

Some Useful Numerical Information

Last Updated: January 2021

Estimated age of the Universe: 13.77 billion years old

Nearest star to our own star - the Sun: Proxima Centauri, 4.25 light-years (25 trillion miles)

Speed of light in a vacuum: 670,616,629 mph (300 million meters/second)

Speed of sound in dry air (20°C): 343 meters/second

Fastest speed reached by an unmanned rocket in space: 364,660 mph (Nov. 2021)

We do not have the capability to travel to another solar system.

Distance of the moon from Earth: 239 thousand miles

Distance of the sun from Earth: 93.824 million miles (1 AU)

The sun is about 400 times further away than the moon. Their relative sizes and distances cause them to appear to be about the same size in the sky.

Age of the Sun, Earth, Solar System: 4.571 billion years

Diameter of the Sun: 109 times Earth's diameter (865 thousand miles)

The Sun is expected to remain a yellow star for about 5 billion more years until it runs out of hydrogen fuel, collapses, begins to use helium fuel and expands into a red giant.

Oldest fossil of human: 2.8 million years based on a jaw bone found in Ethiopia (*not homo sapiens*)

Age of youngest fossil of a dinosaur: 65 million years

Humans and dinosaurs never co-existed.

Average diameter of the planet Earth: 7918 miles (about 8000 miles)

Deepest hole every drilled by humans: 7.5 miles

Deepest ocean trench: 36,070 feet - 6.8 miles

We have barely scratched the surface of the Earth.

Highest Mountain: Mount Everest has the "highest elevation above sea level". The peak of Mount Everest is 5.5 miles above sea level.

Height of Willis Tower (Chicago): 442 meters (1,450 feet) - this is a little more than 1/4 mile.

Height of the atmosphere: About 62 miles until outer space although there is no fixed boundary.

99% of the atmospheric gases occur within 20 miles (32 km) above the Earth.

50% of the atmospheric gases occur within 3.2 miles (5 km) above the Earth.

Population of Earth: 8 billion (2022)

Population of the United States: 330 million

Population of Chicago (city limits): 2.7 million **(metropolitan area)** 9.5 million

There is no agreement on the number of people the Earth can support. Estimates vary from 2 billion (if everyone lived like the average American) to 40 billion (survival level). There are many variables.