Overall outcome

Present persuasive argument through hot seating and video clips to refute Aristotle's theory of a geocentric

Hook:

Literacy : Crime scene with bike and red jacket. Missing girl newspaper report from The Kid Who Came From Space book.

Stand-alone areas of learning (theme/subject)

Maths, RE, SPaG and PSHE

Y5 Spring 1: Medium Term Plan

Key Vocabulary: Day, night, Earth, axis, rotate, **Solar system** , star = Sun, Planets ; Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune (Pluto was classified as Dwarf planet in 2006) **Phases of the Moon** - full moon, gibbous moon, half moon, crescent moon, new moon, waxing ,waning

Texts: The Kid Who Came From Space Ross Weller. Pie Corbett Six ways to look at the moon poem. HG Wells Usborne adaptation 'War of the Worlds', Orson Welles Radio script of 'War of the Worlds'. Non fiction research texts about planets and space exploration.

Year 5: Are we alone in the universe?

GLOBAL GOALS: Gender equality, industry, infrastructure and innovation

Areas of learning (theme/subject)

Literacy, Computing, Art, DT,

Resources

Different sized balls and fruit, literacy shed shorts, torches, planet modelling equipment, iPads, seeds for astro plants, potting equipment, oreos, chalk pastels, black paper, online space clips and videos.

Significant individuals

Tim Peake, Aristotle, Galileo and Copernicus, Alyssa Carson

Curriculum

What will we learn?

Children will be able to:

Recognise the key elements of a Science Fiction narrative.

Describe the movement of the Earth and other planets relative to the Sun in the solar system.

Recognise why some planets are uninhabitable for Life forms.

Describe the movement of the Moon relative to the Earth.

Describe the Sun, Earth and Moon as approximately spherical bodies.

Be able to explain how we know the Earth is spherical

Use the idea of the Earth's rotation to explain day and night and the apparent movement of the Sun across the sky.

Describe what living on the ISS is like

Know the names of Neil Armstrong, Buzz Aldrin, Tim Peake and other significant space explorers and their contribution to scientific discoveries in space.

Understand the reasons why scientist wished to explore Mars during the Mars 2020 mission

Creativity:

How will we show we understand in multiple ways? What does the Rainbow Continuum (Blooms Taxonomy) guide us to do?

Write a science fiction story, drawing on their knowledge of Earth and Space.

Drawing on personal research, create a metaphorical poem about a planet

Present a persuasive argument to refute Aristotle's theory

Create abstract artwork drawing on knowledge of life in Space.

Design an astro garden for the ISS.

Create and edit a video presenting knowledge of the heliocentric layout of the solar system

Investigate scientific models of; Sun, Earth and Moon, Day and Night, constellations (star tubes) and Lunar phases (Oreos).
WS Record data and results using scientific diagrams

Research/make a planet for homework

Connections

What are the connections to our curriculum past and present?

Connections to previous learning

Neil Armstrong study in Y2

Connections to Future learning

Forces in Y5 and Y6

Compassion

What feelings to we wish to evoke?

Understanding that great achievements require a team effort and that sometimes people who make a significant impact may not always be the person who receives recognition – Michael Collins and Hidden Figures to be used as examples.

Realisation that the science we are learning today is ever changing and the facts that we are learning now, may be altered in the future- eg Pluto as a planet, historic perception that the world was flat.

An elevated engagement in STEM- pupils to realise there are many avenues to contribute to scientific advancements and they could achieve this themselves.

Community

What links can we develop' Near and Far'?

Possible communication with ISS

Local planetarium

Liverpool museum space floor