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| **Year 5: Spring 2  Earth and Space (Strand: Physics)** | | |
|  | | **Vocabulary**  Earth  Axis  Rotate  Solar system  Planets  Orbits  Star  Universe  Milky way  Galaxies |
| **What I already know:** | | |
| Reception   * Explore the natural world around them. * Describe what they see, hear and feel whilst outside.   Year 1   * Observe changes across the four seasons. * Observe and describe weather associated with the seasons and how day length varies. | | |
| **What I will learn now:** | | |
| **Year 5**   * 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 Sun is at the centre and the planets follow individual paths called orbits around it. * They all travel in the same direction, but move at different speeds and take different times to complete one orbit. * All planets within the solar system orbit the sun. * The order of the planets, starting with the one closest to the Sun is: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus then Neptune. * A moon is a celestial body that orbits a planet. * The Earth, moon and sun are known as spherical bodies. * The moon orbits around the Earth, the planets orbit around the sun and the sun remains stationary. * The Earth Rotation around stationary sun creates the apparent movement of the sun across the sky. | |
| **What I will learn next:** | | |
| KS3   * Gravity force, weight = mass x gravitational field strength (g), on Earth g=10 N/kg, different on other planets and stars; gravity forces between Earth and Moon, and between Earth and Sun (qualitative only). * Our Sun as a star, other stars in our galaxy, other galaxies. * The seasons and the Earth’s tilt, day length at different times of year, in different hemispheres. * The light year as a unit of astronomical distance. | | |

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| **Year 5: Spring 2 Earth and Space (Strand: Physics)** | |
| **Question 1: Join up these labels to the correct planet, star or satellite** | |
| **Pre** | **Post** |
| **Question 2: How long does it take for the earth to spin once on its axis?** | |
| **Pre** | **Post** |
| **Question 3: Roughly what shape are the Earth, Sun and Moon?** | |
| **Pre** | **Post** |
| **Question 4: Say whether the following statements are true or false** | |
| **Pre**   1. The Earth orbits around the sun 2. The sun is a planet. 3. The earth is a satellite of the moon. 4. The gravity of the sun keeps the planets in orbits. | **Post**   1. The Earth orbits around the sun 2. The sun is a planet. 3. The earth is a satellite of the moon. 4. The gravity of the sun keeps the planets in orbits. |
| **Question 5: Shade in the circles to show the phases of the moon.** | |
| **Pre** | **Post** |