## (TG) Y5 KNOWLEDGE ORGANISER

## EARTH and SPACE

## Overwiem


-The Earth (our planet) is a part of the Solar System, At
the centre of the Solar Systern is the Sun, The Sun is a star.
-There are 8 planets and 5 dwarf planets in the Solan System, which orbit (go around) the Suru,

- It takes Earth just over 365 days to go anound the Sun (one year).
- The Earth rotates on its axis ance every 24 hours (one day). This causes day and night, as different parts of the planet face the Surs.
-The Moor orbits around the Earth The Sur, Earth and Moor are all roughly spherical.


## The Solar System

- The Solar System includes the Sun and all of the objects that orbit anound it due to gravity.
- The Earth is one of eight planets, that orbit the Sur. It is the thind closest to the Sur
-The planets are ffrom closest to furthest away from the Sur) Mercury. Verwss, Earthu Marss, Jupiter,
Satum, Unamus and Neptune. Jupiter is the largest planet and Mercury is the smallest.
- There are also-five dwanf planets: Haumea, Makemake, Ceres, Eris and Pluto:
- Earth is the only known planet in the Solar System where there are living things. The planets closen to the Sur are thought to be too hot, whilst some of those further amway are too cold.
- You could fit about I,321 Earths inside Jupiter. You could fit I. 3 million Earths into the Sur!
-Many of the planets (including Earth) have moons which orbit them Jupiter has anound 80 moons! - The Sur is gigantic, but it is just one of billions of stans in our galaxy: The Mukyy Way. The Muky Way is just one of billions of galaxies in the Universe!



## The Sun and the Moon

- The Sun is a star: a huge ball of hot gas that gives off light \& heat. The Earth (and all of the planets in the Solan System) orbit the Suru
-It takes the Earth just over 365 days to make one complete orbit around the Sur - this is one year. The Earth and other planets are held in place around the Sur by grouity - the same force that keeps you or the Earth
- The Earth is always spinning around. Wherr a point on Earth is facing the Surs it is daytime. When facing away, it is nightime. It takes 24 hours for the Earth to complete a spirn (one day).
-Same objects orbit around the planets. These are called moons. The Earth has one moor fiust called The Moon). The Moor is mucch smadlen than the Earth and takes one full day to complete an orbit anound the Earth

| Planet Facts, |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mercury | Venus | Earth | Mars | Jupiter | Saturn | Uranus | Neptune |
| Area: <br> 0.147 Earths $8^{\text {th }}$ Largest | Area: 0.902 Earths $6^{\text {th }}$ Largest | Area: <br> 1 Earth! $5^{\text {th }}$ Largest | Area: <br> 0.284 Earths $7^{\text {th }}$ Largest | Area: 121.9 Earths ${ }^{15}$ Largest | Area: 83.7 Earths $2^{\text {nd }}$ Largest | Area: 15.91 Earths $3^{\text {rd }}$ Largest | Area: 14.98 Earths $4^{\text {th }}$ Largest |
| Moons: None | Moons: <br> None | Moons: <br> 1 moon | Moons: <br> 2 moons | Moons: <br> Around 80 moons | Moons: <br> Around 65 moons | Moons: <br> Around 30 moons | Moons: <br> Around 15 moons |
| Length of Day: 1,408 hours | Length of Day: <br> 5,832 hours | Length of Day: 24 hours | Length of Day: 25 hours | Length of Day: 10 hours | Length of Day: 11 hours | Length of Day: 17 hours | Length of Day: 16 hours |
| Length of Year: 88 days | Length of Year: 225 days | Length of Year: 365 days | Length of Year: 687 days | Length of Year: 12 Years | Length of Year: 29 Years | Length of Year: 84 Years | Length of Year: 165 Years |

