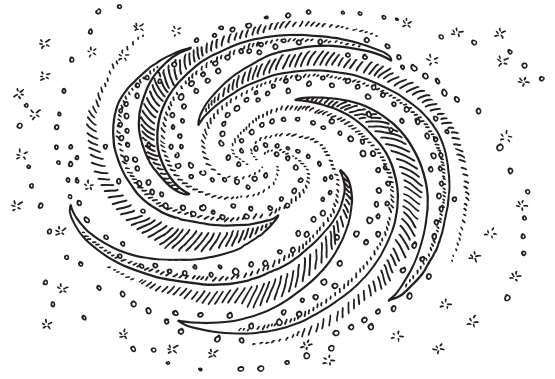


Our solar system is located in a spiral galaxy called *The Milky Way*. Our galaxy is huge!

It is so big that we cannot measure distances in kilometres or miles. The numbers would be too big. Instead, we measure distances by how far light can travel in a year.



Light travels at about 300 000 km per second. This means that it can travel about 9 460 528 400 000 km in one year. The estimated distance from the Sun to the furthest planet in our solar system is about 1.87 light years. The distance to our nearest neighbouring star system, Alpha Centauri, is about 4.3 light years. Astronomers believe that *The Milky Way* is about 100 000 light years across.

And that's just our galaxy! Astronomers believe that the Universe contains a countless number of galaxies like the *Milky Way*. It is very hard to imagine just how big the Universe is.

What is the distance from the Sun to Neptune? _____

How far is it across our solar system? _____

How many kilometres can light travel in a year? _____

Why do we use light years instead of kilometres or miles as a way of measuring distances in the galaxy? _____

What is the name of the star system that is closest to our solar system?

How far away is this star system? _____

What is the distance across the galaxy? _____