

## **Progression of knowledge science – Earth and Space (Physics)**

## Progression of skills to KS3 are detailed on Earth and Space / trust science sheets

Threshold Concepts	EYFS	Year 1	Year 3	Year 5
This concept involves understanding				
what causes seasonal changes, day				
and night.				
KS 1	<ul><li>Learn about the</li></ul>	Name the 4 seasons and	Name some types of	Name the planets of Our Solar System and
Observe the apparent movement	solar system and stars	say when in the year they	rock and describe the	understand Our place in Our universe, describe the
of the Sun during the day.	<ul> <li>Learn about space</li> </ul>	occur	physical features of each	Sun, Earth, Moon and other planets as
Observe changes across the four	travel	Observe and describe	Compare and group	approximately spherical bodies
seasons.	<ul> <li>Explore the natural</li> </ul>	weather associated with	together kinds of rocks	Describe the movement of the Earth around the
Observe and describe weather	world around them	the seasons	based on their appearance	sun in the solar system (a full orbit is 365 days, the
associated with the seasons and how	<ul> <li>Describe what they</li> </ul>	<ul> <li>Observe changes across</li> </ul>	Compare and group	Earth spins on its axis every 24 hours)
day length varies.	see, hear and feel	the 4 seasons	together kinds of rocks	Use the idea of the Earth's rotation to explain day
	whilst outside	<ul> <li>Can describe other</li> </ul>	based on their simple	and night and the apparent movement of the sun
LKS2	<ul> <li>Understand the</li> </ul>	features that change	physical properties	across the day
Describe the movement of the	effect of change in	throughout the year that	<ul> <li>Name the 3 types of</li> </ul>	Describe the movement of the moon relative to
Earth relative to the Sun in the solar	seasons on the	are caused by the change	rocks (igneous,	the Earth (lunar cycles take 28 days, the lunar cycle
system.	natural world around	in weather e.g. numbers of	sedimentary and	and eclipses)
Describe the movement of the	them	mini beasts found outside,	metamorphic) and classify	Describe the movement of the other planets
Moon relative to the Earth.	<ul> <li>Name the 4 seasons</li> </ul>	seed and plant growth,	based on their appearance	relative to the sun in the solar system (fixed orbits)
		leaves on trees, clothes	and physical properties	Describe what meteors are, and name other
UKS2		worn by people,	(e.g. marble is	objects in space
Describe the movement of the		hibernation and migration	metamorphic because it is	Explain how 'The Space Race' has expanded our
Earth, and other planets, relative to		<ul> <li>Explain how day light</li> </ul>	hard and smooth)	scientific knowledge and discuss space travel
the Sun in the solar system.		(from the sun rising to sun	Describe how the 3 rock	
Describe the movement of the		setting)length varies across	types are formed (the rock	
Moon relative to the Earth.		the year (longer in	cycle)	
Describe the Sun, Earth and Moon		summer, shorter in winter)	<ul> <li>Recognise that soils are</li> </ul>	
as approximately spherical bodies.			made from rocks and	
Use the idea of the Earth's rotation			organic matter	
to explain day and night and the			Describe in simple terms	
apparent movement of the sun			how fossils are formed	
across the sky.			when things that have	
			lived are trapped in rock	

Links from Reception Development Matters are detailed on the Reception Termly Planning Document