

# Earth & Space



## Curriculum Links:

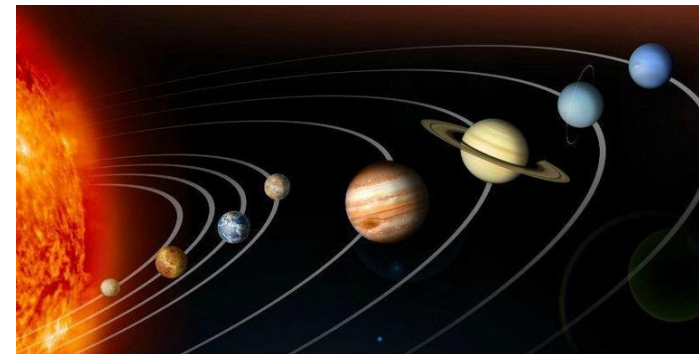
- Describe the movement of the Earth, and other planets, relative to the Sun in the solar system
- Describe the movement of the Moon relative to the Earth
- Describe the Sun, Earth and Moon as approximately spherical bodies
- Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky

## Key Facts:

- The Earth rotates on its axis anti-clockwise; a complete rotation is 24 hours, or a day. This rotation creates day and night.
- Different parts of the Earth experience daylight at different times, this is the reason we have time zones
- At different times of the day, shadows change size and orientation
- The Earth takes 365 and a quarter days to orbit the sun, the extra quarter gives us our leap year every four years
- The Earth's tilt created the seasons
- Over 28 days, the Moon orbits the Earth. It spins once on its axis during its orbit (meaning we only see one side). This orbit gives us the different phases of the moons.
- There are 8 planets in our Solar System. They all orbit the Sun, which is a star, and they all have moons
- The first four planets are smaller and rocky, the four outer planets are gas giants (Jupiter and Saturn) or ice giants (Uranus and Neptune)
- Our solar system is in a galaxy called the Milky Way. The galaxy is in the universe

## Possible experiences: We should already know:

- |                                              |                                                          |
|----------------------------------------------|----------------------------------------------------------|
| • Visit the Royal Observatory in Greenwich   | • We have four seasons                                   |
| • Astrodome Visit                            | • The Sun is a source of light, however, the moon is not |
| • Keep moon diaries                          | • Shadows are created by an object blocking light        |
| • Use oreos to create the phases of the moon | • Some basic facts about space travel                    |
| • Use sweets to recreate the Solar System    |                                                          |



## Key Vocabulary

Asteroid	Rocks which orbit the Sun
Axis	An imaginary line which a body rotates around
Galaxy	Millions or billions of stars held together with gas and dust . Ours is the Milky Way
Gravity	The force which attracts things to the Earth
Meteorite	Rock or metal which has fallen to the Earth's surface from outer space
Orbit	A curved path around a star, planet or moon
Planet	A large object which moves around a star
Solar System	The collection of eight planets and their moons which orbit round the Sun
Star	A ball of burning gas in space
Universe	Space and all of the stars, planets, matter and energy in it