## **Staplegrove Church School**

## **Knowledge and Skills Progression in Science**

## **Earth and Space**

| Year  | Knowledge   | Skills   | Unit            |
|-------|---|--|-----------------|
| group |   |  |                 |
| 1     |   |  |                 |
| 2     |   |  |                 |
| 3     |   |  |                 |
| 4     |   |  |                 |
| 5     | As Earth orbits the Sun, it also spins on its axis. It takes Earth a day (24 hours) to complete a full spin. During the day, the Sun appears to move through the sky. However, this is due to the Earth rotating and not the Sun moving. Earth rotates to the east or, if viewed from above the North Pole, it rotates anti-clockwise, which means the Sun rises in the east and sets in the west. As Earth rotates, different parts of it face the Sun, which brings what we call daytime. The part facing away is in shadow, which is night time. | Use the idea of Earth's rotation to explain day and night, and the Sun's apparent movement across the sky.                                   |                 |
|       | The Sun, Earth, Moon and the planets in our solar system are roughly spherical. All planets are spherical because their mass is so large that they have their own force of gravity. This force of gravity pulls all of a planet's material towards its centre, which compresses it into the most compact shape — a sphere.  | Describe the Sun, Earth and Moon as approximately spherical bodies and use this knowledge to understand the phases of the Moon and eclipses. | Earth and Space |
|       | The Moon orbits Earth, completing a full orbit every month (28 days).   | Describe or model the movement of the Moon relative to Earth.  |                 |
|       | The Solar System is made up of the Sun and everything that orbits around it. There are eight planets in our Solar System: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune. Earth orbits around the Sun and a year (365 days) is the  | Describe or model the movement of the planets in our Solar System, including Earth, relative to the Sun.                                     |                 |

|   | length of time it takes for Earth to complete a full orbit. |  |
|---|---|--|
| 6 |   |  |