Earth and Space—Science: Year 5

Conflict—A fight, struggle or disagreement.

Key Vocabulary

Tier 1: star, sun, planet, moon, Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune.

Tier 2: orbit, rotate, axis, shadow, gravity, crescent, lunar, solar system.

Tier 3: geocentric, heliocentric, astronomy, atmosphere, constellations.

PRIOR LEARNING:

Year 3: Describe magnets as having two poles.

Find patterns in the way that the size of shadows change – notice that shadows move throughout the day so the Earth is rotating around the sun.

Know that the moon is a reflector, not a light source.

In **Year 2**, you studied the Look Inside Space text in English, producing your own non-fiction lift-the-flap texts.

FUTURE LEARNING:

KS3: Space physics ♣ 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.. Earth's magnetism, compass and navigation

My Component Knowledge:

Lesson 1: I can understand the key vocabulary and explain the structure of the solar system.

Lesson 2: I can explain the difference between heliocentric and geocentric.

Lesson 3: I can understand how the Earth rotates.

Lesson 4: I can explain the phases of the moon.

Lesson 5: I can present my knowledge and learning.

My Composite Knowledge:

I can identify and describe the movement of the Earth and other planets in relation to the Sun within our solar system.

My Powerful Knowledge:

I can use my prior knowledge to identify the importance the Sun has on our planet, describing the changes and evolution of the solar system.

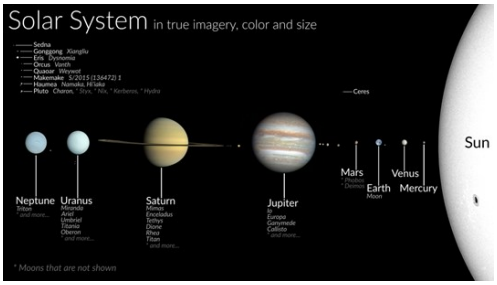
Working scientifically:.

I can identify scientific evidence that has been used to support or refute ideas.

I can report and present findings from enquiries, including conclusions, causal relationships and explanations in oral and written forms.

What are the phases of the moon?

Why do we have seasons?



What is geocentric versus heliocentric?

What does orbit mean?