter)

Polar Diameter (12,715 Km).

Blue Planet.
↳ 70% → water

* Revolution → 365, 5 hr., 48 min, 46 sec
↳ सूरज के चारों तरफ़.
↳ 365 1/4 Day's

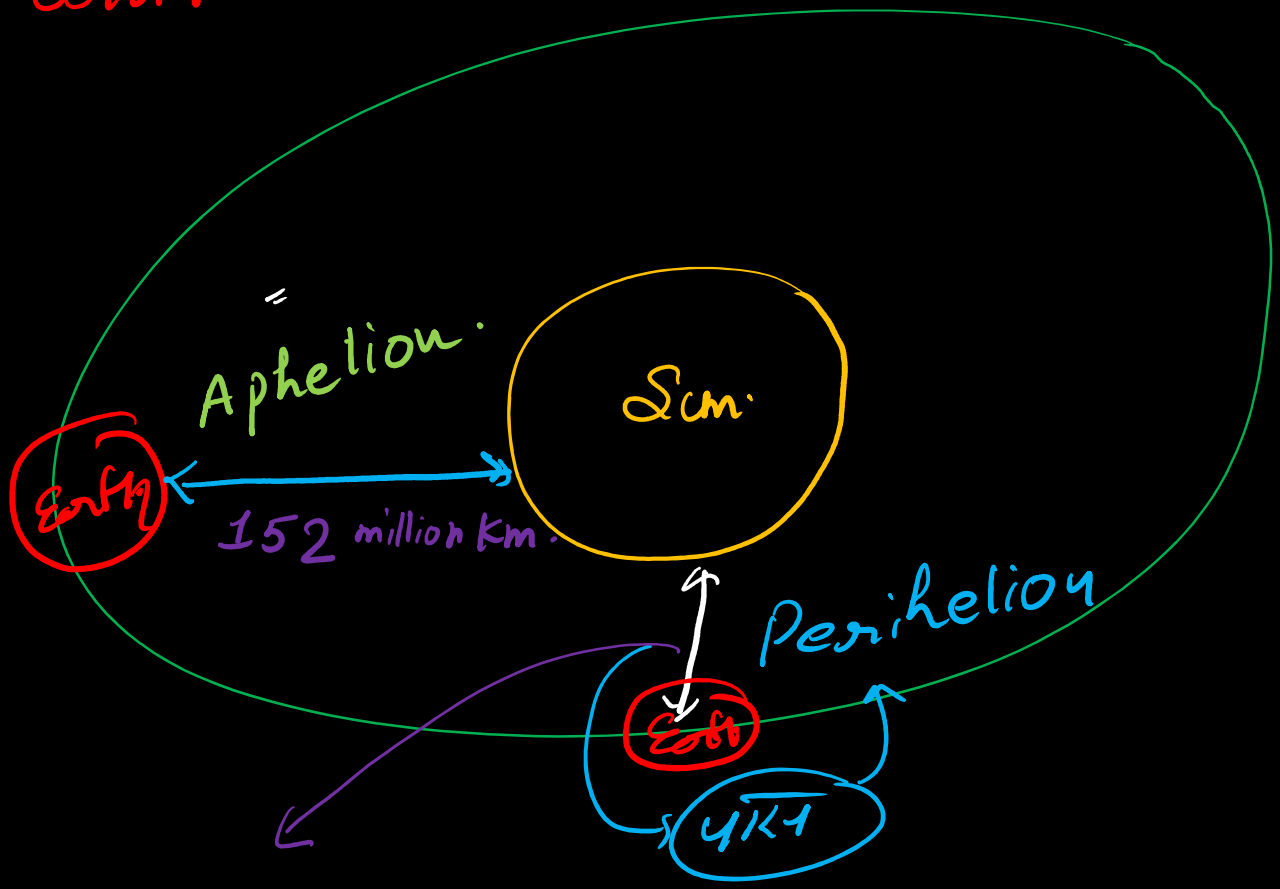
Rotation → 24 hrs.
↳ अपनी जगह पर
23 hrs, 56 mins.

* Earth ⇒ 40000 kms.

Escape velocity
↳ 29.8 Km/Sec

Earth → orbit ⇒ Elliptical

Ellipse



*Average Distance

↳ 150 million Km

* Deepest point ⇒ * Mariana Trench. (11,033 - Deep). → खाई

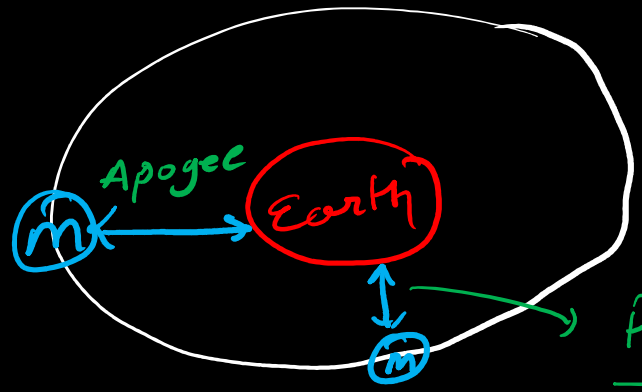
↳ Pacific ocean

* Highest ⇒ 8848.18 metres.

↳ Mt. Everest

* Moon ⟷ Earth (distance)

↳ Avg. → 3,84,000 Kms.



Perigee.

Mars :- * Red planet due to presence of Irone oxide

* Revolution ⇒ 687 Days.

* Natural Satellites ⇒ Phobos and Deimos.

* Highest Point ⇒ Nicks olympia (3 times Mt. Ev.)

* Atmosphere ⇒ Co_2, Nitrogen, Argon.

Jupiter :-

* largest planet of our Solar System.
* Revolution ⇒ 11.9 years
* Natural Satellites ⇒ 80

largest is "Ganymede"

JSUM

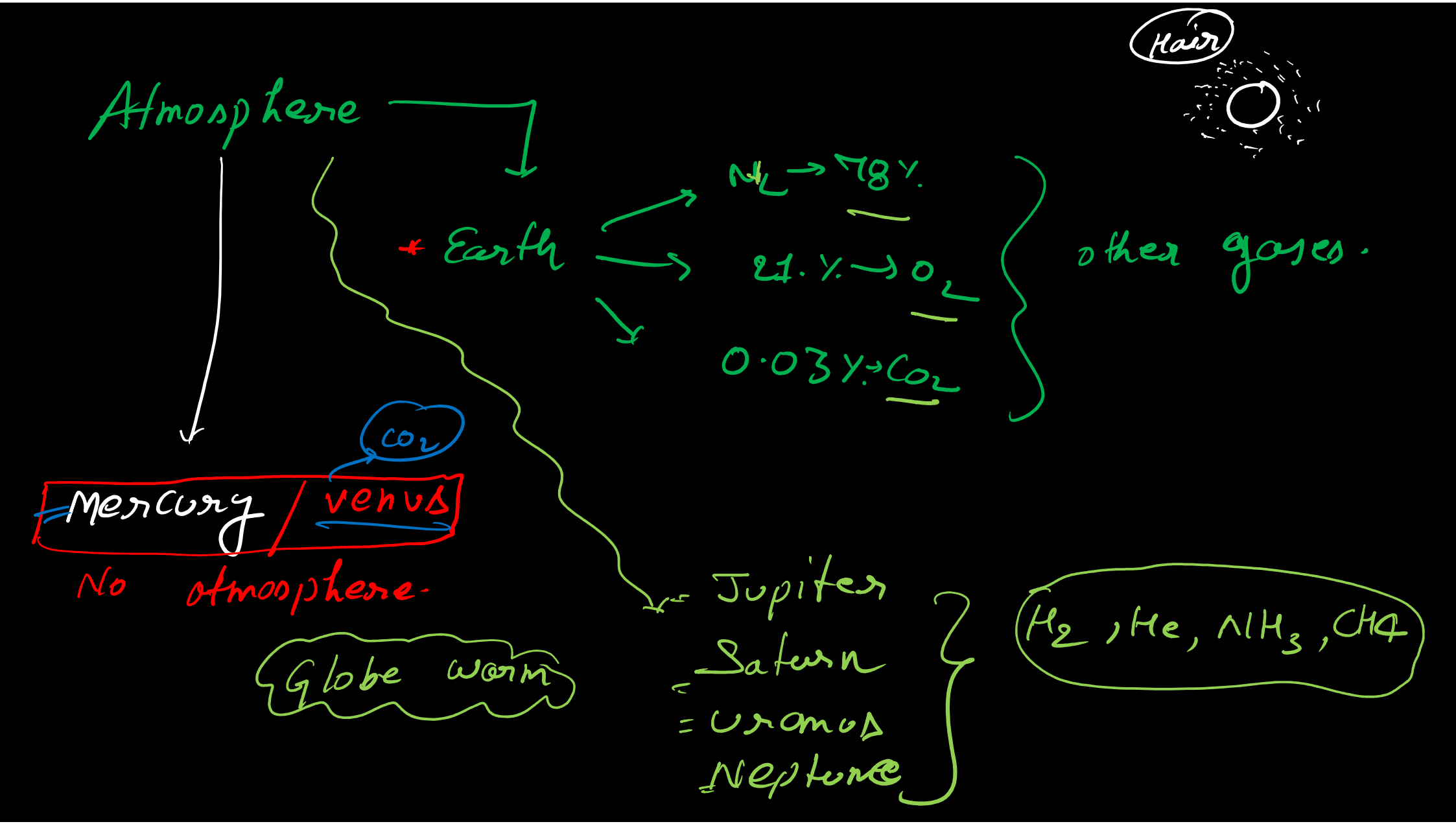
Great Red Spot

storm in atmosphere of Jupiter.

other natural Satellites → Europa, Ayo, Callisto

* Atmosphere → Hydrogen, Helium, methane Ammonia.

* mini Solar System
  * Behaves like a star, has its own radio energy.


Atmosphere
Earth
N_2 → 78 %
21 % → O_2
0.03 % → CO_2
other gases.
Hair
CO_2
Mercury / venus
No atmosphere.
Globe worm
Jupiter
Saturn
Uranus
Neptune
H_2, He, NH_3, CH_4

Saturn :-

↓

Yellow

* Atmosphere → H_2, He, CH_4, NH_3.
* Revolution → 29.5 years =
* Natural Satellites → 82 (max. no. of Natural Satellites) ***
  - Largest ⇒ (Titan)
* *** This planet has 7 fully developed rings.
* It is last planet can be seen naked eyes.

MVEMJS

Uranus :-

*** Bluish green.

* Uranus and Neptune are icy giants.

* *** Lying Planet [East to west].
  - Because it Bends on its axis about 98°.
* Revolution → 84 years.
* Atmosphere → H_2 / He / CH_4 / NH_3.
* Natural Satellites → 27 [Titania].
* Rings → 5 rings but not fully developed.

Neptune :- * Discover → Johann Galle.

yellow

* Revolution → 165 years.

* Atmosphere → H_2 / He / CH_4 / NH_3.

* Natural Satellites → 14 (Triton, Nereed).

Pluto → * Dwarf * Planet. [Because it intersect path of neptune].

* Discover → Clyde Tombaugh.

* An International Astronomical union Summit held in Prague in 2006, in which Scientists withdraw status of Planet.

Prague → Czech Republic

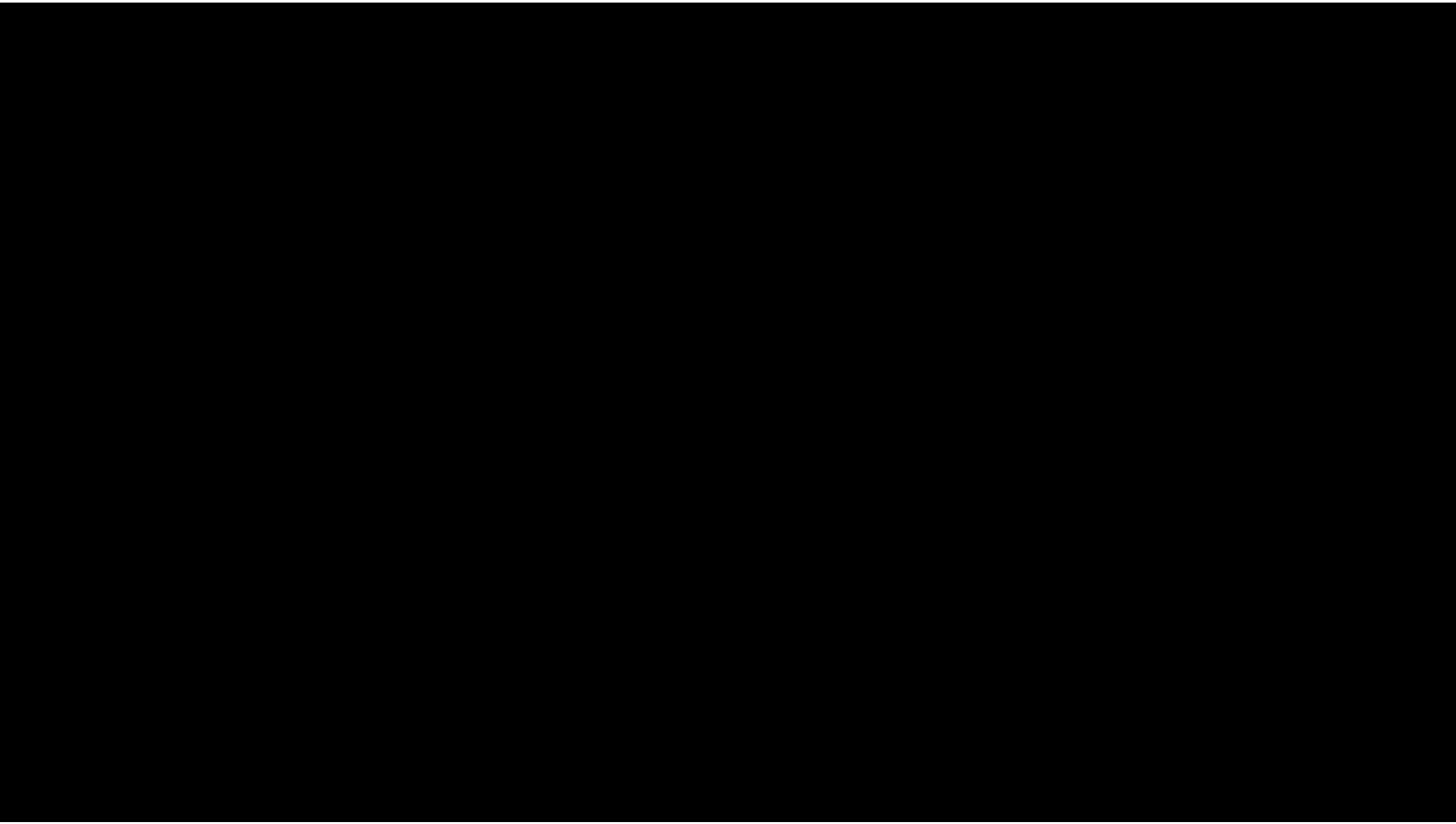
other Dwarf Planets ⇒ Eries, Ceres, Charon, Pluto

① Asteroid Belt :- * it is between Mars and Jupiter.

* Ceres its part.

② Kuipers Belt :- * After Pluto

* Eris its part.



Earth → 1 Moon.

Mars → 2 Phobos & Deimos.

Jupiter → 79 Ganymede

Saturn → 82 Titan

Uranus → 27 Triton.

Neptune → 14 Titania

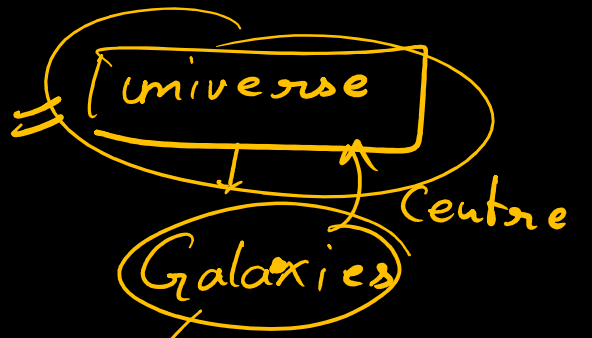
☿ ♀ ⊕ ♂ ♃ SUN.

Natural Satellites

Celestial object

1. Rotation

2. Revolution.



Solar System → Sun

Revolves around centre of galaxy.

Moon = Natural Satellite = Luna. → Greek

Sol → Sun

Satellite → Natural

→ Artificial / man made.

- ① Revolves round planet.
- ② has not its own Planet.
- ③ Earth has one Natural Satellite.
- ④ Saturn has max. natural Satellites
- ⑤ Mercury and venus doesn't have Natural Sat.

Moon :-

① orbits Earth → 29.5 Day's. (Revolution)

Rotation → 27.5 Days.

Note :- Revolution and Rotation of moon is approximately same.

② Highest Point → Mt. Leibnitz.

③ Distance from Earth →

Avg. ⇒ 3,85000 kms

Apogee ⇒ 4,06,000 kms

Perigee ⇒ 3,64000 kms.

* Atmosphere → Negligible atmosphere.

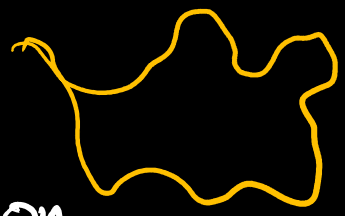
* Diameter → ≈ 4,76 kms

* 56% of Moon can only be seen from. because its rotational and revolution period is Approximately Same.

* Study of Moon → Selenography.

* Mass of Moon → $\frac{1}{81}$ th of Earth.

* There Craters on moon :- (अँचा-नीचा { गड्ढे)



→ 30,000 Craters are there on moon so Sun light not reached in that part that's why moon has spots.

→ 29·5 Day's ⇒ Lunar Month. ✓ = (Hindi)

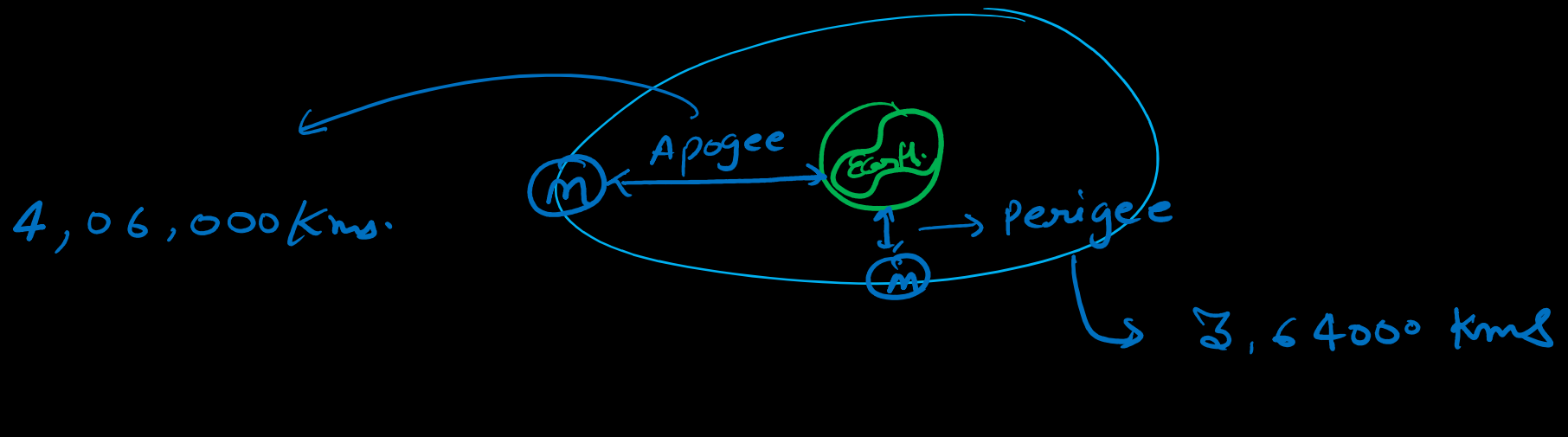
Blue Moon → Second full moon in an English Calendar is called as blue moon. but it not look's blue.

Blood Moon or Red Moon :- "full moon / syzygy | Lunar Eclipse"

* It Can be seen only on Lunar Eclipse and full moon day and at this time moons looks like Red.

Super Moon :- when largest part of moon can be seen from Earth.

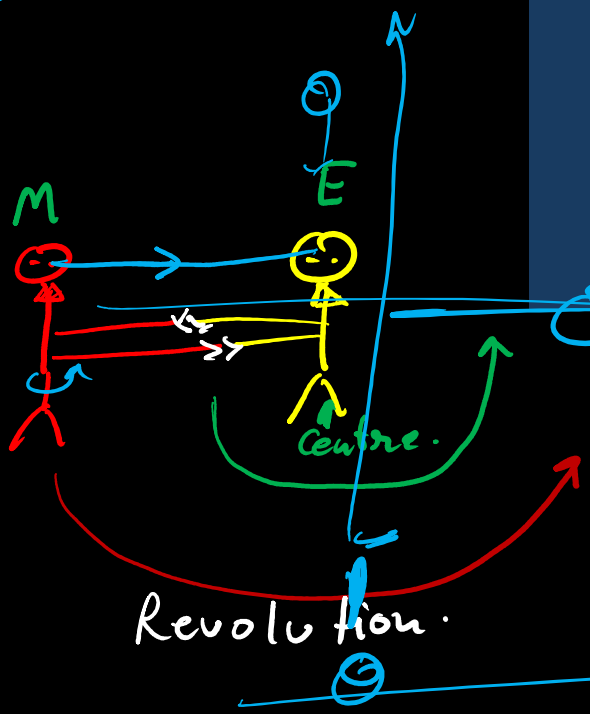
↳ Perigee.

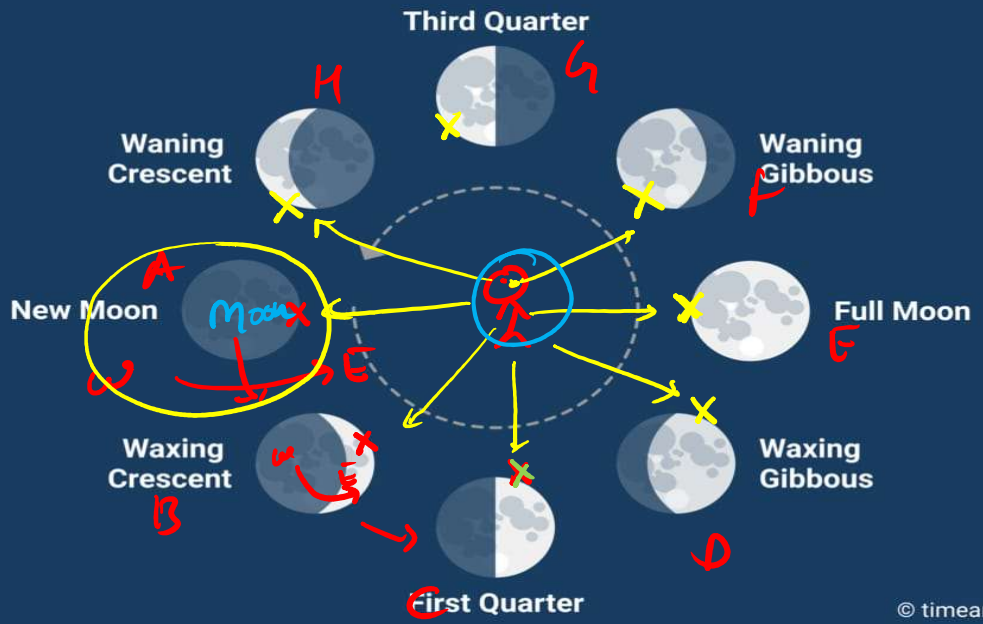


100%

Fake

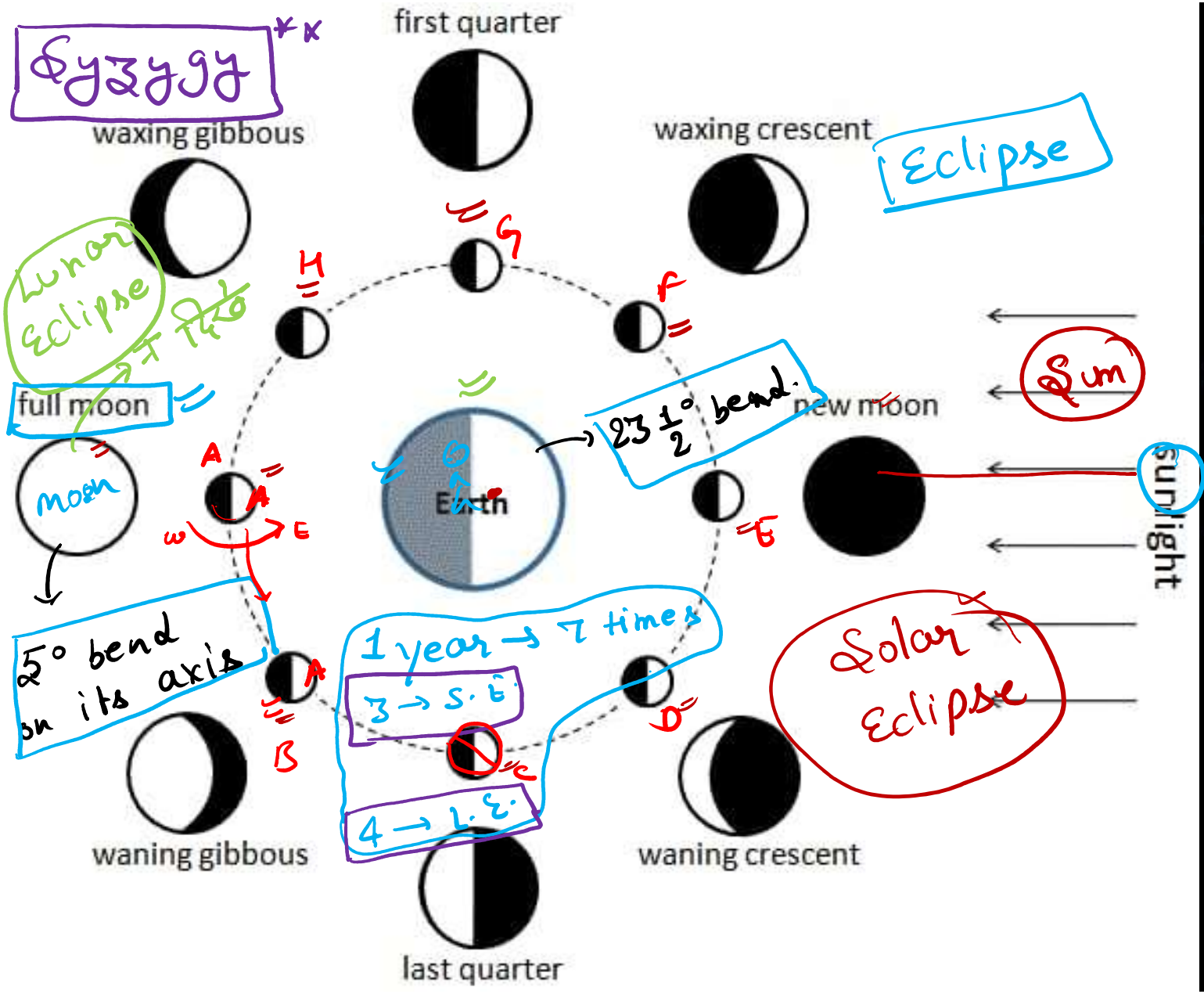
M

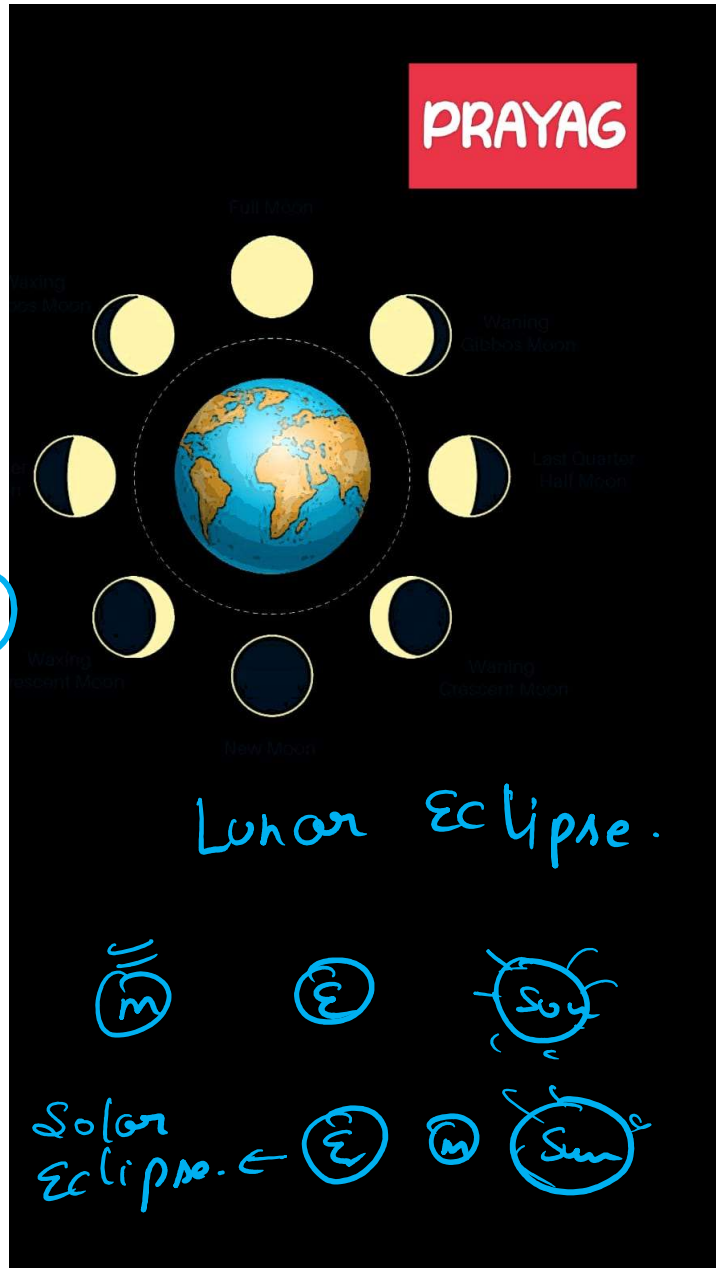


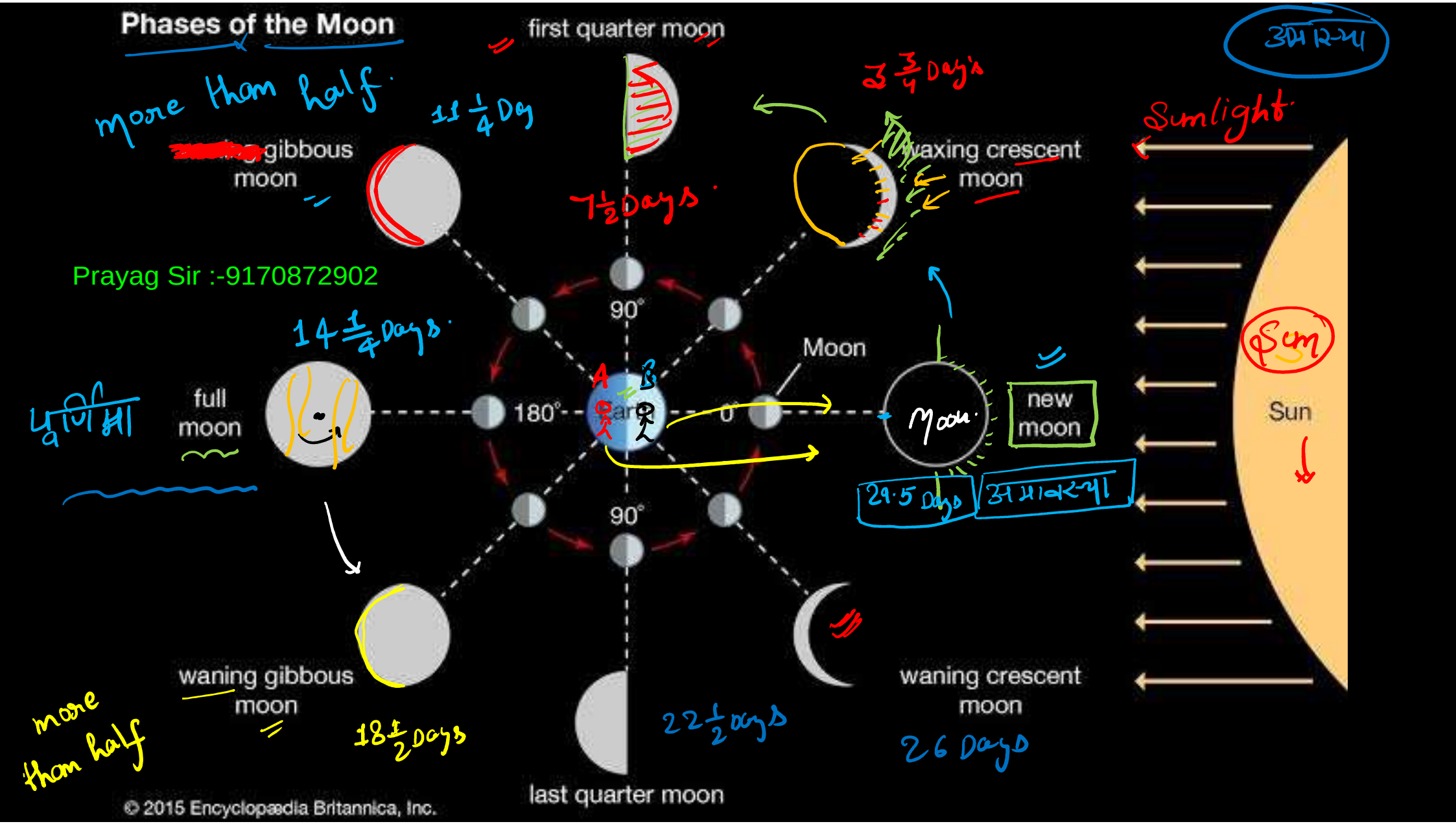


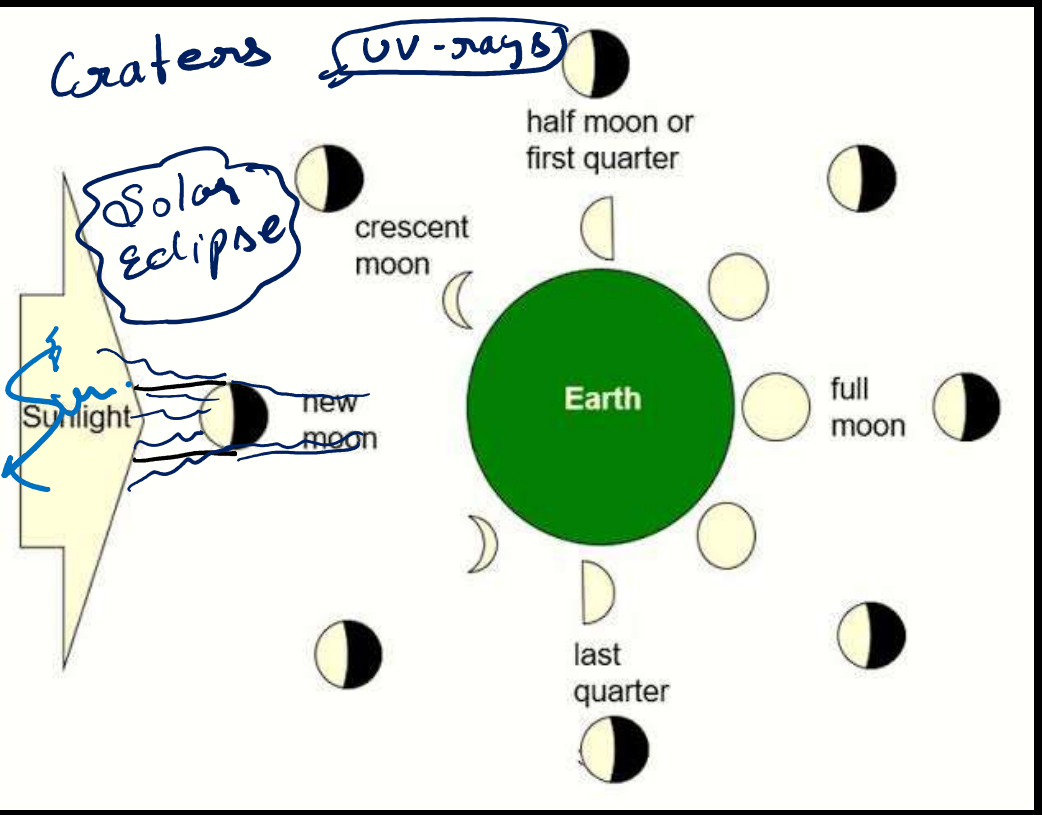
∴ 54% of Moon can only visible from Earth.

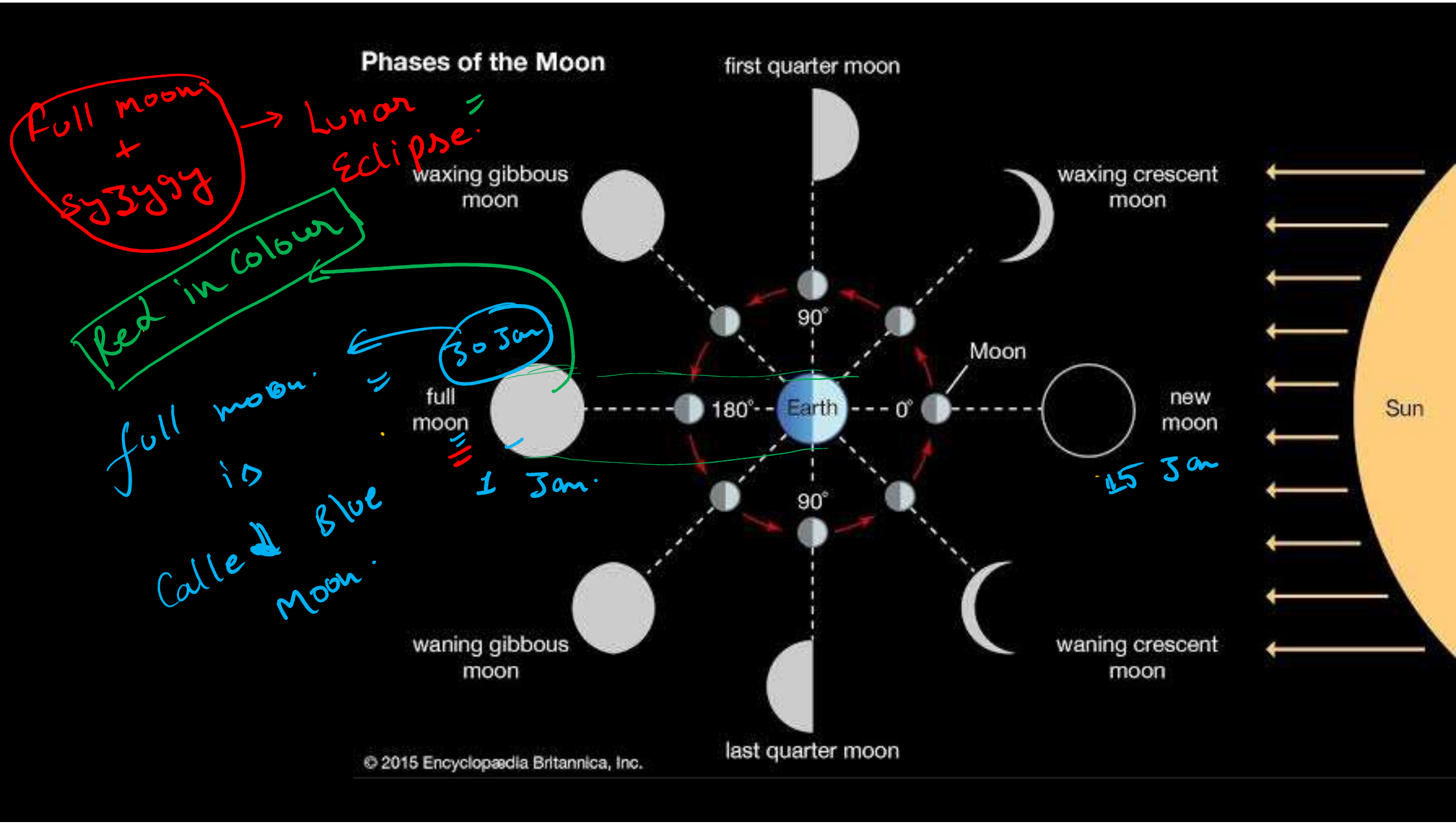
→ Rotation = Revolution Period


Syzygy
first quarter
waxing gibbous
waxing crescent
Eclipse
Lunar Eclipse
full moon
new moon
Sun
moon
Earth
23 1/2° bend.
sunlight
5° bend on its axis
1 year → 7 times
3 → S.E.
4 → L.E.
Solar Eclipse
waning gibbous
waning crescent
last quarter


PRAYAG
Lunar Eclipse.
Solar Eclipse.
Sun


Phases of the Moon
first quarter moon
more than half.
11 1/4 Day
gibbous moon
7 1/2 Days.
3 3/4 Day's
waxing crescent moon
Sunlight.
Prayag Sir :-9170872902
90°
14 1/4 Days.
Moon
full moon
180°
Earth
0°
new moon
Moon.
Sun
29.5 Days
90°
waning gibbous moon
18 1/2 Days
22 1/2 days
waning crescent moon
26 Days
more than half
last quarter moon
© 2015 Encyclopaedia Britannica, Inc.


Craters
UV-rays
half moon or
first quarter
Solar
Eclipse
crescent
moon
Sun
Sunlight
new
moon
Earth
full
moon
last
quarter


Phases of the Moon
first quarter moon
waxing gibbous moon
waxing crescent moon
90°
Moon
full moon
180°
Earth
0°
new moon
90°
waning gibbous moon
waning crescent moon
last quarter moon
Sun
© 2015 Encyclopædia Britannica, Inc.