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1) Estimating The age of Universe

To estimate The age of universe, Scientists use various methods. One common approach is studying The Cosmic microwave background radiation. This left over radiation from the Big Bang Provides valuable insights into the early universe and it age.

By analyzing the cosmic microwave background radiation, Scientists can calculate the age of universe. They examine The temprature fluctuation in The radiation, which reveal The information about The condition and evolution of the early Universe.

2) Methods of Estimating The age

* Studing Ancient Stars:-

Another method involves studing ancient stars, such as globular clusters, found in galaxies. There stars act as time capsules, Poesessing the characteristics from the early Universe. By analyzing their composition and properties, scientists can estimate their age and use that to estimate the age of the universe.

* The Planck Satellite:-

Scientists also utilize data from the Plank satellite, which was designed to study the cosmic microwave background radiation. The satellite provided detailed maps of the Temperature fluctuations, allowing for more precise estimation of the universe's age.

* Hubble's Law and Expansion of the Universe:-

Edwin Hubble discovered that galaxies are moving away from each other, indicating that the universe

is expanding. By measuring the rate of expension, known as the Hubble constant, Scientist can work backward to estimate the age of the universe

* Supernovae:-

Supernovae are massive explosions that occur at the end of star life by studing the brightness and characteristics of supernovae in distant galaxies, Scientists can determine the rate of cosmic expansion and consequently extimate the age of Universe

* Baryon Acoustic Oscillations (BAO):-

BAOs are patterns in the distribution of matter in the universe that were imprinted during the early stages of its formation. By studing there patterns and measuring the scale of BAOs, scientists can extimate the age of universe

Conclusion:-

Estimating the age of the Universe is a complex and ongoing

scientific endeavor. By including, all giving methods, scientists continue to refine their understanding of the universe's age.