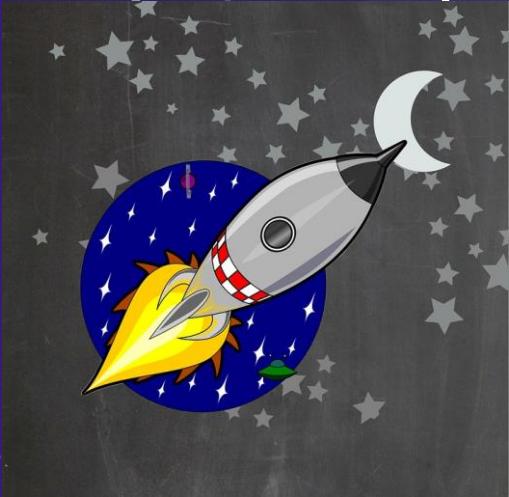




Celestial and Heavenly Bodies





HELLO KIDS!

I AM AAKANSHA and

I AM SHAURYA

It's good to have you all here.

We all will ride on a roller coaster to find what is up there in
universe



“

Fly me to
The *MOON*
Let me play
Among the *STARS*
Let me see what
Spring is like on
JUPITER and *MARS* .

WE WILL STUDY ABOUT....

- ★ What are celestial bodies?
- ★ How did they form?
- ★ How many celestial bodies are there?
- ★ Eclipses
- ★ Rotation of earth.
- ★ Activity for fun.



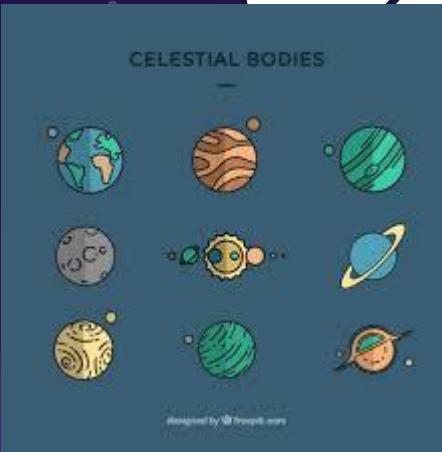
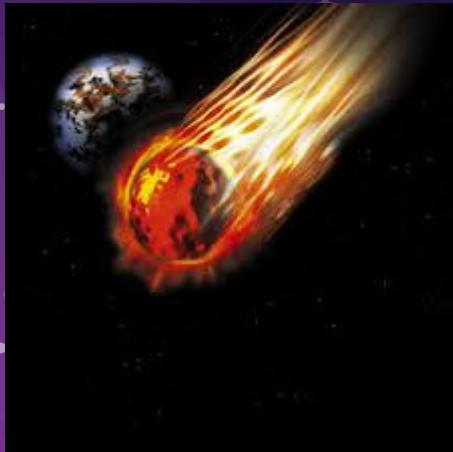


LET'S GO CHAMPS !!



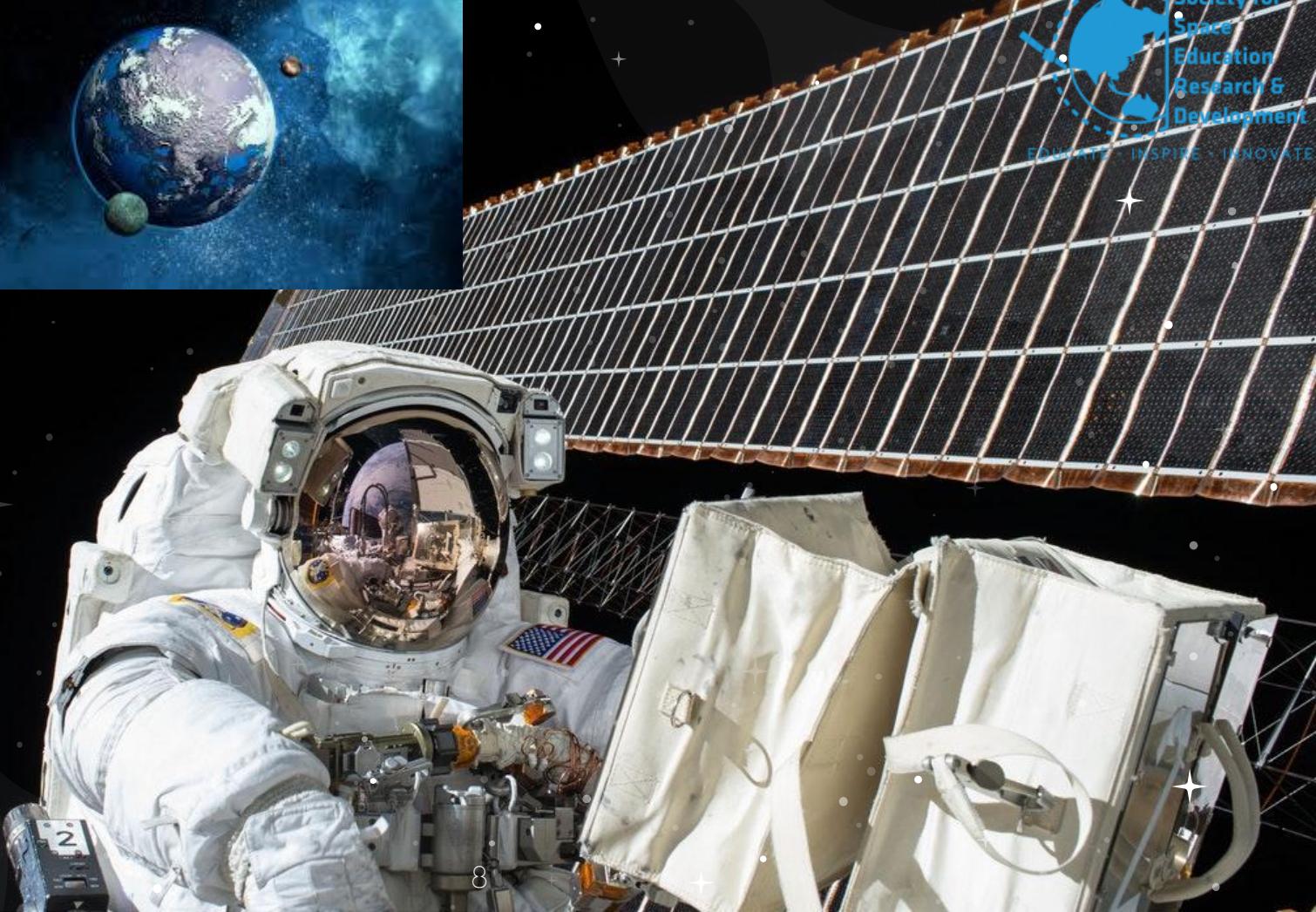
Celestial bodies

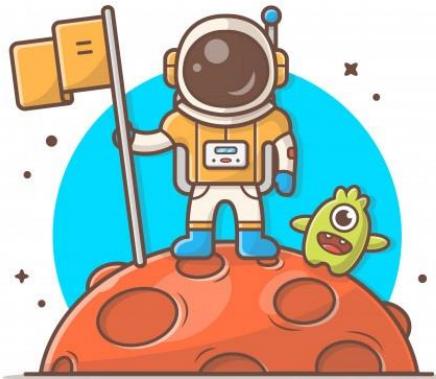
- ❖ Celestial bodies or heavenly bodies are objects in space such as the sun, moon, planets, and stars.
- ❖ They are very far objects from Earth..





Earth is
a place
where
we live...





The glorious night sky is dotted with such objects and when we observe them using a telescope , they reveal fascinating worlds of their own.

The magnificent night sky is dotted with such objects and when we see them using a telescope .

It is any natural object outside of the Earth's atmosphere.



From where did these all celestial bodies came from????? 🔎

Many many years ago.... Gas and dust started clumping
together to form planets.

Soon, those clumps got big enough and bounded together
to form heavenly bodies.

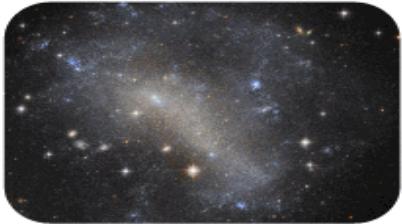
Some of these twirling bits clumped together to make our
EARTH 



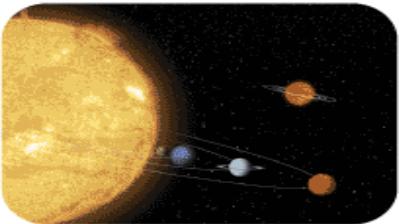
Classification of celestial bodies

- ❖ Stars
- ❖ Planets
- ❖ Satellites
- ❖ Comets
- ❖ Asteroids
- ❖ Meteors and Meteorites
- ❖ Galaxies





(1) Stars



(2) Planets



(3) Satellites



(4) Comets



(5) Asteroids



(6) Meteors and
meteorites



(7) Galaxies

★ Stars ★

- ❖ Stars are giant balls of hot gases that can produce their own light.
- ❖ The nearby star to Earth is the Sun.
- ❖ Several other stars are visible to the naked eye from Earth during the night time.
- ❖ The most noticeable stars were grouped into constellations

300000000000
000000000000*



Whoa! That's a big number.

The number of stars we have in space



PLANETS

- ❖ Planets are large spherical objects that revolve around the sun.
- ❖ Planets move in fixed orbits around the sun.
- ❖ There are 8 planets in our solar system.
- ❖ Planets may be made of rocks, metals and gases like hydrogen, nitrogen and methane.
- ❖ The earth is also a planet and is the only known place in the universe which supports life.





The Sun



I am the Sun.

Satellites

- ❖ Satellites are objects that revolve around planets.
- ❖ They form the essential part of the celestial bodies.
- ❖ These may be of natural origin or sent by humans.
- ❖ The moon is a natural satellite of the earth and revolves around it because it is bound by the Earth's gravitational pull. ✨

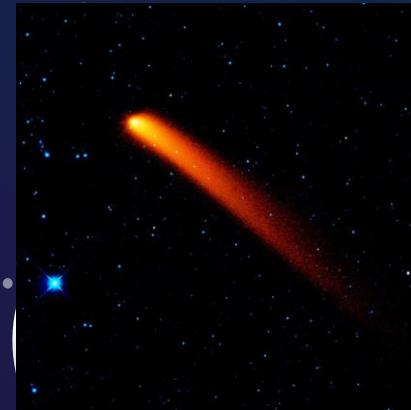
**MOON IS THE NATURAL
SATELLITE OF EARTH.
IT REVOLVES AROUND THE
EARTH**

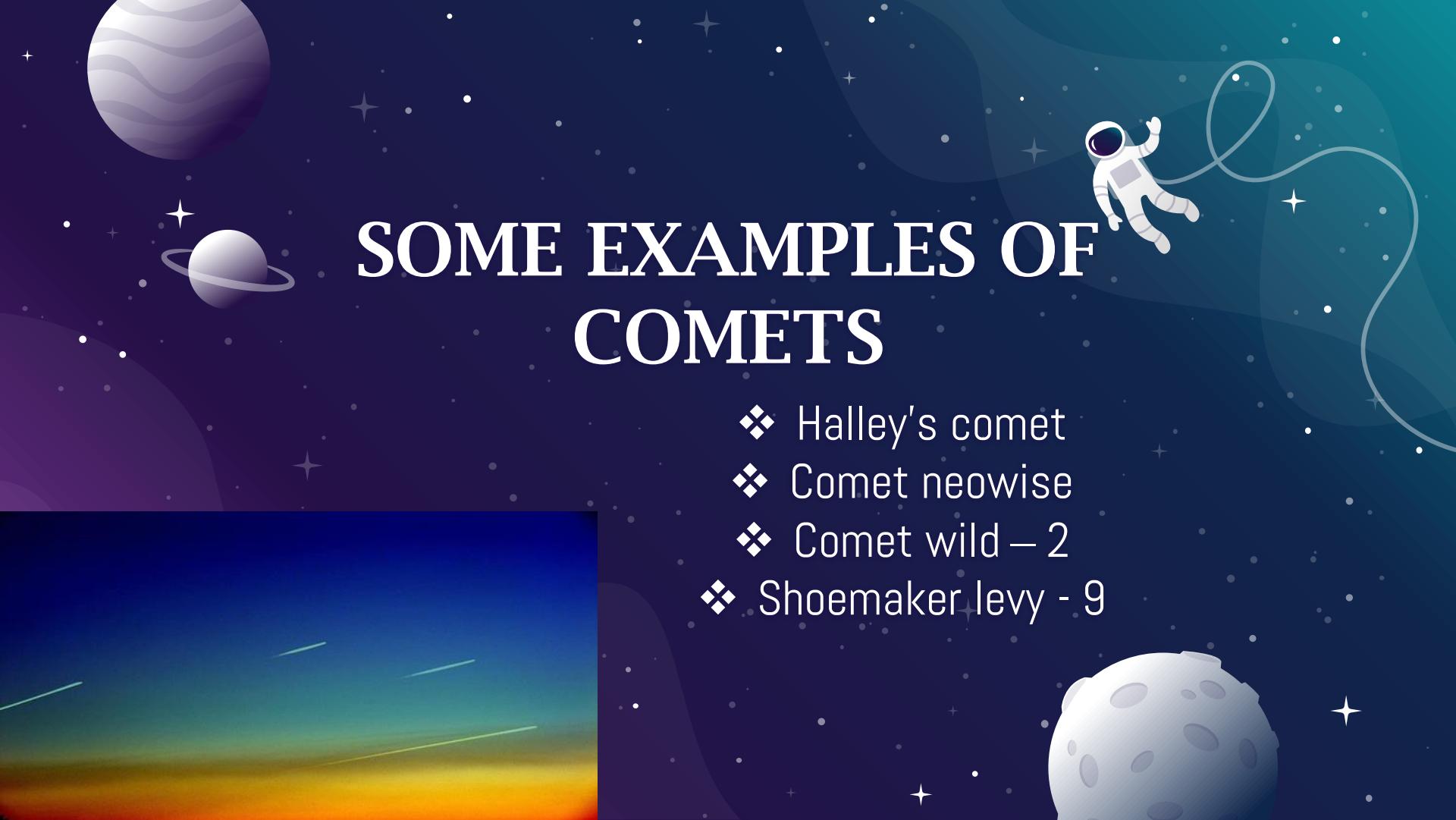




Comets

- ❖ A comet is an icy object from the outer edge of the solar system.
- ❖ When its orbit brings it closer to the sun, the ice on them vaporizes, creating a beautiful tail. behind them.





SOME EXAMPLES OF COMETS

- ❖ Halley's comet
- ❖ Comet neowise
- ❖ Comet wild – 2
- ❖ Shoemaker levy - 9

Asteroids

- ❖ Asteroids are small planets, especially of the inside Solar System.
- ❖ Big asteroids are also called planetoids.
- ❖ These are small irregularly shaped rocks made up of metal or minerals that orbit the sun.





Most of them are found between Mars and Jupiter in an area known as the asteroid belt.



Meteors and Meteorites

- ❖ Meteors usually are small and burn up in the atmosphere as they enter the earth.
- ❖ This creates streaks in the sky as though a star has fallen.
- ❖ They are commonly called *shooting stars*.
- ❖ If a meteor is large enough it can reach the ground and create a crater. Such objects are called meteorites.





Galaxies

- ❖ Galaxies are large groups of stars held together by gravity.
- ❖ The sun and the solar system is part of a galaxy known as the Milky Way.
- ❖ Other galaxies are usually so far away that they look like stars in the night sky.





The
Milky
Way



What is an eclipse?

- ❖ An eclipse occurs when one object in space blocks an observer from seeing another object in space.
- ❖ From Earth there are two main types of eclipses:

SOLAR ECLIPSE and LUNAR ECLIPSE

SOLAR ECLIPSE

- ❖ A solar eclipse occurs when the Moon passes in front of the Sun causing a shadow to fall on certain portions of the Earth.
- ❖ The eclipse is not seen from every place on Earth, but only from the locations where the shadow falls.
- ❖ From these locations, it appears as if the Sun has gone dark.

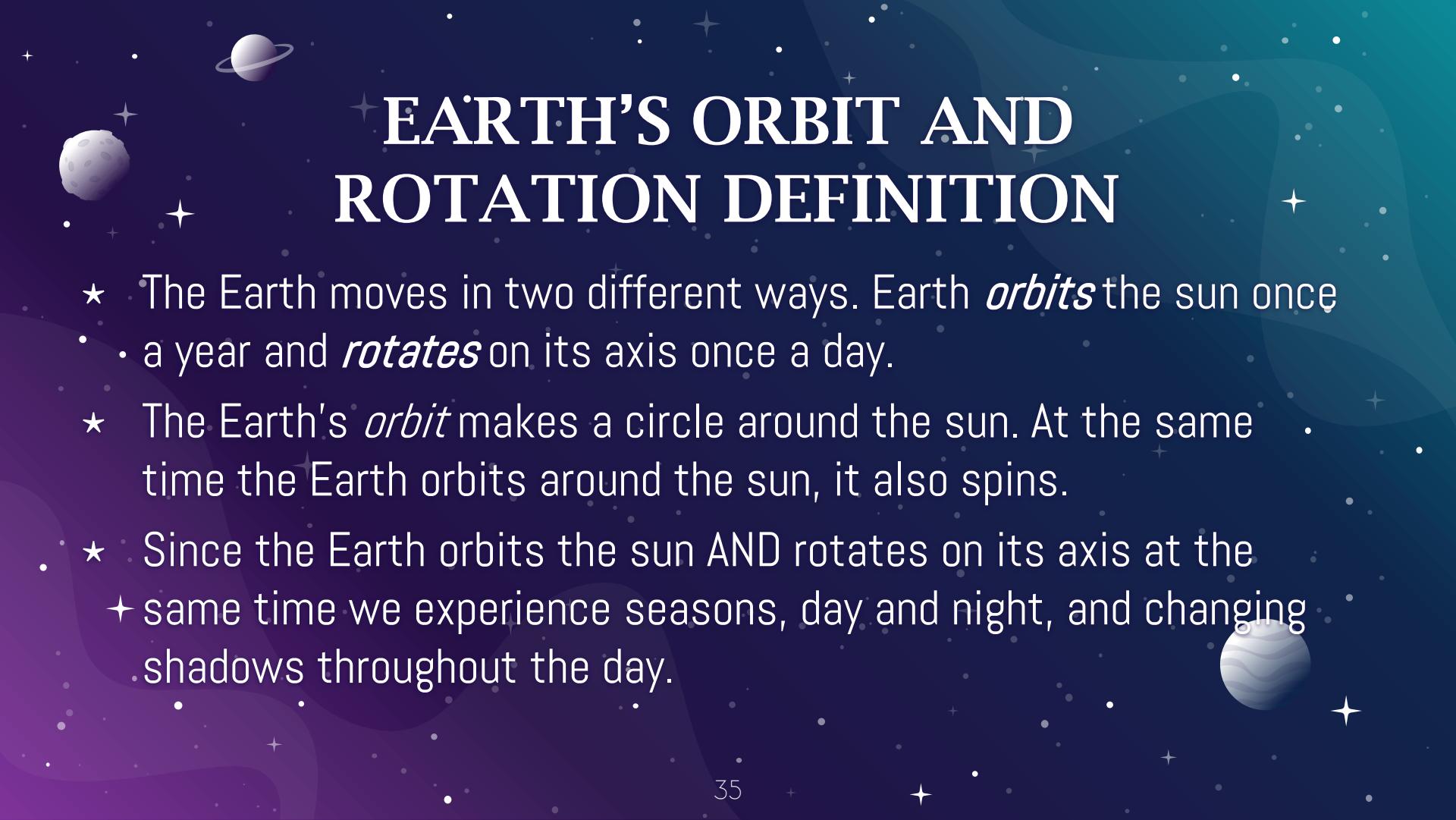


LUNAR ECLIPSE



- ❖ A lunar eclipse occurs when the Moon passes through the Earth's shadow.
- ❖ Lunar eclipses can be seen by a much larger area of the Earth than solar eclipses.
- ❖ They also can be viewed without special equipment to protect the eyes. Lunar eclipses are not totally dark.
- ❖ The Moon will reflect some sunlight that is refracted by the Earth's atmosphere.
- ❖ The light that is refracted is reddish in color and can cause the Moon to appear a dark brownish-red.





EARTH'S ORBIT AND ROTATION DEFINITION

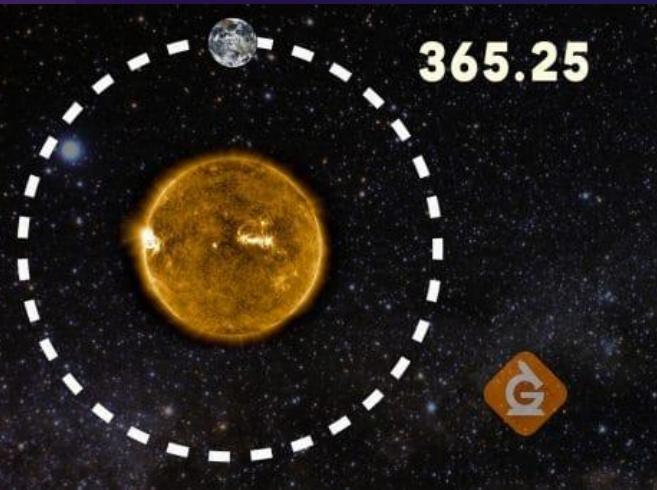
- ★ The Earth moves in two different ways. Earth *orbits* the sun once a year and *rotates* on its axis once a day.
- ★ The Earth's *orbit* makes a circle around the sun. At the same time the Earth orbits around the sun, it also spins.
- ★ Since the Earth orbits the sun AND rotates on its axis at the same time we experience seasons, day and night, and changing shadows throughout the day.

Earth's rotation on its axis occurs every 24 hours.

Earth is always moving. Each day, the Earth makes one complete rotation on its axis. The axis is the imaginary line through the earth that extends from the North Pole to the South Pole.



The Earth orbits around the sun every **365.25** days.



While the Earth is rotating on its axis, it also orbits the sun. It takes a little more than 365 days for the Earth to make a complete trip around the sun.





Earth's rotation causes observable patterns like night and day.

- ❖ The light from the sun shines on half of the Earth at any given time. That side is warmer and brighter. The other side of the Earth faces away from the sun (it's dark) so it is cooler and darker.
- ❖ Since the Earth is always spinning, there is a line between day and night and we pass through it each day.





The next time you go out to wonder at the night sky, try to identify these objects. FIND THE DIFFERENT CELESTIAL OBJECTS MENTIONED IN THE NIGHT SKY



THANKS!

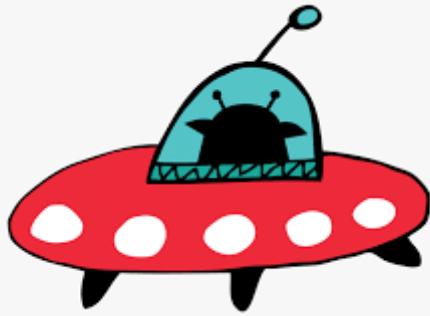
ANY QUESTIONS KIDOS?





ACTIVITY





IF I WERE AN ALIEN

- ❖ My name would be _____.
- ❖ I would live on _____.
- ❖ I would eat _____.
- ❖ If you saw me you would _____.

Resources:- youtube

<https://www.youtube.com/user/Peekaboo>

<https://youtu.be/F2prtPEjOc>