

Y5 – Earth and Space

Inspiration

Citizens for the future

Partnership with parents

Community – sharing learning

Key Questions

- How does the Earth and other planets move in relation to the sun in our solar system?
- How does the moon move in relation to the earth in our solar system?
- What is the shape of the sun, earth and moon?
- How are day and night formed? (and the apparent movement of the sun across the sky)
- What are the names of the planets in our solar system?
- Is the moon a planet?
- What is the sun?

Working Scientifically

- Plan enquiries, including recognising and controlling variables where necessary.
- Use appropriate techniques, apparatus and materials during fieldwork and laboratory work.
- Take measurements using a wide range of scientific equipment, with increasing accuracy and precision.
- Report findings from enquiries, including oral and written explanations of results, explanations involving causal relationships and conclusions.
- Present findings in written form, display and other presentations.
- Use simple models to describe scientific ideas, identifying scientific evidence that has been used to support or refute ideas or arguments.

Also covered in:

- Not covered before or after

Knowledge

- The earth orbits the sun once 24 hours a day
- The moon is a sphere that orbits the earth. It is NOT a light source. The moon reflects the light of the sun - it does not make its own light and heat. It always keeps the same side facing the earth. The opposite side is named " the dark side" only seen by astronauts
- The sun is larger than the moon but appears to be the same size because it much further away.
- The sun is a star that makes its own light and heat
- The sun, earth and moon are all spherical
- Day and night are formed as the Earth spins on its own axis. Daylight faces the sun and night faces away from the sun.
- The Earth spins on its own axis once every 24 hours.
- The name of our planets in our solar system are
- Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune, Pluto is a dwarf planet



Topic Specific Vocabulary

Earth, moon, stars, sun, planets, dwarf planet, axis, orbit, rotate, day, month, night, spherical, distance, cycle, Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Pluto.

NC Subject content

- 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.

Subject Specific/Academic Vocabulary

This vocabulary should be explicitly taught in context. Other tier 2 words should also be explored as they are encountered.

| Year 3 | Year 4 | Year 5 | Year 6 |
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| Benefit, impact, issues, occur, process, sequence, source, variables | Appropriate, consequences, identified, procedure, range, relevant, significant, specific, theory, transfer | Factors, affect, analyse, contribute, demonstrate, outcome, react, volume, | Component, exclude, function, imply, initial, justify, sufficient. |

We are scientists

Presentation of learning in assembly/ to another class. Making sundials and looking at tie zones around the world.