

SOLAR SYSTEM

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- GALAXY
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- STAR - CONSTELLATIONS , POLE STARS
- THE MOON –SATELLITES
- THE SUN
- PLANETS –ORBITS
- EARTH
- ASTEROIDS AND METEOROIDES

UNIVERSE

- The Universe is everything we can touch, feel, sense, measure or detect. It includes living things, planets, stars, galaxies, dust clouds, light, and even time.
- Most scientists believe that the universe began suddenly in an event called the big bang. They estimate that this happened between 10 and 15 billion years ago. The universe at that time was tightly packed and hot. Since then the universe has been expanding and cooling.



GALAXY

- A galaxy is a huge system of billions of
 - ☐ stars
 - ☐ Sun
 - ☐ clouds of dust and gases
 - ☐ the planets , seen as a bright band in the night sky.
- MILKY WAY is one type of such galaxy. Our solar System is part of this galaxy.
- The milky way galaxy is called as Akash Ganga ?
- Why ?
- Because it looks like river of light flowing in the sky.



THE SOLAR SYSTEM

- The **sun**
- Eight planets,
- satellites and
- celestial bodies
(asteroids and
meteoroids)
forms our
solar system.



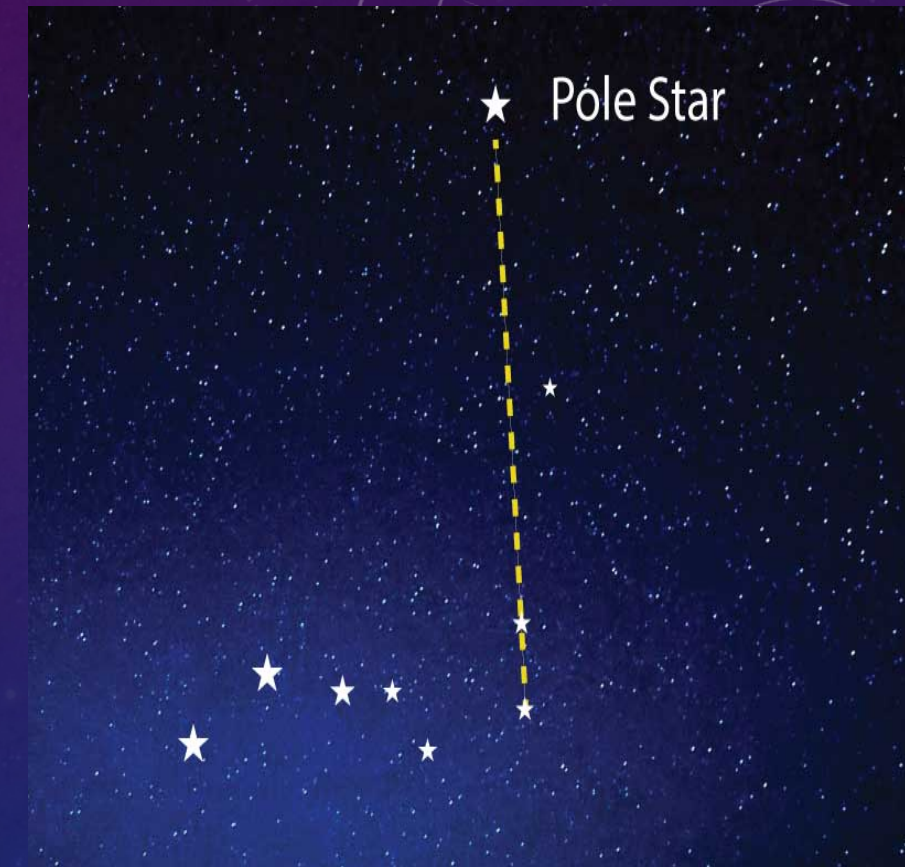
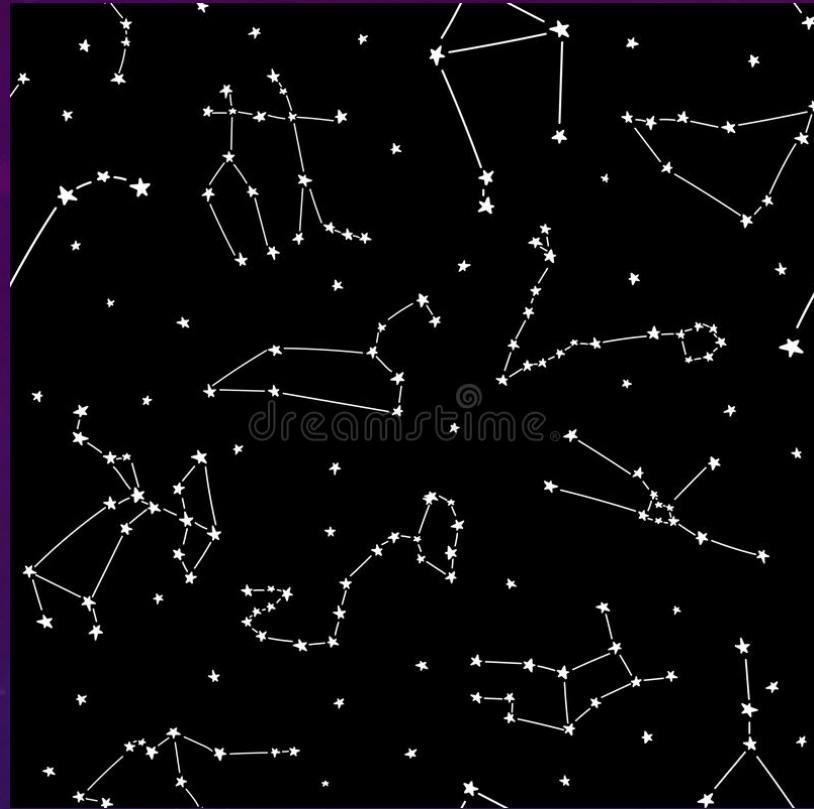


- Have u seen **small dots like objects** shinning brightly in the sky at night.
- Soon the sky gets filled with bright shining objects and these **tiny shining objects** are called as **STARS**.
- A big fireball like object that we see in the morning is?

The Sun

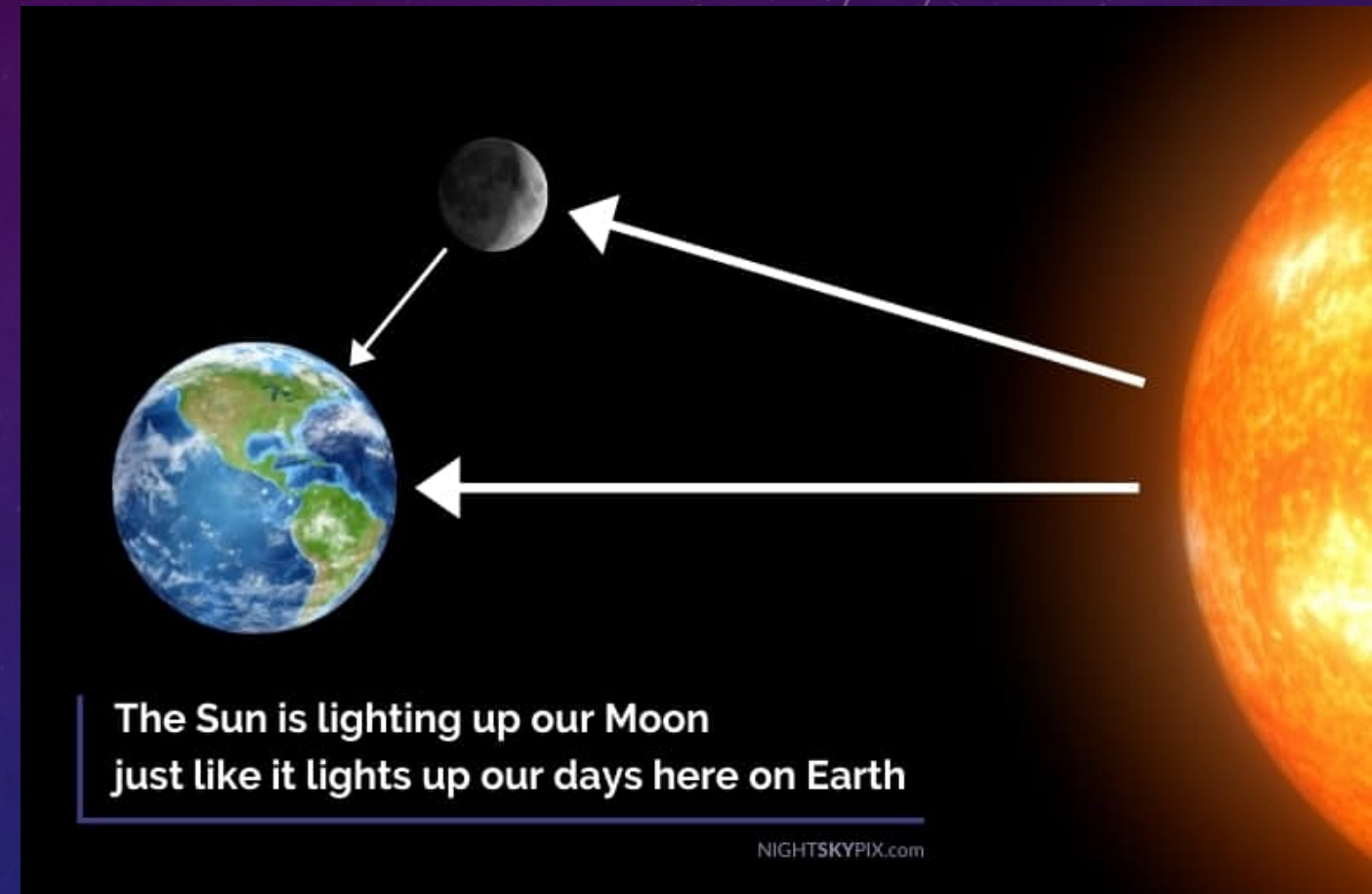


CONSTELLATIONS AND POLE STAR



- While watching the night sky, you may notice various patterns formed by different groups of stars. These are called **constellations**.
- Ursa Major or Big Bear is one such constellation. One of the most easily recognisable constellation is the **Saptarishi** (Saptaseven, rishi-sages). It is a group of seven stars that forms a part of **Ursa Major Constellation**.
- In ancient times, people used to determine directions during the night with the help of stars. The North star indicates the north direction. It is also called the **Pole Star**. It always remains in the same position in the sky. We can locate the position of the Pole Star with the help of the Saptarishi.

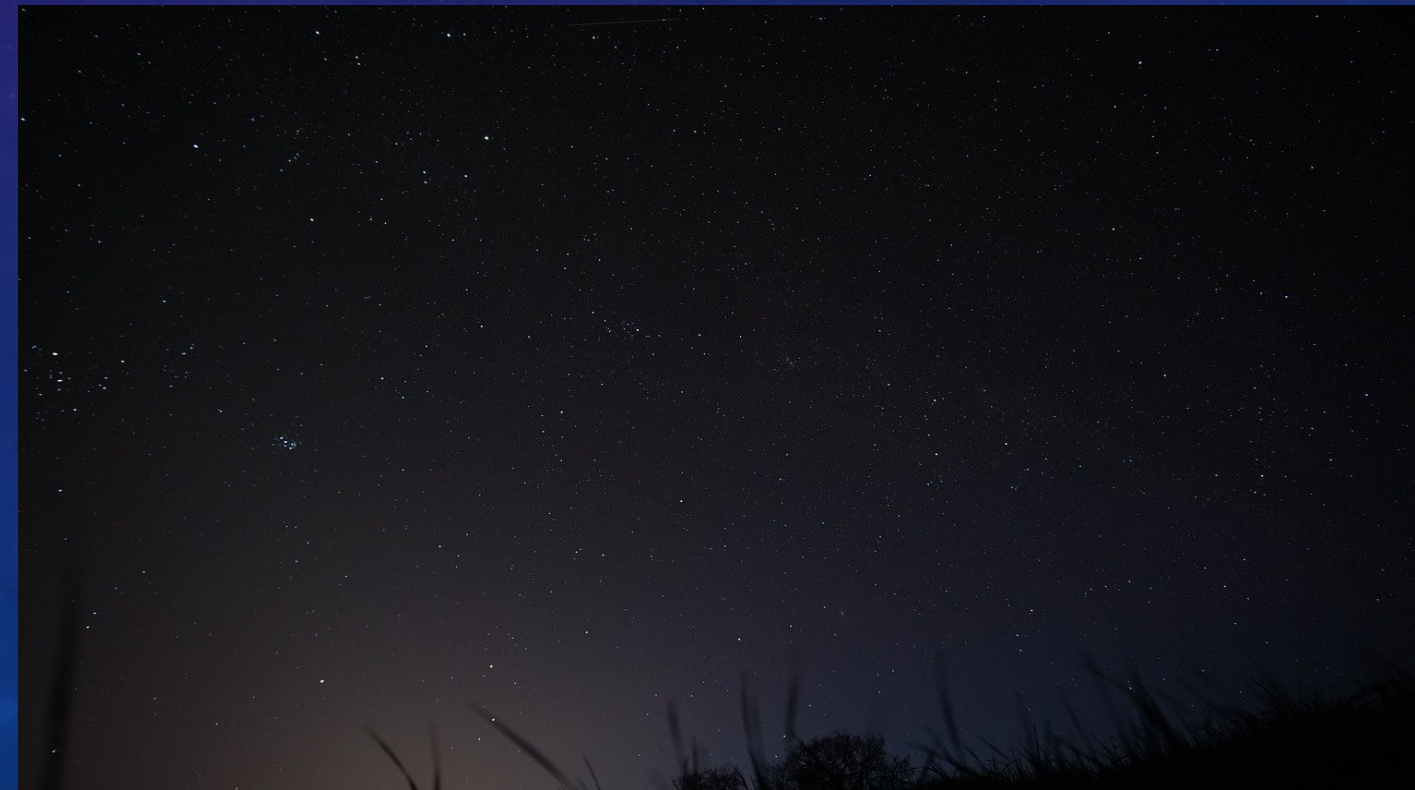
THE MOON

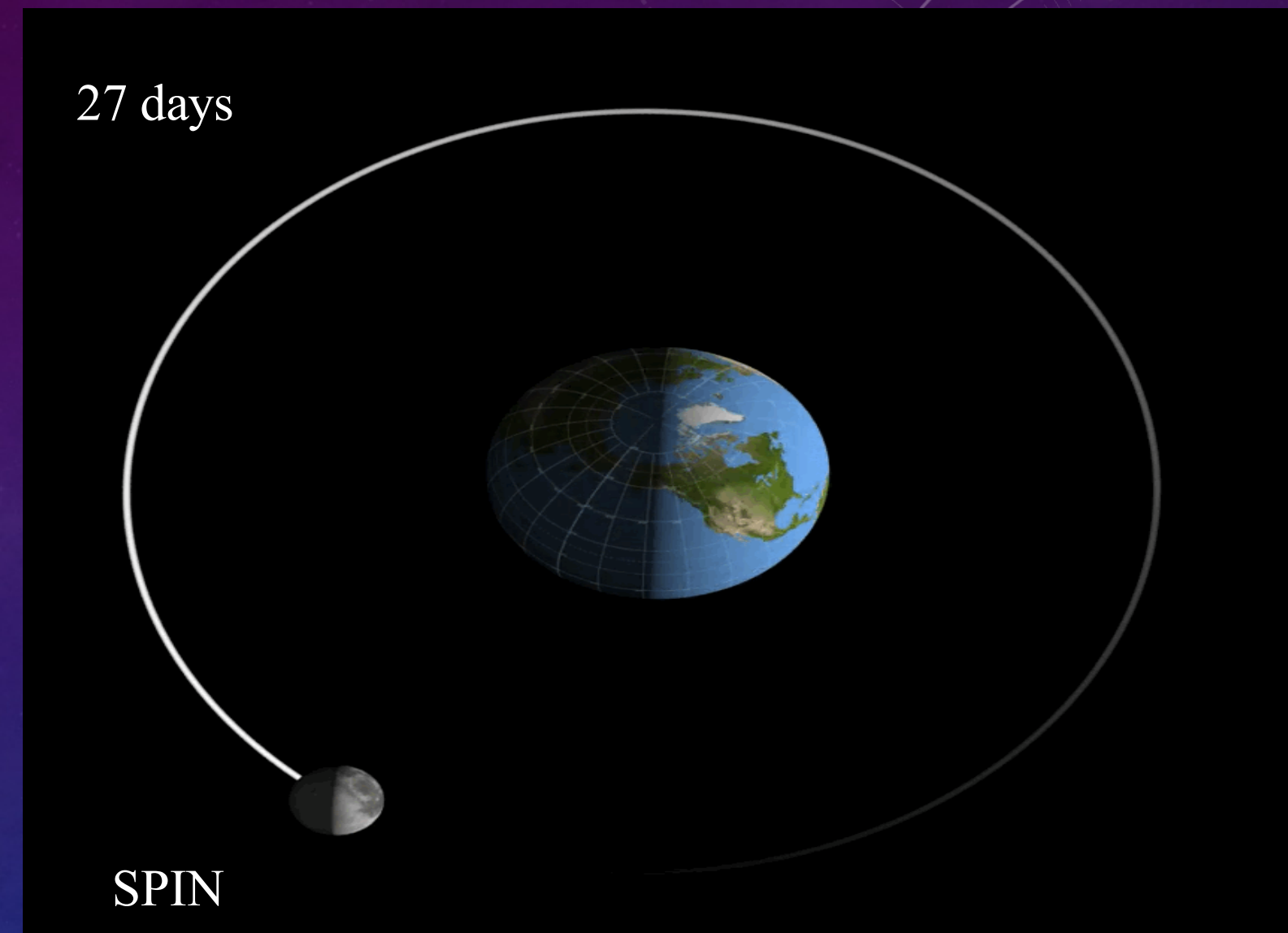


- Apart from stars we see **one big round object** in the sky at night and what is it ?
- Yes, **Moon**
- What makes the Moon glow?
- The Moon **does not shine with its own light**. It simply reflects light coming from the Sun.



- Do you know that the moon is not round at all?
- It changes its **shape throughout the month**.
- The full moon which is complete is seen only once in a month it is called as **Full Moon or Poornima**.
- After Poornima size of moon keeps on **decreasing**.
- After **15 days** of Poornima the moon is not at all visible. it is **New Moon Night or Amavashya**.





- Moon takes **27 days** to complete **one round** around the earth .
- Moon takes the same **27 days** to complete **one spin** around its axis. So only **one side of moon** is visible to us on Earth.