

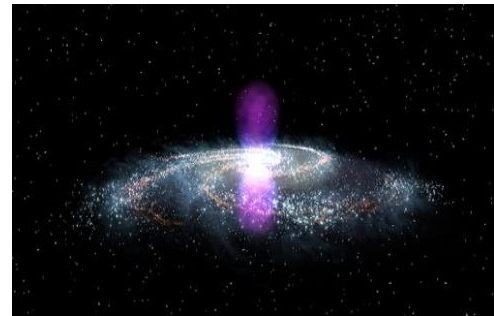
Milky Way

The Milky Way

- The Milky Way Galaxy is a normal spiral galaxy with around 100 to 400 billion stars.
- Each spiral galaxy consists of a disk, a central bulge, and a bunch of spiral arms.
- There is a supermassive black hole in the center of the Milky Way Galaxy.
- We know that our galaxy is a spiral galaxy because the velocities of the stars and gases in the galaxy have a rotational motion.

Study Tip

The Milky Way Galaxy looks different from other galaxies we have observed because we are viewing the Milky Way from within.



The Milky Way is a spiral galaxy, as shown by this picture from a space telescope.

Statistics of Our Galaxy

- Our galaxy's disk has a diameter of 100,000 light years, and is 3,000 light years thick.
- The central bulge is about 12,000 to 16,000 light-years wide, and around 6,000 to 10,000 light-years thick.
- Earth is about 26,000 light years away from the center of the galaxy, and it is a little more than half the way from the center to the edge.
- The solar system orbits through the Milky Way Galaxy, and a typical orbit takes around 250 million years to complete!

Concept Check

- What is the Milky Way? How do we know it spirals?
- What is Earth's approximate location in the Milky Way galaxy?