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Astronomy

**We are here**

**The Milky Way**

In the diagram, you are here in Space I had great visual to learn more about our solar system. And how it compares to size. It was a great visualization of the things we see and the possibilities that are out there. There many things that not really possible to see from where we are simply because we are too far. In this diagram I learned a little more about the Milky Way, the Nearest Star and little bit about the Earth and our moon.

While looking at the diagram I noticed and learned that since our universe is 14 billion years old we can only see 14 billion light years in any direction. Something that is hard to wrap your head around. In addition I also learned that measurements indicate that observable universe contains 100 billion galaxies. Something that can be very shocking the fact that there are possibilities of other galaxies that might contain life form similar to ours.

The Milky Way is one of the largest of galaxy. What makes the Milky Way so special? The Milky Way is the place where our solar system is located. The Milky Way is also home to another 100 billion stars. A quantity that basically impossible to count. However what makes this so fascinating is the fact is that there is still a lot of unknowns. Proving that there is life form in another galaxy is something that could be very possible. There is still a lot of space that has not been taken into account. If we zoom into a small piece of the Milky Way we see that there is a lot of neighboring “stars” that we have not yet gone to or made studies about them. These stars however are billions of miles away. On a ratio from one to a billion it would be the same as traveling the united states from coast to coast.

Other interesting facts that I learned off this diagram are that a piece of sand compares to an atom with a ratio of one to a million. Like wise a piece of atom or molecule compare to a human is about one to a billion. A ratio that is similar to the one we use to compare outer space with.

**7. My Questions**:

What is the farthest we have sent an aircraft?

Aside from the United States what are other countries with a great intrest in outer space.

Follow up Questions:

2. I believe that it is very unlikely for there to be four earth size planets with similar size to the one we have now. Our moon is pretty rare in its size and for it to happen four times it seems very unlikely. It is possible for planets to have their own moon but this situation to happen four times seem very difficult to occur.

3. Yes, it is quiet possible for another meteor to have younger radiometric dating. It is possible to be created after our solar system. However, us reaching that other solar system seems very unlikely at the moment.

4.

1. A

2. D

3. C

5. = = 0.000031

= 977.5

6.

= (size distance ratio)= 0.002325

x 0.002325 = 2150