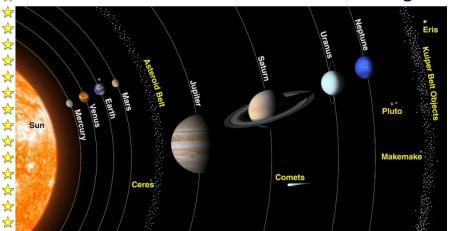
Knowledge Organizer - Space Exploration

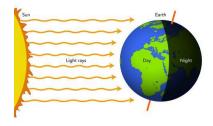


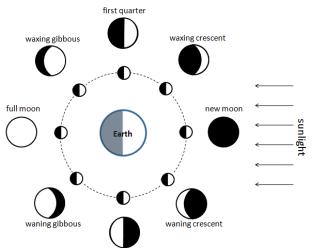
Key vocabulary:

Universe; Galaxy = The Milky Way, **Solar system**: Star = Sun; Planets = Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune (Pluto was classified as Dwarf planet in 2006)

Day and night -

Earth, axis, rotate, Moon, Sun





Phases of the Moon:

full moon, gibbous moon, half moon, crescent moon, new moon, waxing ,waning Moon's orbit: 29.5 days, lunar month , orbit, planets, revolve, sphere,

Key Scientists:

- 1. **Aristarchus (310 230 B.C.)**. He was the first to figure out that the Earth travels around the Sun.
- 2. Nicolas Copernicus (1473 1543). Had the idea that Earth revolves on its axis and the Earth and other planets orbit around the Sun
- 3. Galileo Galilei (1564 1642). Discovered four of Jupiter's moons. In 1609 was the first person to make a study of the skies with a telescope.
- 4. **Edwin Hubble (1889-1953)**. In 1924 Hubble showed that nebulae (fuzzy light patches in the sky) were distant galaxies. In 1929 he found the speed of galaxy moves away from the Earth depends on its distance from the Earth. If a galaxy is four times as far away as another, it is moving four times as fast. This is Hubble's law.
- 5. Professor Brian Cox (1968 -) Contemporary physicist, presents many BBC programmes)

Key Events in Manned Exploration of the Solar System:

1609	Galileo di Vincenzo Bonaulti de Galilei	The first person to study the planets and stars by telescope.
1961	Yuri Gagarin	The first human in space.
1963	Valentina Tereshkova	The first woman in space.
1965	Alexei Leonov	The first spacewalk
1966	Astronauts Armstrong & Scott	The first docking between spacecraft.
1968	Apollo 8	Borman, Lovell and Anders are the first humans to leave the Earth's orbit.
1969	Apollo 11	The first human to walk on the moon: Neil Armstrong
1971	Salyut 1	The first manned space station.
1972	Apollo 17	The last lunar landing mission.
1975	Apollo-Soyuz Test Project	The first joint international mission - collaboration in space
1981	Space Shuttle Columbia	The first winged, reusable spacecraft.
1984	First untethered spacewalk	The manned manoeuvring unit (MMU).
1990	Hubble Space Telescope	Deployment from Space Shuttle Discovery.
1991	Helen Sharman	The first Briton in space: on the Mir space station.
1998	International Space Station (ISS).	Collaboration: working together in space.

☆Useful Websites:

http://www.spaceopedia.com/space-exploration/exploration-timeline/

https://spaceplace.nasa.gov/