



# Science



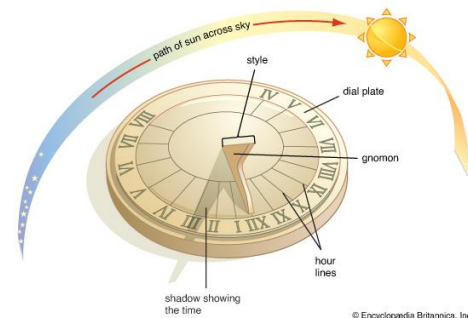
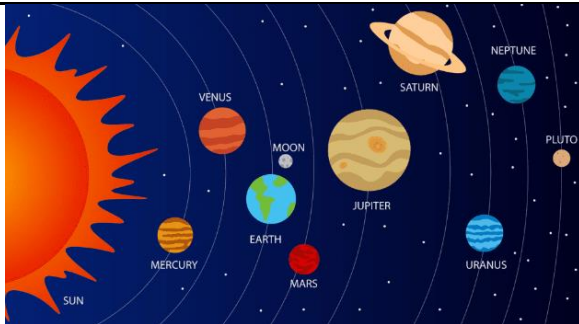
## Knowledge organiser – Earth and Space (UKS2)

### What will we be learning?

The Sun is a star. It is at the centre of our solar system. There are 8 planets (can choose to name them, but not essential). These travel around the Sun in fixed orbits. Earth takes 365½ days to complete its orbit around the Sun. The Earth rotates (spins) on its axis every 24 hours. As Earth rotates half faces the Sun (day) and half is facing away from the Sun (night). As the Earth rotates, the Sun appears to move across the sky. The Moon orbits the Earth. It takes about 28 days to complete its orbit. The Sun, Earth and Moon are approximately spherical.

### Key knowledge

- 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 Vocabulary	Possible Evidence
<p>Earth, Sun, Moon, (Mercury, Jupiter, Saturn, Venus, Mars, Uranus, Neptune), spherical, solar system, rotates, star, orbit, planets</p>	<ul style="list-style-type: none"> <li>• Can create a voice over for a video clip or animation</li> <li>• Can show, using diagrams, the movement of the Earth and Moon</li> <li>• Can explain the movement of the Earth and Moon</li> <li>• Can show using diagrams the rotation of the Earth and how this causes day and night</li> <li>• Can explain what causes day and night</li> <li>• Can demonstrate and explain verbally how day and night occur</li> <li>• Can explain how a sundial works</li> <li>• Can explain verbally, using a model, why we have time zones</li> <li>• Can describe the arguments and evidence used by scientists in the past</li> </ul>
Common Misconceptions	
<p>Some children may think:</p> <ul style="list-style-type: none"> <li>• the Earth is flat</li> <li>• the Sun is a planet</li> <li>• the Sun rotates around the Earth</li> <li>• the Sun moves across the sky during the day</li> <li>• the Sun rises in the morning and sets in the evening</li> <li>• the Moon appears only at night</li> <li>• night is caused by the Moon getting in the way of the Sun or the Sun moving further away from the Earth.</li> </ul>	