Brooklands Primary School

Knowledge Organiser – Science: Autumn term Year 5

Why does the moon have phases?



	Earth and	Space	
Key Knowledge			
The movement	s of the planets		Planet Earth and the moon
The shape and relative sizes of the planets	The planets are roughly spherical in shape and made of rock or gas.	The Earth's movement around the	The Earth orbits the sun in 365.25 days.
Planets' orbits of the sun	Each planet orbits the sun at a different speed, and one orbit is a year.	sun.	Seasons on Earth are created by the Earth's tilt Day and night are created by Earth's rotation, which explains the apparent movement of the sun across the sky.
The planets' names and their order from the sun The relative sizes and make-up	There are 8 planets plus Pluto. Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus (and Pluto being a dwarf planet). Together with the sun, these make up our solar system. The rocky planets: Mercury,	EQUINOX	
of the planets	Venus, Earth and Mars Gas planets: (Jupiter, Saturn, Uranus, Neptune)	southern solstice	SUN southerm summer 21 December solstice
The phases of the moon It takes approximately 27 days for the moon to complete one orbit the Earth.	The moon appears to change shape because of its position in the sky, and its position relative to the sun.	southern 23 September equinox	
Mercury Venus Earth Saturi Uranus Jupiter Jupiter Venus Venus Venus NEW YQUNG WAXING WAXING WAXING WAXING NEW YQUNG WAXING WAXING WAXING WAXING WAXING Upper YQUNG WAXING WAXING WAXING WAXING WAXING Upper YQUNG WAXING WAXING WAXING WAXING Upper Upper YQUNG WAXING WAXING Upper Upper Upper Upper Upper YQUNG WAXING WAXING Upper Upper Upper Upper YQUNG WAXING Upper Upper Upper Upper Upper Upper YQUNG WAXING		East Vest Vest Surrise Surrise Survey Vest Vest Vest Vest Vest Vest Survey Vest Survey Survey Vest Survey Survey Survey Survey Planet – A celestial body moving in orbit round a star Orbit – The regularly repeated oval course of a celestial object around a star or planet Equinox – the days when day and night are of equal length Sun – The star round which planets orbit Rotation – The action of rotating about an axis or centre Solar system – The collection of eight planets and their moons in orbit round the sun Solstice – the longest day (approx 21st June is the summer solstice and the shortest day (approx 21st December) is the winter solstice. Star – A fixed luminous point in the night sky which is a large, remote body like the sun Moon – A natural satellite of any planet Day – A twenty-four hour period, from one midnight to the next, corresponding to a rotation of the earth on its axis Night – The time that occurs when part of a planet is not lit by	