

## **Starry, starry nights**

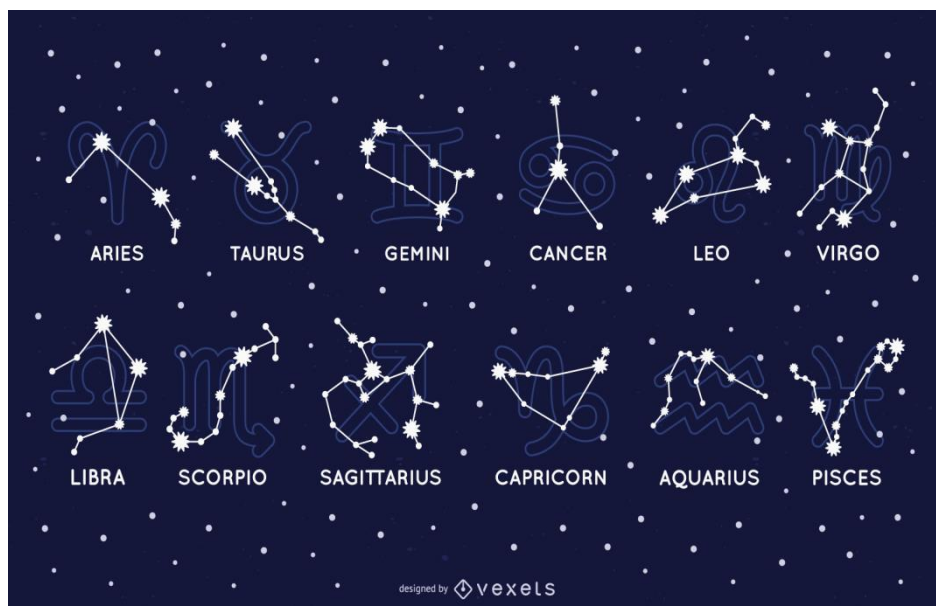
What is a **star**?

- A **star** is a huge ball of gas that gives out enormous amounts of energy in terms of light and heat. Just like the star in our system: the **Sun**.



What is a **constellation**?

- A **constellation** is a group of stars forms an imaginary outline or pattern, typically representing an animal, mythological person or creature, or an inanimate object.




What are the **differences** between constellation and galaxy?

- A galaxy has around **a million** stars but a constellation has only **a few** stars.
- Galaxies are **visible only by telescope** but constellations have only a few stars.

CONSTELLATIONS VS. GALAXIES VS UNIVERSE

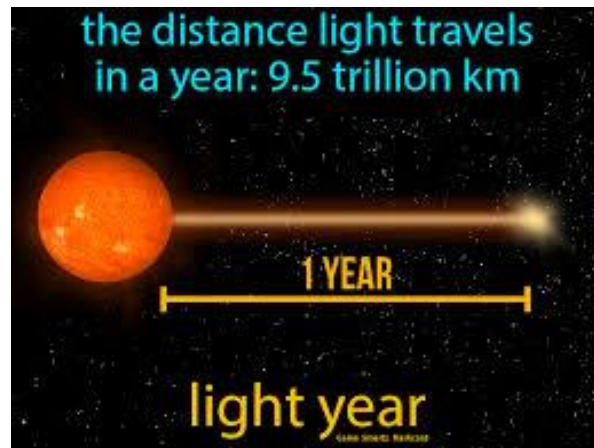
- These stars form a **constellation**, a group of stars that form an imaginary picture in the sky.
- A **galaxy** is a huge system of gases, dust, and stars. Galaxies contain billions of stars.

The **universe** is everything that exists in space.



What is a **light year**?

- A **light year** is a unit of **distance**. It is actually the distance travelled by light for a whole year.
- Speed of light is 300,000 km/second
- This means that in ONE second can cover 300,000 km. Similarly, in **one minute** it can cover **60x300,000 km**, in **one hour**: **60x60x300,000 km**, in **one day**: **24x60x60x300,000 km** and in **one year**: **365x24x60x60x300,000 km**.



NOTE: YOU DON'T HAVE TO REMEMBER the figure in kilometres BUT  
YOU DO HAVE TO REMEMBER it's definition: What **is** a light Year?