

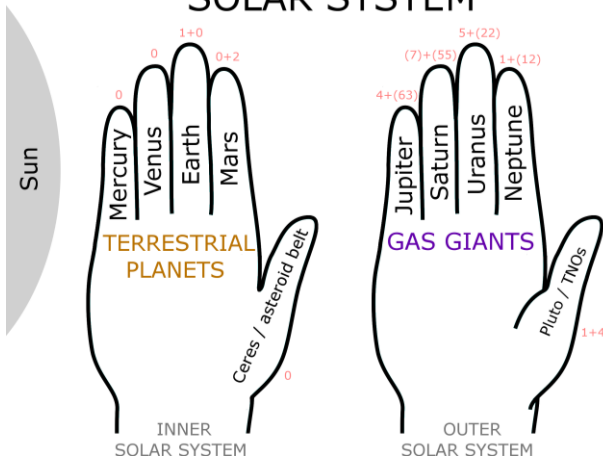
"OUT OF THIS WORLD" KNOWLEDGE ORGANISER

KEY PEOPLE	
Eratosthenes (276-194 BC)	Greek astronomer who calculated the Earth's circumference.
Nicolaus Copernicus (1473-1543)	German astronomer who established the concept of the Heliocentric model.
Galileo Galilei (1564-1642)	Italian astronomer, who improved the telescope so he could see planets.
Edwin Hubble (1889-1953)	American astronomer, who discovered other galaxies.
John Glenn (1921–2016)	First North American to orbit the Earth.
Arnaldo Tamayo Méndez (1942-)	First South American to orbit the Earth.

WHY DO WE NEED TO KNOW?
Understanding how Earth and space systems interact, how they affect us, and how we affect them is vital for our survival.

My Very Easy Method Just Speeds Up Names

SOLAR SYSTEM



DID YOU KNOW?
<ul style="list-style-type: none"> There are 8 planets in the Solar System. (Pluto was reclassified as a Dwarf Planet in 2006). Mercury, Venus, Earth and Mars are rocky planets. They are mostly made up of metal and rock. Jupiter, Saturn, Uranus and Neptune are mostly made up of gases (helium and hydrogen) although they do have cores made up of rock and metal.
<p>Our Solar System (not to scale)</p>
<ul style="list-style-type: none"> The Moon orbits Earth in an oval-shaped path while spinning on its axis. The Moon appears to be different shapes because as the Moon rotates round Earth, the Sun lights up different parts of it. The Earth rotates on its axis. It takes 24 hours for the Earth to rotate 360°. It takes just over 365 days for the Earth to orbit the Sun. Daytime occurs when the side of Earth is facing towards the Sun. Night occurs when the side of Earth is facing away from the Sun. It appears to us that the Sun moves across the sky during the day but it is actually the Earth moving, not the Sun.

KEY VOCABULARY	
astronomer	Someone who studies or is an expert in astronomy (space science).
axis	An imaginary line that a body rotates around. E.g. Earth's axis runs from the North Pole to the South Pole.
celestial	An object positioned in the sky or outer space.
constellation	A group of stars which form a pattern.
geocentric model	A belief people had that other planets and the Sun orbited around Earth.
heliocentric model	The structure of the Solar System where the planets orbit around the Sun .
Milky Way	The galaxy that contains our Solar System.
moon	A natural satellite , which orbits Earth or other planets .
planet	A large object, round or nearly round, that orbits a star .
orbit	The curved path of a celestial object (eg. Earth) around a star , planet or moon .
rotation	The action of spinning around an axis or centre. The Earth rotates on its own axis .
satellite	Any object or body in space that orbits something else. Eg. the Moon is a satellite of Earth.
sphere	A round 3D shape like a ball.
spherical bodies	Astronomical objects shapes like spheres .
star	A giant ball of gas held together by its own gravity.
Sun	A huge star that Earth and the other planets in our solar system orbit around.
Waxing moon	Any phase of the moon between a new moon and a full moon .
Waning moon	Any phase of the moon between a full moon and a new moon .