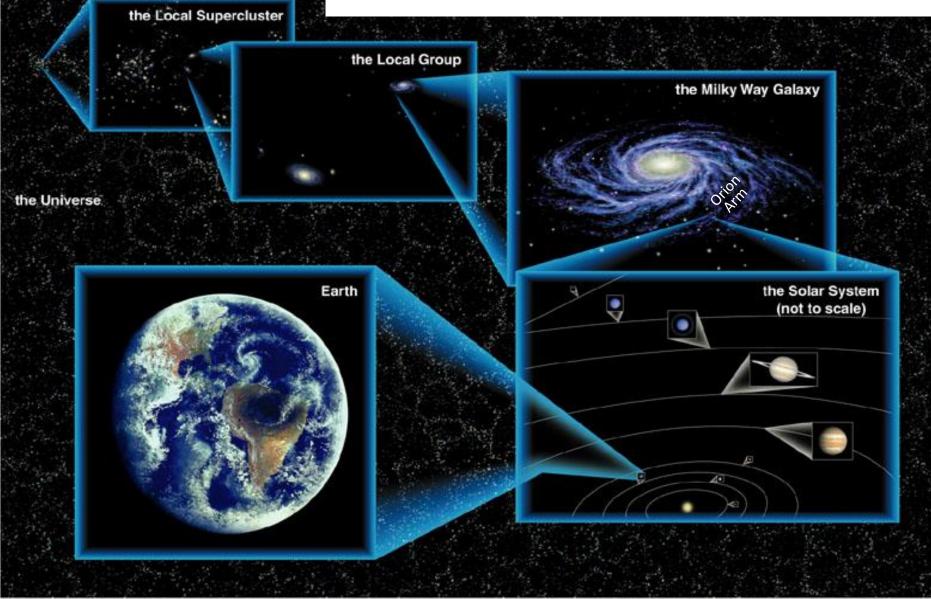
Where is Earth?



The Formation of the Solar System (~4.6 billion years ago) *Nebular Hypothesis*

nebula (H, He, O, C, N, Si, Fe, ...)

As it contracts, the cloud heats, flattens, and spins faster, becoming a spinning disk of dust and gas. Large, diffuse interstellar gas cloud (solar nebula) contracts under gravity.

Sun will be born in center.

Planets will form in disk.

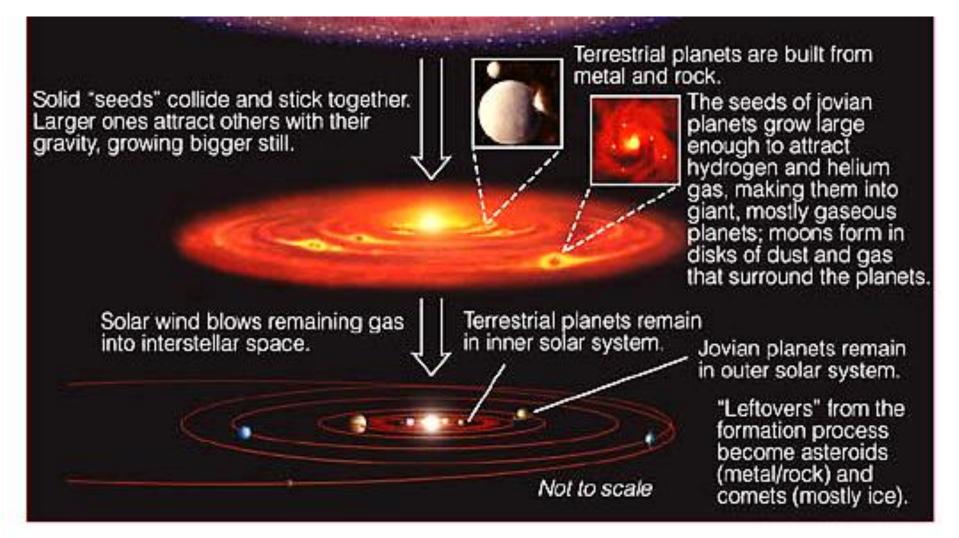
Hydrogen and helium remain gaseous, but other materials can condense into solid "seeds" for building planets. Warm temperatures allow only metal/rock "seeds" to condense in inner solar system.

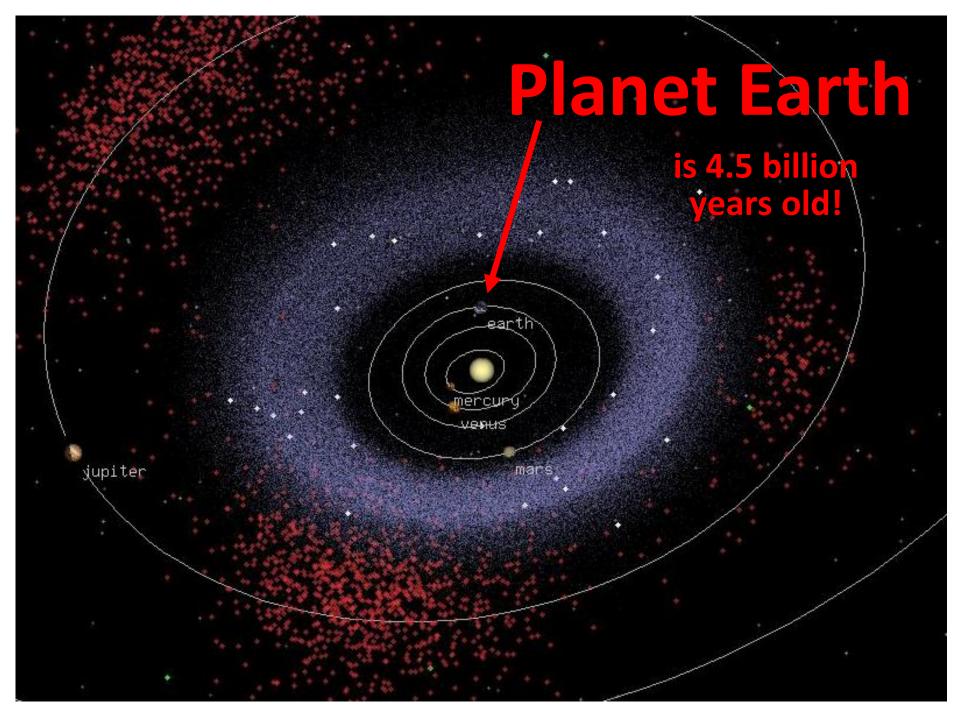


Cold temperatures allow "seeds" to contain abundant ice in outer solar system.

The Formation of the Solar System

The Sun, planets, moons, comets, asteroids are believed to form within 50-100 million years.





What do we see from Earth?

