Year 5 Progression map – Earth and Space		
National curriculum objectives	**HEP science lesson titles**	• **Coherence:**
Pupils should be taught to: • 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 **Misconceptions:** • The Earth is at the centre of the solar system • The Earth is flat • There is no gravity in space • The Sun is not a star • Objects in space do not move • Orbits are circular • Ours is the only galaxy • Night-time happens because the Sun moves down • The Moon changes shape	1. Do objects move in space? 2. Why do we have day and night? 3. Does the Moon change shape? 4. Can we use celestial objects to tell the time? 5. What is the Geocentric Model of the solar system? 6. What is the Heliocentric Model of the solar system? **Working scientifically** **Scientific enquiry skills used:** Secondary research and modelling **Key scientists and inventors:** Ptolemy, Alhazen, Nicolaus Copernicus, Tycho Braye, Johannes Kepler, Galileo Galilei, James Webb, Edwin Hubble **Careers:** Astronomer, Scholar	• **Literacy:** • Etymology, phonetic spelling, comprehension, DARTs • **Key vocabulary:** • Asteroid, celestial bodies, comet, elliptical, galaxy, orbit, sphere, universe, axis, rotation, crescent, phase, satellite, Geocentric, Heliocentric • **Maths:** • Constructing and interpreting tables, data analysis, extrapolation, • **History:** • History of space exploration • **Art:** • Visual representations of the solar system and lunar month
Builds on:	**Future learning:**	• **Further reading:**
Year 3: Light, Forces and magnets **Year 4:** States of matter, Sound	**Year 6:** Light	

Year 5: Forces	**KS3: E**arth and atmosphere, Forces and waves	• The Planets and Our Solar System, Maria Yiangou Solar System Book for 10 - 11 Year Olds, Raymond Cooper