Cluster: A group of galaxies held together by their mutual gravitational pull.

Density: The mass per unit of volume of a substance.

Fusion: The combining of lighter atomic nuclei into heavier atomic nuclei. This process can release a great deal of energy, and is what powers most stars.

Galaxy: A large "society" of stars, held together by mutual gravitational pull.

Plasma: A state of matter in which protons and electrons are not bound together. During the 380,000 years after the Big Bang, this was the state of the entire Universe; it is the normal state inside stars.

Star: A huge cloud of simple matter (Hydrogen and Helium) held together by gravity.

Supercluster: A massive group of smaller galaxy clusters that together form some of the largest known structures in the Universe.

Carbon: A chemical element with six protons that is formed in the death cycle of medium and large stars. Carbon is the basis for all known life on Earth.

Chemical Element: A fundamental type of atom, distinguished by varying numbers of protons and electrons and having unique physical properties. Many elements are formed as products of dying stars

Cosmic Horizon: The distance in our Universe beyond which we cannot see (46-billion to 47-billion light-years from Earth).

Iron: The most common chemical element in the planet Earth, iron forms the majority of its inner and outer core.

Milky Way Galaxy: The spiral-shaped galaxy that contains our Solar System.

Neutron Star: When a star much more massive than our sun runs out of fuel, its core collapses, all of its contents melting into a ball of neutrons more dense than anything else in the Universe.

Periodic Table of Element: The generally accepted system for organizing the known chemical elements.

Supernova: a star that explodes and becomes extremely luminous in the process

Chemistry: the branch of science that deals with matter (elements) and its composition, properties and reactions with other elements.

Ion: An atom that has a different number of protons than electrons, giving it an overall positive or negative charge.

Radioactivity: The breakdown of an unstable atomic nucleus, such as uranium, through the spontaneous emission of subatomic particles.