

Year 7: Earth and Space- The Earth, Sun and Moon

	Check	Date
Revise assumed knowledge: ST3-8ES develop knowledge of the Natural Environment through understanding about the Physical World, Earth and Space, and Living World ST3-9ES develop knowledge of the Natural Environment through understanding about the Physical World, Earth and Space, and Living World	□	
ES2 Scientific knowledge changes as new <u>evidence</u> becomes available. Some technological developments and scientific discoveries have significantly changed people's understanding of the solar system.		
INTERACTIONS BETWEEN THE EARTH, THE SUN AND THE MOON		
4ES2a. explain that predictable phenomena on the Earth, including day and night, seasons and eclipses are caused by the relative positions of the sun, the Earth and the moon (ACSSU115)	□	
Define the term solar system	□	
Identify the main features and objects of our solar system	□	
CODE: 7ES4 First-Hand Investigation and numeracy: Modelling our solar system <ul style="list-style-type: none"> • Discuss the use of units of measurement (km), astronomical units (AU), light years • Prepare a scaled model of the solar system using the classroom (8m) and school oval (100m) 	□	
Define the terms day, night, seasons and tides	□	
Describe the phenomena of <u>day and night</u> caused by the rotation of the Earth in relation to the sun	□	
Describe the phenomena of <u>years</u> caused by the orbit of Earth around the sun	□	
Describe the phenomena of <u>seasons</u> caused by the Earth's tilt in relation to the sun	□	
CODE: 7ES1 First-Hand Investigation: Model day and night and seasons	□	
Define the terms lunar and solar eclipses	□	
Explain the formation of partial and total solar eclipses	□	
Explain the formation of a lunar eclipse	□	
Define gravity	□	
Describe how tides are formed as a result of the moon and sun's gravitational pull	□	
LITERACY SET 1: COSMOS ARTICLE	□	
Assessment: Oxford online test- Interactions between the Earth, The Sun and the moon. Students to achieve 100% in Support and Consolidate OR Consolidate and Extend	□	
UNDERSTANDING THE SOLAR SYSTEM		
4ES2b. demonstrate, using examples, how ideas by people from different cultures have contributed to the current understanding of the solar system 🌐 ♀	□	
Construct a timeline, containing names, dates and cultures of major contributions to our current understanding of the solar system e.g. Incan, Mayan, Babylonian, Chinese, Islamic	□	

4ES2c. compare historical and current models of the solar system to show how models are modified or rejected as a result of new scientific evidence ⚙️	<input type="checkbox"/>	
Define the term model	<input type="checkbox"/>	
Recall the structure of our solar system	<input type="checkbox"/>	
Describe the heliocentric and geocentric models of the solar system	<input type="checkbox"/>	
Outline how technological advancements have changed our understanding of the solar system	<input type="checkbox"/>	
Discuss how and why models are rejected or modified	<input type="checkbox"/>	
LITERACY SET 2: MIXED ACTIVITIES	<input type="checkbox"/>	
Assessment: Oxford online test- Understanding the solar system Students to achieve 100% in Support and Consolidate OR Consolidate and Extend	<input type="checkbox"/>	
LEARNING ABOUT SPACE		
4ES2d. describe some examples of how technological advances have led to discoveries and increased scientific understanding of the solar system 🚀	<input type="checkbox"/>	
Identify the terms space probe, space shuttle, telescope and spectroscope	<input type="checkbox"/>	
Describe the role of rockets in launching space shuttles and probes	<input type="checkbox"/>	
Describe specific examples of how advances in technology have led to discoveries and greater understanding of the solar system e.g. <i>Luna 1, Huygens, Voyager 1 and 2, Phoenix, Mars rovers: Spirit, Opportunity, Curiosity</i>	<input type="checkbox"/>	
CODE: 7ES5 First-Hand Investigation: Pop rocket. Students are to design an experiment that determines the best conditions for launching a pop rocket, using film canisters, sodium bicarbonate and light cardboard for nose cone and wings (optional). (Oxford p245)	<input type="checkbox"/>	
Describe how the telescope and spectroscope have been used to explore the Universe from Earth (Emission spectra)	<input type="checkbox"/>	
Describe the contribution of Edwin Hubble to our understanding of the solar system and Universe	<input type="checkbox"/>	
NUMERACY AND SKILLS SET	<input type="checkbox"/>	
Assessment: Oxford online test- Learning about space Students to achieve 100% in Support and Consolidate OR Consolidate and Extend	<input type="checkbox"/>	
Assessment: Earth, Sun And Moon Chapter Test	<input type="checkbox"/>	
Comments and Suggested improvements		
<p>Name: _____ Signature: _____ Date: _____</p>		