# \\10.4.91.2\TeacherShare\Curriculum\Agreed documents folder\Curriculum\Key themes\Explore.jpgH:\Logo.jpg

|  |
| --- |
| **Key Theme** |
|  |

Year 5 – Spring 1: The Final Frontier

|  |
| --- |
| **Sticky Knowledge & Skills** |
| **I know that:**   * The planets, in order are; Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune * The Moon orbits the Earth anti-clockwise and takes approximately 28 days. * The Moon spins once on its axis every time it orbits Earth. * At different times, the moon appears to be different shapes because the sun lights up different parts of the moon as it moves around the Earth. * The Moon’s gravity causes high and low tides. * Earth rotates on an axis. During the winter, the North Pole is tilted away from the Sun's rays. By June, the North Pole is tilted towards the Sun and the days become very long. * Earth takes a year to orbit the Sun and it is the tilt which creates the seasons. * The earth rotates once every 24 hours and this gives us day and night. * The sun appears to move across the sky. However, this is actually the rotation of the earth. |
|  |
|  |

|  |  |
| --- | --- |
| **Key Vocabulary** | |
| Planet | An object which orbits a star and does not emit its own light. |
| Star | I very large sphere of gas which is held together by its own gravity and emits light and heat energy. |
| Gravity | A force which attracts one object to another object. |
| Orbit | The curved path of an object circling around another object due to the force of gravity. |
| Solar system | Our sun and all objects which orbit around the sun. |
| Astronomy | The study of space and all objects outside of the earth’s atmosphere. |
| Axis | An imaginary line through the centre of an object which the object rotates around. |
| Time zone | Time zones are the time in different zones around the earth. They reflect the rotation of the earth. |
| Sphere | A round 3D shape in the shape of a ball. |
| Sun | The star in the centre of our solar system which all other objects orbit around. |
| Moon | A spherical body which orbits the earth or other planets. |
| Geocentric model | An outdated scientific theory that the sun and all planets orbit the earth. |
| Heliocentric model | The structure of the solar system where all planets and other objects orbit the sun. |

|  |
| --- |
| **Key Texts** |
|  |

|  |
| --- |
| **Links to past and future learning** |
| In Year 3 we learnt that light from the sun can be dangerous and can find ways to protect my eyes and we need light in order to see things and that darkness is the absence of light.  In Year 7 we will learn about the effects of the movement of the earth, sun and moon in more detail. |

|  |
| --- |
| **Core Value Focus** |
| Critical thinking  Curious  Resilient |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Geography | | History | | Science | | RE | |
| What is the equator?  What are the names of the tropics, situated north and south of the equator? | An imaginary line situated an equal distance from the north and south pole which divides the earth into the northern and southern hemisphere.  The tropic of Cancer and The Tropic of Capricorn. | When did the first Moon landing happen?  Who was the first person to walk on the moon?  Name 3 astronauts  Name 3 scientists who developed theories for the structure of the solar system. | 20th July 1969  Neil Armstrong  Various answers  Ptolemy  Nicolaus Copernicus  Galileo | Starting with the planet closest to the sun, what is the order of the planets in our solar system?  How long does it take for :  - The earth to rotate once on its axis?  - The earth to orbit the sun?  - The moon to orbit the earth?  Why do we experience day and night on earth?  Why do the planets orbit the sun? | Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune.  Approximately 24 hours.  Approximately 365 days.  Approxim  ately 28 days.  Because the earth rotates on its axis every 24 hours.  The huge mass of the sun creates a strong force of gravity. | 1.What is meant by the term ‘code for living’  2.What does moral mean?  3.What is a Humanist?  4.What is the Humanist code for living?  5.What codes for living do Christians follow?  6.Who were Adam and Eve?  7.What did Adam and Eve do that displeased God? | 1.a set of principles /rules you follow when deciding how to behave  2.To do with what is right and what is wrong in how a person acts.  3.Humanists do not believe in a god.  They do not follow a holy book.  Humanists value things like reason and rely on science to explain the way things are.  4.Be honest, use your mind, tell the truth. Do to other people what you would like them to do to you.  5.Love, forgiveness, peace between people and God, honesty, prayer, worship and togetherness.  6.Adam and Eve were the first man and woman and were made by God on the sixth day of Creation.  7.They sinned by eating the forbidden fruit from the tree of knowledge. |