



Year 5 Earth and Space Knowledge Organiser



Planets

- There are 8 planets in our Solar System (Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune). Pluto is a dwarf planet.
- They all orbit the Sun, which is a star, and they all have moons.
- The first four planets are relatively small and rocky, while the four outer planets are gas giants (Jupiter and Saturn) or ice giants (Uranus and Neptune).

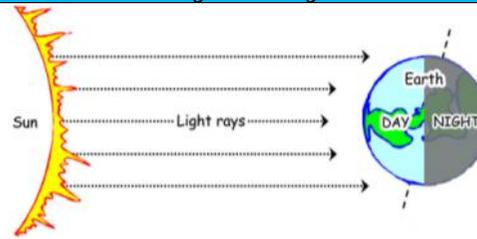


Orbits



- The Sun, Earth and Moon are approximately spherical.
- It takes 24 hours for the earth to rotate on its axis once.
- It takes 365 and $\frac{1}{4}$ days for earth to orbit the sun.
- Every four years we have an additional day on Feb 29th - this is called a leap year.
- It takes 28 days for the moon to orbit earth.

Day and Night



- The Earth rotates on its axis anti-clockwise and makes a complete rotation over 24 hours (a day).
- This makes it appear as the Sun moves through the sky but the Earth's rotation causes day and night.
- Different parts of the Earth experience daylight at different times - this means that it is morning, afternoon and night in different places. This is also the reason why we have time zones.

Shadows



- A shadow is a dark shape formed when light is stopped or blocked by an object.
- Opaque objects do not allow light to travel through them. Translucent objects let some light through.
- A shadow can be different sizes depending on the distance of the object from the light source.

Key Vocabulary

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| British Summer Time | A period when the clocks go forward by one hour, meaning we see more sunlight. In October, the clocks go back again for the winter months. |
| Earth | The third planet in the solar system that we live on. |
| Greenwich Meridian | Splits the world into eastern and western hemispheres. Time in countries to the east of the Greenwich Meridian is always in front of that in the UK. |
| Crescent | A phase of the moon which shows a thin sliver of light. |
| Equinox | Occurs when the position of the Sun is exactly over the Equator. |
| Fixed Star | A star so distant that its motion can be measured only by very exact observations over long periods. |
| Leap Year | A year which has 366 days. The extra day is the 29 th February. There is a leap year every four years. |
| Lunar Month | the period of time taken by the moon to make one complete revolution around the earth. |
| Solstice | a moment in the year when the Sun's apparent path in the sky is farthest north or south from Earth's Equator. |
| Tilt | To lean on a slant. |
| Waning | Gradually getting smaller. |
| Waxing | Gradually getting larger. |