









Science Knowledge Organiser Year 5- Feel the Force

<p align="center"><u>Question for Learning:</u> <u>What's in space?</u></p> <p>Key learning;</p> <ul style="list-style-type: none"> There are 8 planets in the solar systems: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune. They orbit the sun, taking different lengths of time. 	 Using secondary sources
<p align="center"><u>Question for Learning:</u> <u>What is a year?</u></p> <p>Key learning;</p> <ul style="list-style-type: none"> The stars stay in the same places in the sky, but as the Earth orbits the Sun, their heights in the sky change each day. Orbit means to circle something, like the earth orbits the sun. 	 Using secondary sources
<p align="center"><u>Question for Learning:</u> <u>What is a day?</u></p> <p>Key learning;</p> <ul style="list-style-type: none"> The Earth takes 24 hours to rotate once on its axis (anticlockwise). The Sun rises due east on only two days of the year: the equinoxes of March 20th/21st and September 22nd/23rd. In the UK, sunrise is almost northeast in June and almost southeast in December – a 90 degree change in direction. 	 Identifying patterns
<p align="center"><u>Question for Learning:</u> <u>How does the sun help us to measure time?</u></p> <p>Key learning;</p> <ul style="list-style-type: none"> After the end of March, with the clock adjustment for British Summer Time, the shortest shadow is at 1 p.m., not 12 noon (12:00), due to when the clocks move forwards (the start of British Summer Time). 	 Observation over time
<p align="center"><u>Question for Learning:</u> <u>What time is it around the world?</u></p> <p>Key Learning;</p> <ul style="list-style-type: none"> The Sun rises gradually round the world from east to west, and at noon moves westwards around the world. There comes a point where noon of one day is also noon of the next day. This point, which can be thought of as a line that stretches from the North Pole to the South Pole at 180° longitude, passes through the Pacific Ocean and was adopted as the International Date Line in 1884. 	 Using secondary sources
<p align="center"><u>Question for Learning:</u> <u>Why do we have seasons</u></p> <p>Key Learning;</p> <ul style="list-style-type: none"> The Earth is tilted at an angle of 23.5°. This is the reason we have seasons in the UK. The tilt angles Earth's northern hemisphere towards the Sun in the summer and away from it in winter, with midway points in spring and autumn. 	 Observation over time
<p align="center"><u>Question for Learning:</u> <u>What are the conclusions about sunrise and sunset times?</u></p> <p>Key learning;</p> <ul style="list-style-type: none"> This tilt angles either the Earth's northern or southern hemisphere towards the Sun. The hemisphere tilted towards the Sun has summer and the other, being tilted away from the Sun, has winter. As a result there are changes in the hours of daylight. 	 Using secondary sources
<p align="center"><u>Question for Learning:</u> <u>Why does the moon change shape?</u></p> <p>Key learning;</p> <ul style="list-style-type: none"> The phases of the Moon that we see when we look at the night sky are shaped the way they are because from Earth we may only be able to see a portion of the Moon that is illuminated by the Sun. 	 Observation over time

Key Words

Solar	relating to or caused by the sun.
Orbit	the curved path of a celestial object or spacecraft round a star, planet, or moon
Axis	an imaginary line which the earth rotates.
Rotating	To move in a circle round an axis or centre.